Laboratorio dei Diritti Fondamentali



NEW PARENTHOOD AND CHILDHOOD PATTERNS

PRINCIPLES AND PRAXES IN MUSLIM REALITIES

by Federica Sona



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Foreword

This research report by Dr Federica Sona is the result of a project carried out jointly by the Laboratorio dei Diritti Fondamentali (hereafter LDF) and the Department of Law and Anthropology at the Max Planck Institute for Social Anthropology (hereafter DLA). It offers an excellent illustration of the type of interdisciplinary collaboration that the two Institutes are seeking to establish by supporting research projects such as the one carried out by Dr Sona.

The choice of topic of the study was initially agreed between Dr Sona and the LDF, and then supported by the DLA. Research conducted under the aegis of LDF aims to explore the effective reality of human rights, that is, human rights as they are actually put into practice, and to compare this reality with the written rulings in an attempt to identify gaps and examine whether protection deficits are produced in the implementation process. According to a formula adopted by the European Court of Human Rights (ECtHR) and taken up by the LDF, it is necessary to protect the «concrete and effective rights, not the theoretical and illusory ones». Those guaranteed by the normative texts remain theoretical and illusory if they are not translated into concrete and effective rights in people's lives. LDF's decision to join forces with the DLA draws on this concern for translation, as well as on the specific interest both share for the European context. Since 2012, the research activities of the DLA have focused on questions of accommodating cultural, ethnic and religious diversity within the context of contemporary societies, with a particular interest in European societies. The distinctive feature of the research programme of the DLA is the commitment to bringing legal scholars and anthropologists together on one team and exploring the different ways in which the two disciplines, each with its own approaches and perceptions of topics of shared interest, can result in a richer, more sophisticated analysis of the dynamics that inform the ways in which diverse cultural and religious groups live together in today's plural societies. Dr Sona's study provides clear and compelling evidence of what can be achieved when the LDF and the DLA join forces within a collaborative project.

This work is pioneering, not only from a thematic point of view, but also because of the methodology adopted. As for the topic, one might be surprised that it has remained to date largely underinvestigated, if not to say ignored. The study focuses on the use of medically assisted reproductive (hereafter MAR) technologies among Muslim communities of immigrant origin currently residing in northern Italy, whom, for the sake of her analysis, Dr Sona refers to as «new» Italians. While the study is limited to Italy, the observations hold true for other European countries as well: very little is known about the attitudes of Muslim women and couples living in Europe regarding sterility and infertility, and even less about their recourse to MAR technologies to overcome them. To accomplish her research goals, Dr Sona opted for a highly original approach, namely combining an in-depth study of the relevant legal sources, including Islamic law, with an analysis of an impressive number of testimonies and empirical data – all of which were collected first hand by the author - that evidence the frequency with which the Muslims involved in the study take recourse to MAR technologies. The idea behind the study is to juxtapose three different approaches: the first draws on the testimonies of persons involved in such practices (both patients and practitioners); the second refers to available statistics about recourse to certain biomedical technologies; and the third approach analyses the normative frameworks at play, both formally (positive/state law and human rights) and informally (Islamic law).

Dr Sona is a certified Italian legal practitioner, with several years of legal experience in the field of family law and international private law, as well as a scholar trained in the study of *Islām*. It is indeed no minor achievement to offer to the reader a truly interdisciplinary framework that draws on law, an-thropology, and Islamic studies, not to mention the clinical expertise required to capably discuss reproductive technologies. She has done a remarkable job of marshalling all of these skills in her exploration of the various ways in which the human body and its reproductive potential are placed at the service of the expression of identity, whether individual or collective. The report shows what is to be gained from cross-cultural comparisons when it comes to heightening our understanding of the various ways communities – in casu Muslims residing in the northern Italian region of Piedmont – take the human body (as physical reality) and endow it with meaning beyond the physical, giving it symbolic value and «using» it as a locus of identity, here in terms of human reproduction, filiation and arrangements regarding parental relationships.

In the vast majority of domestic legal systems in Europe today, the standards used as normative yardsticks in the regulation of bio-medical technologies draw, generally speaking, on principles of individual autonomy, informed consent and, to the extent possible, the balancing of the various interests at play (with reference to, among other principles, gender equality and the interests of the child). An underlying assumption, prevalent especially among scientists, policymakers, and bioethicists, suggests that, irrespective of place and culture, biomedical technologies are used for similar ends and raise similar legal, bioethical, and moral concerns. Yet the diversification of ethnic and religious groups in contemporary Europe produces a set of new questions regarding the context in which such biomedical technologies are embedded. Actual regulations are not necessarily attuned to these new realities; expectations may vary significantly, depending on the legal tradition and the biomedical culture, suggesting different approaches to and trajectories for the use of such technologies. Dr Sona's work helps explain some of the behaviours, opinions, and taboos, as well as various types of constraints, that accompany recourse to MAR technologies in the context of contemporary plural societies. Through her conversations with health workers and women who were undergoing medical procedures, Dr Sona comes across interesting examples of people reasserting traditional, shari ah-linked institutions and invoking them to justify recourse to MAR technologies. The number of cases in which Muslim women consent to undergo medically assisted procreation procedures is considerable, with statistics indicating that the desire to have children and the fear of the social stigma attached to childless couples drive them to agree to such procedures despite various contraindications, be they of a legal, medical, financial or religious nature.

Clearly, the relevance of the work done by Dr Sona far exceeds the case study on which she focuses; it engages with highly topical questions about medical, legal and religious definitions of life and death, kinship and identity, and the legitimacy of the various actors in deciding whether recourse to medical technologies is permissible. By bringing the perspectives of law, anthropology and clinical expertise together, Dr Sona's study offers a very sophisticated interdisciplinary framework for investigating a broad range of issues pertaining to, among others, the right to health and access to health services, notions of the sacredness of life, and potential conflicts between various normative frameworks that – in the context of plural societies – are often in competition with one another. What is the role of doctors and other clinical staff vis-à-vis patients? To what extent do individual autonomy and informed consent play a role in this context? What scope do doctors have in deciding between competing views? These are but a few of the theoretically complex and ethically charged questions that Dr Sona's study raises.

The report is to be seen as part of a wider research programme undertaken under the aegis of the LDF that has already led to the publication of two other, separate reports on new forms of filiation and parenthood. The first, by Alice Margaria, examines the law and jurisprudence dealing with the new realities; the second, by Ilaria Bertini, looks into the use and abuse of the term «nature»¹. Moreover, there is a strong connection between these

¹ A. Margaria, Nuove forme di filiazione e genitorialità. Leggi e giudici di fronte alle nuove realtà (Laws and Judges vis-à-vis new realities in filiation and parenthood), Bologna, Il Mulino,

three reports, taken together, and previous publications of the LDF that take as their object of study the multifaceted right to health, which interacts with the right to respect for private and family life as set out in Article 8 of the European Convention on Human Rights, the Italian Constitution, and constitutional jurisprudence. Questions linked to the status and rights of children who owe their lives to MAR technologies touch upon both rights. Dr Sona's study mainly looks into new forms of parenthood: new not only because the parents owe their parenthood to the decision to take recourse to MAR technologies, but also because they reflect new conceptions of what a family is and/or should be. These dynamics are all to be viewed in connection with respect for the personal autonomy and self-determination of individual persons involved.

Dr Sona sees in collisions between Italian domestic law and rules that come with other religious and cultural traditions, *in casu Islām*, an opportunity to assess, both from a comparative legal point of view and through the lens of an anthropological analysis, the various dynamics and individual sensitivities that are at play in the lives of women and couples at the very moment when they have to balance the edicts of (Italian) state law against the constraints that come from their own culture and religion.

Dr Federica Sona has carried out an extremely difficult and demanding task with passion and a highly developed sense for exactitude. She has not only demonstrated her expertise in technical questions relating to domestic Italian law and *Islām*, but she has also proven herself capable of gaining trust and acceptance within a very specific social and cultural environment – that of Muslim families now living in Italy – and relating to them with great sensitivity on some deeply personal and intimate topics.

The Laboratorio dei Diritti Fondamentali and the Department of Law and Anthropology both express heartfelt thanks and appreciation to Federica Sona for her truly excellent work.

VLADIMIRO ZAGREBELSKY Director of the Laboratorio dei Diritti Fondamentali, Collegio Carlo Alberto (Torino, Italia) MARIE-CLAIRE FOBLETS Director of the Department of Law and Anthropology, Max Planck Institute for Social Anthropology (Halle, Germany)

2018; I. Bertini, Nuove forme di filiazione e genitorialità. Uso e abuso del richiamo alla natura (New forms of parenting. Use and abuse of the word «nature»), Bologna, Il Mulino, 2018. Both the Italian and the English versions of the two reports can be found on the LDF website (www.labdf.eu). Chapter one

Setting the scene

1. Raison d'être of the study

An international study of medically assisted procreation policies states that Italy is «much more restrictive than *any* Sunni Muslim country»¹. When comparing legal and religious provisions in Egypt, Lebanon, and Italy, mentioned investigation indeed reports that the latter «has become quite "Sunnī" in banning all manner of third-party reproductive assistance»². Inhorn, Patrizio, and Serour further clarify that, although Italy was originally perceived as «the Wild West of European ART», the country eventually became «one of the most restrictive ART regimes in the world through pressures from the Vatican». In actual fact, religious moralities in play a key role in shaping the boundaries of legally and/or socially acceptable medically assisted reproductive methods, more specifically so in the Mediterranean area. A similar point was formerly raised by Bundren, who concurs that Judaism, Catholicism, and Islām profoundly influence both culture and law in Israel, Italy, and Egypt. In these Mediterranean coastal countries, three theologies in effect «often express their religious tenets with more force and clarity»³.

¹ Italics in the original. See M.C. Inhorn, P. Patrizio, and G.I. Serour, *Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and Multisectarian Lebanon*, in M.C. Inhorn, and S. Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, New York, and Oxford, Berghahn, 2012, pp. 223-260, at pp. 253-254, also with respect to the quotation in the third sentence. The authors focus upon these countries since they represent *Sunnī* Muslim, multi-sectarian, and Catholic perspectives respectively. For more details on *Sunnī Islām*, see *infra*, chapter III, section 1.

² Inverted commas in the original. See M.C. Inhorn, P. Patrizio, and G.I. Serour, *Third-party* reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and Multisectarian Lebanon, in «Reproductive BioMedicine Online», 21, 7, 2010, pp. 848-853, at p. 850.

³ See M.R. Bundren, *Influence of Catholicism, Islam and Judaism on the Assisted Reproductive Technologies (ART) Bioethical and Legal Debate: A Comparative Survey of ART in Italy, Egypt and Israel*, in «University of Detroit Mercy Law Review», 84, 5, 2007, pp. 715-746, at pp. 717-719. Reproductive technologies are thus significantly affected by deep-seated religious beliefs and cultural sensitivities in addition to bio-scientific achievements⁴. Furthermore, this happens from the state perspective as well as from the anthropological frame of reference: not only (inter)national laws, but also human beings are highly impacted on by ethics and morals linked to religious affiliations.

In the broad fields of biomedicine and global bioethics, the paradigm is therefore constantly shifting⁵. As a result, fertility treatments can be supported, accommodated or rejected by religious authorities and/or state bodies⁶. More specifically, beliefs, customs, and traditions can *de facto* be variously interpreted in order to legitimise, or prevent, the recourse to heterogeneous methods of assisted procreation and reproduction. Challenged by fluid and occasionally contradictory interpretations, prospective parents may then abide by religious and/or legal restrictions or find alternative (sometimes rather creative) solutions to their procreative problems.

On this account, the present study intends to investigate the underexplored scenario of (non) Islamically compliant alternative routes to parenting as potentially or actually enacted by Muslim prospective parents settled on Italian soil⁷. In particular, the analysis aims to unveil the significance of

⁴ A number of studies compare the viewpoints and provisions of the three Abrahamic religions, see *inter alia* the following A. Rabello, D. Milani, and D. Atighetchi, *Intorno alla vita che nasce: diritto ebraico, canonico e islamico a confronto*, Torino, Giappichelli, 2013; M. Hemayatkhah *et al.*, A review of ethical issues involved in fertility treatments in different religious frameworks: Cases in Judaism, Christianity, and Islam, in «Journal of Jahrom University of Medical Sciences», 11, 65, 2014; Various Authors, Symposium on Religious Law: Roman Catholic, Islamic, and Jewish Treatment of Familial Issues, Including Education, Abortion, In Vitro Fertilization, Prenuptial Agreements, Contraception, and Martial Fraud, in «Loyola of Los Angeles International and Comparative Law Journal», 16, 1, 1993, pp. 9-106. For a theological perspective in the analysis of Christian and Islamic mind-sets on medically assisted procreation, see M.S.B. Ishak, and S.S.S Haneef, Reproductive technology: A critical analysis of theological responses in Christianity and Islam, in «Zygon: Journal of Religion & Science», 49, 2, 2014, pp. 396-413.

⁵ See *inter alia* G. Gunderson, and J. Cochrane, *Religion and the Health of the Public. Shifting the Paradigm*, Basingstoke, Palgrave, 2012; in addition to the following essay collections: E.M. Bucar, and A. Stalnaker (Eds.), *Religious Ethics in a time of Globalism. Shaping Third Wave of Comparative Analysis*, Basingstoke, Palgrave, 2012; F. Compagnoni, and F. D'Agostino (Eds.), *Il confronto interculturale: dibattiti bioetici e pratiche giuridiche. Bioetica, diritti umani e multietnicità*, Cinisello Balsamo, San Paolo, 2003; P.F. Camenisch (Ed.), *Religious Methods and Resources in Bioethics*, Dordrecht, Springer, 1994.

⁶ From the viewpoint of national states, domestic, transnational and international laws represent the backdrop against which religious provisions and cultural traditions are measured. With regard to the Italian scenario, see *infra*, chapter II. Bibliographical references on the interactions between human rights and biomedicine are reported at the end of the volume.

⁷ The volume is the result of a research project funded by the Laboratory of Fundamental Rights as part of the Collegio Carlo Alberto, from April 2016 to March 2017, and by the Department Law and Anthropology of the Max Planck Institute for Social Anthropology, from April 2017 to December 2017. I would like to express my deepest gratitude to LDF Director Vladimiro Zagrebelsky and MPI Director Professor Marie-Claire Foblets for the opportunity

the right to a private family life as well as the idea of parenthood and childhood, whilst exploring familial vertical relationships within local Muslim communities. Paying specific attention to principles and praxes as understood and implemented in local Muslim realities, the study purposes to provide decoding tools for state and non-state socio-legal actors, who are coping with plural kinship frameworks on a daily basis.

In order to unveil concurrent and potentially conflicting normative orders, religious provisions and customary practices, the volume adopts a juxtaposing narrative. Newly interpreted long-standing Islamic provisions on assisted human reproduction will then be compared to Italian laws and case laws on medically assisted procreation. *Sharīʿah* compliant remedies to involuntary childlessness as voiced by religious figures will also be contrasted to the actual familial choices of Muslim prospective parents. Similarly, specific Muslims' necessities as asserted by Islamic scholars will be measured against the needs voiced by Muslim intended parents undergoing fertility treatments. Additionally, Muslim patients' experiences will be analysed, together with Muslim patients' perceptions as expressed by healthcare professionals working in local public and private fertility clinics. Accordingly, the volume points to possibly partially concealed kinship dynamics leading to newly discovered family constellations and creative patterns of filiation amid Muslim prospective parents.

2. Terminology – Some clarifications MAR, MAP, and ART

Before beginning to examine two realities that are nowadays in close proximity – the Italian one and Muslim one – attention is to be paid to the vocabulary adopted throughout the volume. Further details will be provided in each chapter; nonetheless, some terminological clarifications regarding fertility treatments are to be immediately addressed. Actually, the acronyms MAR, MAP, and ARTs are frequently used as synonyms, although this is not entirely correct. The latest version of the glossary issued by the International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organisation (WHO) describes «Medically Assisted Reproduction» (MAR) as follows

[...] reproduction brought about through ovulation induction, controlled ovarian stimulation, ovulation triggering, ART procedures, and intrauterine, intracervical, and intravaginal insemination with semen of husband/partner or donor⁸.

to investigate this highly uncharted research topic; without their invaluable insights and precious support this study would have not been possible.

⁸ See F. Zegers-Hochschild et al., International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology, in «Fertility and Sterility», 92, 5, Nov. 2009, pp. 1520-1524; and also Ibidem, «Hu-

The same definition also suits the expression «Medically Assisted Procreation» (MAP)⁹. The acronym ART (Assisted Reproductive Technology) instead identifies assisted reproductive technologies, which are delineated as reported below:

[...] all treatments or procedures that include the in vitro handling of both human oocytes and sperm or of embryos for the purpose of establishing a pregnancy. This includes, but is not limited to, in vitro fertilization and embryo transfer, gamete intrafallopian transfer, zygote intrafallopian transfer, tubal embryo transfer, gamete and embryo cryopreservation, oocyte and embryo donation, and gestational surrogacy. ART does not include assisted insemination (artificial insemination) using sperm from either a woman's partner or a sperm donor¹⁰.

It should be emphasised that this terminology may create some confusion. In a number of publications – specifically those examining Islamic bioethics – the acronym «ART» is indeed used also with respect to treatments involving third party donation and surrogacy, which should be rather labelled as «MAP» or «MAR». In order to avoid any misunderstandings, the present work adopts the definitions reported above. Therefore, ART is used when referring to non-donor fertility treatments, unless otherwise stated (e.g. ART-Donor). MAP and MAR are instead employed in case of homologous and heterologous fertility treatments; in other words, fertility procedures relying upon a third party in terms of donor's female/male gametes, embryo(s), and/or uterus.

3. Why MAP, MAR and ART?

Fertility treatments have been specifically chosen as a marker of social change and test for legal accommodation of increasingly religiously and culturally diverse patients. In exploring the current social dynamics of change, the present section aims to investigate the usage of reproductive and procreative technologies on Italian soil. The utilisation of medically assisted reproductive (MAR) services is indeed considerably and persistently increasing, as demonstrated by the data discussed below.

man Reproduction», 24, 11, pp. 2683-2687, see pp. 1523 and 2686 respectively. For further details on Italian terminology, see *inter alia* F. Buzzi, and G. Tassi, *La procreazione medicalmente assistita: normativa, giurisprudenza e aspetti medico legali*, Milano, Giuffrè, 2011, pp. 5-7.

⁹ See for instance the summary in English language of the Constitutional Court's judgement No. 96/2015 provided by ISS, http://www.iss.it/binary/rpma/cont/S96_2015_en.pdf.

¹⁰ See Zegers-Hochschild *et al.*, *International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology*, cit., at pp. 1521 and 2685 respectively. Accordingly, sometimes the expression «ART-Donor» is used in some reports. However, it should be emphasised that the acronym ART might be used to address MAR/MAP in some publications.

Year	Cycles per million inhabitants	Cycles per million women
2005	636	2,683
2006	692	3,328
2007	736	3,569
2008	800	3,905
2009	865	4,265
2010	973	4,863
2011	1,063	5,392
2012	1,078	5,562
2013	1,070	5,601
2014	1,102	5,855
2015	1,175	6,341

TAB. 1.1. Increasing usage of MAR technologies

The latest report of the Italian Assisted Reproductive Technology Register (IARTR) clarifies that in 2012, both the initiated cycles per million inhabitants and per million women of reproductive age¹¹, in Italy and in Europe¹², were constantly growing¹³, with an increase of 539 cycles (+84.7%) and of 3,658 cycles (+136.4%) respectively¹⁴. As shown in the Table 1.1 and in the Figure 1.1, in Italy, both the number of started cycles per million Italian inhabitants and the ART cycles per million women increased constantly and steadily¹⁵. In ten years, the first data increase was of 84.7%, whilst the second increase was of 136.3%.

¹¹ Between the ages of 15 and 45 years.

¹² These data refer only to the 18 European states that reported complete data to the European IVF-Monitoring Consortium (EIM).

¹³ In real terms, in 2013, a slight decrease (-0.7%) was recorded with respect to the number of fertility cycles per million inhabitants; this decrease matches the recorded lowest growth (+0.7%). As discussed *infra*, this phenomenon is linked to the economic and financial crisis amongst other factors.

¹⁴ IARTR, Italian Assisted Reproductive Technology Register, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2017, p. 11. In 2011, the increase was of 466 cycles (+73.3%) and of 3,172 cycles (+118.2%). See IARTR, Italian Assisted Reproductive Technology Register, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2016, p. 10; and RNPMA, Registro Nazionale della Procreazione Medicalmente Assistita. *X Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2013*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2016, p. 24.

¹⁵ It should be highlighted that the ART procedures include FIVET, ICSI, FER, FO, and ED. This terminology is addressed in chapter II. For further details, see IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015*, cit., at pp. 11, 45; IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014*, cit., at p. 10; IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2013*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, p. 18.

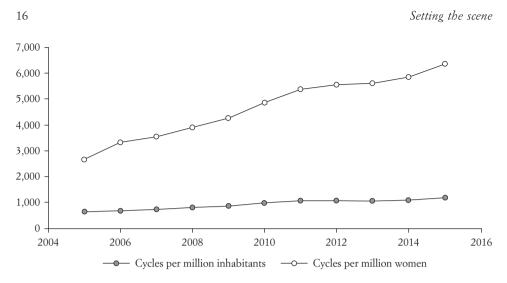


FIG. 1.1. Increase of MAP usage.

To further corroborate the reported data on the growth of ART services, from 2005 to 2015, the percentage of infants born with fertility treatments of levels I and II «increased three times», as official reports demonstrate¹⁶. The live-born babies conceived by ARTs of level I, II and III reached 12,836 in 2015, namely 2.6% of the children born in Italy¹⁷.

The 2016 report of the Italian Assisted Reproductive Technology Register also reveals that the total number of patients treated in non-donor MAP procedures (namely IUI-H and ART) in 2014 amounted to 70,589¹⁸. The peak was reached in 2011, when 73,570 patients were treated in 354 Italian clinics offering fertility treatments. Adding ART-Donor procedures to the above-mentioned list, the 2017 IARTR report indicates that in 2015 the number of patients was the highest ever with 74,292 treated persons in 366 clinics¹⁹. The number of initiated MAP cycles was in effect significantly

¹⁶ IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015, cit., at p. 13. See also RNPMA, X Report, cit., at p. 59, and IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014, cit., at p. 12. For further details on the terminology employed in the text, see *infra*, chapter II, section 3.

¹⁷ RNPMA, XI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2013, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2017, p. 6. For further clarifications on the employed terminology, see the different types of treatments as provided by Italian fertility centres, *infra*, chapter II, section 5.

¹⁸ IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014*, cit., at p. 39. The acronym IUI-H indicates «Intrauterine insemination» performed using couple's male gametes, see *infra*, chapter II, section 5.

¹⁹ IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015, cit., at p. 45. The procedures include IUI-H, IUI-D, ART-Non Donor, ART-Donor.

TAB. 1.2. Increasing number of fertility clinics and patients in Italy

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*
No. of clinics No. of patients											

high and reached 95,110 units, including fertility treatments of levels I, II, III and gamete donation. This is detailed in the Table 1.2²⁰.

According to the data published by the Italian National Registry of Assisted Reproductive Technology, the number of couples treated with ART techniques amounted to 45,985 in 2014. This indicates a significant growth from the figure of couples' fertility treatments registered in 2005, namely 27,254²¹. In other words, in ten years, the increase was of 68.7%. When looking at the number of patients entering non-donor procedures²², in the same time lapse (2005-2014) the increase was of 51.7%; from 2005 to 2015, the recorded increase became significantly higher, namely +59.7%. After analysing the available 2005-2015 data, it is clear that the use of ART is escalating on Italian soil. By way of illustration, the number of initiated cycles increased by +67%, and the number of infants born out of these procedures was 128% higher²³.

The intensification and magnification of fertility treatments are not only due to medical progress, but also to legal provisions. ART and MAP treatments were indeed highly affected by Italian laws and case law. As further discussed in Chapter II, when the Italian law on medically assisted procreation was enacted in 2004, cryopreservation was banned; therefore, frozen/thawed embryo replacement (FER) cycles declined consistently – from 3.6% in 2005, to 1.1% in 2008²⁴. However, in 2009, the Italian Constitutional Court removed some limitation and, as a result, FER steadily grew from 2.0% in 2009 up to 18.5% in 2015²⁵. Similarly, given that the Constitutional Court recently permitted donor cycles (when certain conditions are met), the procedures with embryo or female/male gamete donation are progressively mushrooming on Italian soil since June

See also RNPMA, XI Report, cit., at p. 6. The entry of an asterisk in the table indicates provisional data.

²⁰ RNPMA, X Report, cit., at p. 9; RNPMA, XI Report, cit., at pp. 8-9.

²¹ RNPMA, X Report, cit., at p. 9.

²² As reported *supra*, in Table 1.2.

²³ These data regard fresh ART cycles. See IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015*, cit., at pp. 20-21, also for detailed data on IVF, ICSI, FER and FOR cycles.

²⁴ See *infra*, chapter II, section 4.

²⁵ IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015, cit., at p. 22.

		2014	2015	Percentage increase
ART-Donor	No. of clinics	17	69	+305.9
activity	No. of initiated cycles	209	2,287	+994.3
IUI-D	No. of live born No. of clinics	61 13 27	532 52	+772.1 +300
activity	No. of initiated cycles	37	513	+1,286.5
	No. of live born	1	69	+6,800

TAB. 1.3. Growth of fertility procedures involving donors

2014²⁶. It can thus be ventured that this growth will become a constant Italian trend.

With respect to ART-Donor activities, the number of Italian clinics offering fertility treatments is affected by a similar exponential growth. For instance, in 2014, 17 clinics were counted amongst those reporting data to the National Health Institute²⁷; in 2015, the number grew to 69, with a sharp increase of +305.9%. The fact that the number of fertility centres more than tripled is also reflected in the number of initiated cycles: 209 in 2014 and 2,287 in 2015. A similar trend can be found in procedures involving donors of male gametes. In actual fact, the number of clinics grew from 13 in 2014 to 52 in 2015, and the initiated cycles escalated from 37 to 513. The figure of babies born out of these fertility treatments involving donors reached 532 and 69 respectively, thus showing an increase of +772.1% and +6,800%, as clarified in the Table 1.3²⁸.

When focusing on Piemonte²⁹ – namely the Italian region chosen to frame the geographical dimension of the present study – the total number of couples undergoing fertility treatments revealed a steadily growth from 2008 to 2012³⁰, then a slight decrease was registered in 2013 and 2014³¹. From 2015, a net increase became evident again: the number of couples undergoing fertility treatments reached 4,362 and a total of 5,286 MAR cycles were initiated in the sole Piedmontese region.

²⁶ See RNPMA, *X Report*, cit., at p. 60. As discussed in chapter IV, even during the ban some Italian physicians carried out these procedures abroad and/or couples travelled in what were called «MAP-friendly countries».

²⁷ The clinics should have had at least one patient during the year.

²⁸ See IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015*, cit., at p. 47; for further details on female recipients' age and pregnancy rates see also pp. 31-32, 45.

²⁹ *Piemonte* (Piedmont) is a North-Western Italian region whose capital is the city of Torino. The population amounted to 4,375,865 at 31st December 2017. See www.regione.piemonte.it/stat/popolazione.html (7th January 2018). See also *infra*, subsections under 6.

 30 From 2008 to 2012, the rate of increase was of 13.4% in Piemonte, whilst in Italy it was of 26.4%.

³¹ The percentage decline was 4.76% in 2013 and 9.04% in 2014.

TAB. 1.4. Increasing number of couples undergoing fertility procedures

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
No.	Piemonte	-	-	-	3,998	3,958	4,222	4,493	4,535	4,319	4,125	4,362
of treated couples	Italy	46,519	52,206	55,437	59,174	63,840	69,797	73,570	72,543	71,741	70,589	74,292
No.	Piemonte	-	-	-	4,962	5,305	5,652	5,700	5,670	5,409	5,059	5,286
of initiated cycles	Italy	63,585	70,695	75,280	79,125	85,385	90,944	96,427	93,634	91,556	90,957	95,110

Remarkably, the discussed data echo the contemporary Italian trend, as shown in the Table 1.4³². The Italian peak-year is indeed identified in 2011, when 73,570 couples underwent fertility treatments and 96,427 MAP cycles were initiated; out of these prospective parents, 6.1% couples were treated in Piemonte where 5.9% of Italian MAR cycles took place in one of the 26 registered fertility clinics³³. As further elaborated in the interviews released by healthcare professionals, the decrease – specifically in private clinics – was also linked to the economic and financial crisis that deeply affected European countries from 2008 to 2013³⁴.

As elucidated by the Table 1.4 and Figure 1.2, from 2008 to 2012, the rate of increase of treated couples was of +13.4% in Piemonte, whilst in Italy it was of +26.4%. From 2012 to 2015, Italian and Piedmontese trends instead differ: in Piemonte, a decrease of -3.8% was registered, whereas on Italian soil there was an increase of $+2.4\%^{35}$. This data also indicate that Piedmontese couples may reoccur to «health tourism» – more specifically to the so-called «reproductive tourism». In other words, Italian and foreign couples residing in Piemonte can move to other Italian regions (or even abroad) in order to undergo fertility treatments³⁶. Accordingly, the facts and statistics analysed above not only clearly demonstrate

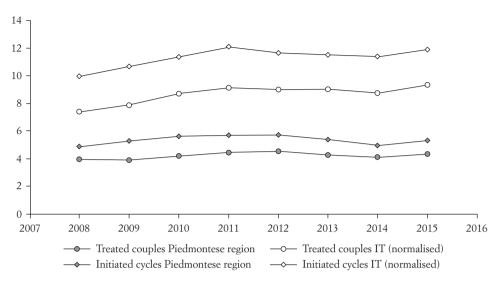
³² For further details, see RNPMA, XI Report, cit., at pp. 8, 141; RNPMA, X Report, cit., at pp. 8, 142; RNPMA, VII Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2011, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2013, p. 136; RNPMA, VI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2010, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2012, p. 30; RNPMA, IV Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2008, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2010, p. 31.

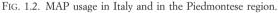
³³ On this, see *infra*, chapter II, section 3.

³⁴ For an in-depth study, see *inter alia* P. Berkowitz *et al.*, *The impact of the economic and financial crisis on the reform of Cohesion Policy 2008-2013*, European Commission Regional Working Paper, WP 03, 2013.

 35 With respect to initiated cycles, in Piemonte the decrease was of 6.8%, whilst in Italy the increase was of 1.6%.

³⁶ As mentioned above, the phenomenon of fertility tourism is also addressed in chapter II and in chapter IV, as disclosed by some informants.





Note: In order to compare data concerning Piemonte and Italy in the same chart, Italian data have been normalised applying a scaling factor of 8.

the incessant growth in demand and supply of MAR procedures on Italian soil, they are also useful tools in examining and interpreting the qualitative and quantitative data discussed in the present volume. In chapters IV-V, in particular, these statistical data are reflected in real-life narratives of Muslim patients.

4. Catchment areas of fertility treatments: «New» Italians

The former section described the flourishing MAR utilisation rate in Italy and in the Piedmontese region; the present section instead aims to identify potential users of domestic fertility treatments.

As briefly mentioned at the beginning of the chapter, the socio-legal narrative on MAP tends to focus upon the convergence/divergence of state law and religious provisions, specifically looking at major religious groups settled in a national state. Faith-inspired state MAR law can indeed be rejected by non-religious people as well as by people belonging to local religious communities.

The next two sections thus intend to explore whether the domestic «MAP catchment area» is changing. Actually, Italians are changing, as statistics confirm. According to the latest available estimates, at the beginning of January 2017, the Italian population amounted to 60,579,000 residents,

86,000 units less than in 2016³⁷. The total number of Italians is decreasing due to three main factors: low birth rate, increasing mortality³⁸, and higher emigration rates³⁹. At the same time, the number of immigrants (including asylum seekers and refugees) settling in Italy is growing, constantly⁴⁰.

With respect to the fertility rate – namely the average number of children born to a woman over her lifetime – a noteworthy downward trend has been registered amid the resident – Italian and alien – population since 2008⁴¹. A sharp difference however exists between Italian and foreign women. For instance, in 2004, Italian women delivered an average of 1.26 children, whilst foreigner women 2.92⁴².

Paying specific attention to the data reported in the Table 1.5, it becomes clear that the birth rates decrease is linked to both Italian and foreign mothers, although alien women are still more fertile when compared to Italian women.

Some key factors are associated with low fertility rates and eventually affect the decline in births. Birth rates (as well as abortion rates) are usually affected by religious beliefs, economic prosperity, and social structures⁴³.

³⁷ See Istat, Indicatori demografici. Stime per l'anno 2016, in Statistiche Report, 6th March 2017, pp. 1-16, at p. 2; Istat, Demographic indicators. Estimates for the year 2016, in Istat Report, 6th March 2017, pp. 1-7, at p. 1.

³⁸ In 2016, the number of deaths were 608,000, less that the peak of 648,000 cases reached in 2015; this high level is however in line with the upward trend due to population ageing. The data published by Istat clarify that the Italian population aged 65 and over exceeded 13.5 million and accounted for 22.3% of the total population. Italians aged 90 and more were 727,000, 1.2% of the total; centenarians were 17,000, equal to 0.03%. See the previous footnote.

³⁹ Istat reports that 147,000 people left the country in 2015, the figure of 8% is higher than the one recorded on 2014 (136,000). The increase in emigration is predominantly due to the rise in the number of Italian national emigrants (from 89,000 in 2014 to 102,000 in 2015). See Istat, *International and internal migration. Year 2015*, in *Istat Report*, 6th December 2016, pp. 1-8, at p. 1.

⁴⁰ See Istat, International and internal migration. Year 2015, cit.

⁴¹ In real terms, European fertility rates are falling in several countries and Europe is regarded as the continent with the lowest total fertility rate. For a historical perspective, see G. Lazdane, and J. Bryld (Eds.), *Low fertility – The future of Europe*, in «Entre Nous, The European Magazine for Sexual and Reproductive Health», No. 63, New York, United Nations Population Fund, 2006; and J. Collins *et al.*, *Europe the continent with the lowest fertility*, in «Human Reproduction Update», 16, 6, 2010, pp. 590-602. For further discussion on increasing childlessness, see *inter alia* M. Kreyenfeld, and D. Konietzka, *Analysing childlessness*, in Iid. (Eds.), *Childlessness in Europe: Contexts, Causes, and Consequences. Demographic Research Monographs*, Dordrecht, Springer, 2017, pp. 3-15.

⁴² Istat, Anno 2015. Natalità e fecondità nella popolazione residente, in Statistiche Report, 28th November 2016, pp. 1-21, at p. 1.

⁴³ See inter alia G. Nargund, *Declining birth rate in Developed Countries: A radical policy re-think is required*, in «Facts, views and vision in obstetrics and gynaecology», 1, 3, 2009, pp. 191-193. On differential fertility, see also M. Livi Bacci, *A History of Italian Fertility During the Last Two Centuries*, Princeton, PUP, 1977.

	2000	2002	2004	2006	2008	2010	2012	2014	2015
Total									
fertility rate	1.26	1.27	1.34	1.37	1.45	1.46	1.42	1.37	1.35
Fertility rate of									
Italian women	-	1.21	1.26	1.28	1.34	1.34	1.29	1.29	1.27
Fertility rate of					a (=	a 10	a a=	4.07	1.0.1
foreign women	-	2.83	2.92	2.92	2.65	2.43	2.37	1.97	1.94

TAB. 1.5. Fertility rate on Italian soil

With regard to the Italian scenario, three main factors have been identified as a core determinant of (in)fertility. First of all, a declining birth rate is the result of the fall in number of women in childbearing years. The number of resident Italian women aged 15-29 is indeed less than half the figure of resident Italian women aged 30-49. Foreign women settled on Italian soil are similarly «getting older». As an illustration, the share of foreign women aged 35-49 out of the total of foreign nationals of childbearing age increased from 41.4% in 2005 to 50.7% in 2016⁴⁴.

Additionally, the overall level of fertility is significantly decreasing in Italy. This phenomenon is primarily due to personal choices (including financial crisis and economic difficulties) and/or pregnancy postponement. Actually, in 2015, the proportion of births to Italian women aged 40 and over (9.3%) exceeded the one of those aged under 25 (8.2%)⁴⁵. Foreign mothers' age at delivery is nevertheless lower when compared to the Italian ones. By way of illustration, in 2008, the average age at delivery was 31.7 for Italian mothers and 27.5 for aliens; in 2015, the average age at delivery were equal to 32.3 and 28.7, respectively. Therefore, in seven years, the child delivery age difference between Italian and foreign mothers was reduced from 4.2 to 3.6 years⁴⁶.

In spite of the fact that a declining birth rate is noticeable also among non-Italian parents, the figure of children born to (at least one) foreign parents is nonetheless rather relevant on Italian soil. For instance, whereas 6% of children born in Italy had at least a foreign parent in 1999, this fraction reached 20.7% in 2015. In North-Western areas, in particular, the increase in the number of children with at least a foreign parent was of +19.6 percentage points in the same time span. The phenomenon is indeed particularly noticeable in Northern Italian regions where more than

⁴⁵ See Istat, *Births and fertility among the resident population. Year 2015*, in *Istat Report*, 28 November 2016, pp. 1-10, at p. 1; Istat, *Anno 2015. Natalità e fecondità nella popolazione residente*, cit., at pp. 6-7.

⁴⁴ See Istat, Anno 2015. Natalità e fecondità nella popolazione residente, cit., at p. 3.

⁴⁶ Istat, Anno 2015. Natalità e fecondità nella popolazione residente, cit., at p. 1.

	19	99	20	15
-	At least one foreign parent (%)	Both parents foreign (%)	At least one foreign parent (%)	Both parents foreign (%)
Italy	6.0	4.0	20.7	14.8
Islands	2.3	1.5	7.8	4.9
South	1.9	0.9	8.7	5.5
Centre	8	5.5	23.7	17.0
North-East	8.7	5.9	29.3	21.4
North-West	9.1	6.2	28.7	21.1

TAB. 1.6. Children born to foreign parents

one baby out of four counts at least a foreign parent, as clarified by the Table 1.647.

Amongst alien parents, four groups of foreign mothers represented 47% of all births in 2015: Romanians (19,123), Moroccans (11,888), Albanians (9,257), and Chinese (4,070). When specifically looking at (im)migrant parents whose country of descent is a Muslim majority country, the number of children born on Italian soil become rather significant. By way of illustration, in 2015, among the number of children born from non-EU alien parents, 13.9% of children were born from Moroccan parents, 10.9% from Albanians, 3.5% from Bangladeshis, 3% from Pakistanis, 3% from Egyptians, 2.5% from Nigerians, 2.2% from Senegalese, 2.1% Tunisians, 1.2% from Kosovans, and 1.2% from Ghanaians.

Examining nationality-mixed couples, the percentages of children whose mother is Italian and whose father is national of a Muslim majority country are as follows: 15.2% from Morocco, 13.4% from Albania, 5.5% from Tunisia, 3.1% from Egypt, 2.7% from Senegal, 1.4% from Nigeria, 1.1% from Ghana. When investigating children with an Italian father and a foreign mother, the figure decreases sharply; for instance, 8.8% of children have a mother from Morocco, 6.4% from Albania, 1.4% from Tunisia, 1% from Senegal, and 1% from Nigeria.

The examined data are in line with what emerged from MAP clinics, namely that nationality-mixed couples are less common amongst Muslims when compared to other migrant communities on Italian soil⁴⁸. In real terms, studies pinpoint a low inter-faith relationships attitude in Western countries⁴⁹; endogamous couples are thus more common, specifically amid Muslim prospective parents.

⁴⁷ Further details can be found in Istat, *Anno 2015. Natalità e fecondità nella popolazione residente*, cit., at pp. 4-5.

⁴⁸ See *infra*, chapter V, section 3.

⁴⁹ For a comparative perspective, see for instance S. Carol, *Like Will to Like? Partner Choice among Muslim Migrants and Natives in Western Europe*, in «Journal of Ethnic and Migration Studies», 42, 2, 2016, pp. 261-276.

Analysing the above-described Istat data⁵⁰, attention should be paid to two additional aspects. First, the percentage of children born in Italy from Moroccan fathers and Italian mothers is higher that the figure of children with Moroccan-national mothers and fathers. In terms of absolute values, nonetheless, the former are equal to 985 children, whilst the second is as high as 9,935 children born in the sole year of 2015. Furthermore, alien parents' naturalisation procedures also affect the figures reported above; parents holding dual nationalities, for instance, cannot be identified by this statistical approach⁵¹.

With respect to Piemonte, the number of children born from alien parents is similarly remarkably increasing. By way of illustration, in 1999, 8.3% of children were born to at least one foreign parent, 5.5% of these children had both non-Italian parents; in 2015, these percentages reached respectively 26.8% and 18.9%. Moreover, in the examined year (2015) the Piedmontese fertility rate rose slightly above the Italian average (1.35), reaching 1.36 amongst resident mothers⁵².

As clarified by the data published by Istat, the Italian total fertility rate is highly impacted on by foreign women, and this explains geographical dissimilarities. In Northern Italian regions, in particular, a larger presence of alien population combined with a greater propensity to have (more) children amid foreigners *de facto* impacts the new-born population⁵³. National highest levels of alien women's fertility rate are indeed registered amongst the residents in Northern areas, where the data indicate an average of 2.06 children per alien woman compared to 1.27 per Italian woman.

As shown in the Figure 1.3, differential fertility can be remarkably noticeable: the fertility rate of foreign mothers was indeed significantly higher than the one of Italian mothers in the city of Torino. As time passes, the average number of children born from foreign and Italian mothers is however gradually reducing. By way of illustration, in 2002 the fertility rate of foreign mothers was 2.82 compared to 1.21 for Italian women; twelve years later, the fertility rate of foreign women dropped to 1.86 (-35.2%), whilst the fertility rate of Italian women increased to 1.29 (+12.5%)⁵⁴. Additionally, the fertility rate of Italian women grew of +0.19 from 2002 to 2010, and

⁵⁰ Istat, Anno 2015. Natalità e fecondità nella popolazione residente, cit., at p. 6.

⁵² The fertility rate of both Italian and foreign women settled in Piemonte is however lower than the national one, being respectively 1.25 (compared to 1.27) and 1.90 (compared to 1.94). See Istat, *Births and fertility among the resident population. Year 2015*, cit., at pp. 5-6.

⁵³ It is worth mentioning that foreign women settled in Central and Southern Italian regions, on average, tend to have a lower number of children; respectively 1.73 and 1.79 children per woman. See Istat, *Anno 2015. Natalità e fecondità nella popolazione residente*, cit., at p. 9.

⁵⁴ Data available at http://dati.istat.it/Index.aspx?DataSetCode=DCIS_FECONDITA1# (11th September 2017). It should be mentioned that the Istat regional data regarding the fertility rate of foreign and Italian mothers are available beginning from 2002.

⁵¹ See *infra*, section 5. It should be mentioned that the fertility rate is calculated relying upon mothers' nationality.

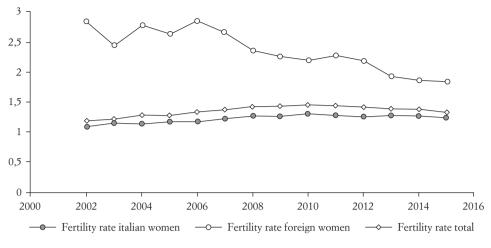


FIG. 1.3. Fertility rate of indigenous and alien population.

+0.14 from 2002 to 2015. As mentioned above, this phenomenon should also be linked to the process of naturalisation of foreign parents; as a result, people «disappear» from statistical data grounded on mothers' nationality⁵⁵.

5. Why (Italian) Muslims?

Amongst foreign (purported) parents, in the present study, the focus is placed upon Muslims. As a starting point, it should be mentioned that Muslim are not considered an exception, this section therefore intends to clarify the reasons supporting and surrounding the research subjects' choice⁵⁶.

First and foremost, *Islām* is the second largest religion after Christianity in Europe. Paraphrasing Gale, Brunn and Gilbreath, the world religious map is changing; as a result, in the contemporary geography of religion, «the West»

⁵⁵ This is the main reason why, in addition to the nationality-criterion, an additional selection criterion based on patients' name and surname has been adopted as useful filter during the empirical investigation conducted for the present work. See *infra*, section 6 and chapters IV and V.

⁵⁶ For an introduction to academic studies considering Muslims «an exceptional case» rather than the standard, see J. Césari, *Muslim Identities in Europe: The Snare of Exceptionalism*, in A. Al-Azmeh, and E. Fokas (Eds.), *Islam in Europe: Diversity, Identity and Influence*, Cambridge, CUP, 2007, pp. 49-67; and S. Allievi, *Reactive identities and Islamophobia: Muslim minorities and the challenge of religious pluralism in Europe*, in «Philosophy and Social Criticism», 38, 4-5, 2012, pp. 379-387.

has to make room for Muslims⁵⁷. This religious community is deemed worthy of attention since the global Muslim population is expected to continue to grow at a faster rate than the non-Muslim population during the next decades⁵⁸. The main factors affecting the constant increase of Muslim population have been identified in the following: higher fertility rate, lower mortality, increased (e/im)migration, and younger age structure of the population⁵⁹.

Actually, although fertility rates have fallen in most Muslim majority countries in recent decades⁶⁰; globally, Muslims show the highest fertility rates. Amongst Muslim parents, the average fertility rate is indeed 3.1 children per woman and this implies that Muslim parents' fertility levels are higher than the world's overall⁶¹. This fact, coupled with the consistent number of young (European) Muslims, contributes to the increasing Muslim share of the world's population, according to the projections of the Pew Research Center's Forum on Religion and Public Life⁶².

In fact, the Muslim share of the population throughout Europe steadily grew from 4% in 1990 to 6% in 2010, and this pattern is expected to continue⁶³. In 2030, Muslims are thus projected to amount to 8% of the over-

⁵⁷ See R. Gale, *The Place of Islam in the Geography of Religion: Trends and Intersections*, in «Geography Compass», 1, 5, 2007, pp. 1015-1036; S.D. Brunn, and D.A. Gilbreath (Eds.), *The Changing World Religion Map. Sacred Places, Identities, Practices and Politics*, Dordrecht, New York, London, Heidelberg, Springer, 2015.

⁵⁸ See PRC, Pew Research Center's Forum on Religion and Public Life, *The Future of the Global Muslim Population. Projections for 2010-2030*, Washington, Pew Research Center, 2011; PRC, Pew Research Center's Forum on Religion and Public Life, *The Future of the Global Muslim Population. Projections for 2010-2050. Why Muslims Are Rising Fastest and the Unaffiliated Are Shrinking as a Share of the World's Population*, Washington, Pew Research Center, 2015. The reported data do not distinguish between two major branches of *Islām – Sunnī* and *Shī'ī –* and various denominations, sects, branches, subgroups and schools of judicial thought. For further details on Muslim denominations see *infra*, chapter III.

⁵⁹ The main factors are the following: fertility, mortality, emigration, immigration, and age structure of the population. See PRC, *The Future of the Global Muslim Population. Projections for 2010-2030*, cit., at pp. 15, 22, 25, 131, and PRC, *The Future of the Global Muslim Population. Projections for 2010-2050*, cit., at pp. 5, 7, 40.

⁶⁰ See *inter alia* J. Schellekens, and Z. Eisenbach, *Religiosity and Marital Fertility: Israeli Arab Muslims, 1955-1972*, in «Journal of Family History», 35, 2, 2010, pp. 147-163, and C.L. Hughes, *The «Amazing» Fertility Decline: Islam, Economics, and Reproductive Decision Making among Working-Class Moroccan Women*, in «Medical Anthropology Quarterly», 25, 4, 2011, pp. 417-435.

⁶¹ See PRC, *The Future of the Global Muslim Population. Projections for 2010-2030*, cit., at pp. 10, 25; and PRC, *The Future of the Global Muslim Population. Projections for 2010-2050*, cit., at p. 75.

⁶² For instance, in 2010, 34% of Muslims was under the age of 15, whereas only more than a quarter of the world's total population (27%) was younger than 15. See PRC, *The Future of the Global Muslim Population. Projections for 2010-2030*, cit., at p. 135; and PRC, *The Future of the Global Muslim Population. Projections for 2010-2050*, cit., at pp. 10 and 77.

⁶³ C. Hackett, 5 facts about the Muslim population in Europe, in «Fact Tank», 19th July 2016, at p. 2.

Setting the scene

TAB. 1.7. Percentages of Muslims settled in European countries

	1990	2010	2030	2050
Muslims settled in Europe (%)	4	6	8	10

all European population, and by 2050, they will account for 10% of Europeans⁶⁴. As clarified by the Pew Research Center, «the share of Muslims in Europe's population will nearly double between 2010 and 2050, from about 5.9% to 10.2%»⁶⁵.

If the current demographic trends continue, Muslims are the only religious group projected to increase faster than the overall global population, therefore reaching 29.7% of world's population in about three decades. Researchers indicate that, in the timeframe 2010-2050, the growth in overall global population will be of 35%, whilst Muslims are projected to increase by 73%⁶⁶. Additionally, Muslims' annual growth rate is expected to be remarkably higher than the world growth rate. From 2010 to 2015, for instance, Muslim growth rate was +1.8%, while the growth rate for the world's population was $+1.1\%^{67}$.

The described trend is in line with the Italian one, indeed the Muslim share of Italian population is significantly and constantly growing. According to the data published by the Pew Research Center, 2.6% of Italian population was Muslim in 2010, and 3.7% in 2012⁶⁸. The percentage of Muslims settled in Italy has now reached 4%, according to the latest available estimates⁶⁹. Muslims are thus projected to amount to 5.4% of Italian residents in 2030⁷⁰, and 9.5% by 2050⁷¹. In real terms, Muslims are expected to

⁶⁴ PRC, *The Future of the Global Muslim Population. Projections for 2010-2050*, cit., at pp. 17 and 79.

⁶⁵ See *Ibidem*, at p. 50.

⁶⁶ See PRC, The Future of the Global Muslim Population. Projections for 2010-2030, cit., at p. 13; PRC, The Future of the Global Muslim Population. Projections for 2010-2050, cit., at pp. 7-8, 14.

⁶⁷ See PRC, The Future of the Global Muslim Population. Projections for 2010-2050, cit., at p. 70.

⁶⁸ See respectively PRC, *The Future of the Global Muslim Population. Projections for 2010-2030*, cit., at pp. 124 and 130; PRC, *The Global Religious Landscape*, Roma, Pew Research Center, 2012, p. 47. Cfr. PRC, *The Global Religious Landscape*, cit., at p. 47; PRC, *The Future of the Global Muslim Population. Projections for 2010-2050*, cit., at p. 328.

⁶⁹ Estimates based upon data provided by ISMU, Orim, Istat and Minister of Interior. See F. Ciocca, *Quanti sono i musulmani in Italia? Stime, analisi e proiezioni*, in «Lenius», 22nd August 2017, pp. 1-12, at p. 3.

⁷⁰ According to the data reported by PRC, *The Future of the Global Muslim Population*. *Projections for 2010-2030*, cit., at pp. 124, 126-127, 130, and 161.

⁷¹ PRC, *The Future of the Global Muslim Population. Projections for 2010-2050*, cit., at pp. 50 and 238. In case of no new migration, Muslims are projected to reach 7.2% of Italian population by 2050.

° .					
	2010	2012	2017	2030	2050
«Visible» Muslims settled in Italy (%)	2.6	3.7	4	5.4	9.5

TAB. 1.8. Figures and estimates of the Italian Muslim population

increase from 1,583,000 to 3,199,000 in two decades⁷². By 2030, the Muslim population is estimated to more than double in size with a projected percentage increase of +102.1 and a projected point change of 2.7⁷³.

With reference to the Italian soil, in compliance with the latest estimates, at the beginning of 2017, Muslim residents amounted to 2,520,000⁷⁴. Amongst them, 43% are (also) Italian nationals, and therefore almost «invisible» in (statistical) studies relying upon nationalities as an indicator of religious belonging, as briefly mentioned before and further explained below.

When specifically looking at migrant communities, foreign Muslims settled in Italy amounted to 1.6 million in 2014⁷⁵, and 1.4 million in 2015; more precisely, Muslims counted as 32% of Italian immigrants by the end of 2015⁷⁶. When computing regularly and irregularly settled aliens, however, the Muslim share of local population reached 1.7 million at the beginning of 2015⁷⁷. According to the data published by the *Dossier Statistico Immigrazione* 2016, on 1st January 2016, non-nationals residing in Italy were 5,054,000, thus representing 8.3% of the total population⁷⁸. The same foreigners' percentage was reported on 1st January 2017, when non-nationals residing in Italy similarly amounted to 8.3% of the total Italian population, an increase of 2,500 units (+0.5 per thousand) was however registered⁷⁹.

As discussed above, (im)migration plays a key role in the increase of domestic Muslim population. According to the data published by Istat, non-EU foreigners holding a residence permit in Italy on 1st January 2016 were

⁷² See PRC, *The Future of the Global Muslim Population. Projections for 2010-2030*, cit., at p. 124. From 1990 to 2010 the Muslim population increased from 858,000 (1.5%) to 1,583,000 (2.6%); see *Ibidem*, at p. 161.

⁷³ According to the data reported by PRC, *The Future of the Global Muslim Population*. *Projections for 2010-2030*, cit., at pp. 124, 126-127, 130, and 161.

⁷⁴ See supra, and Ciocca, Quanti sono i musulmani in Italia? Stime, analisi e proiezioni, cit.

⁷⁵ Fondazione ISMU, *Religioni in Italia e nel mondo*, in «ISMU Iniziative e Studi», May 2014, pp. 1-3, at p. 1.

⁷⁶ See Centro Studi e Ricerche IDOS and Confronti, *Dossier Statistico Immigrazione* 2016, Roma, Edizioni IDOS, 2016, pp. 9-14.

⁷⁷ See A. Menonna, *La presenza musulmana in Italia*, in «Fact Sheet ISMU», 1st-5th June 2016, at pp. 1-3.

⁷⁸ Centro Studi e Ricerche IDOS and Confronti, *Dossier Statistico Immigrazione* 2016, cit. Compared to 2015, there was an increase of 39,000 units amongst immigrants. See Istat, *Demographic indicators. Estimates for the year 2015*, in *Istat Report*, 19th February 2016, pp. 1-7, at p. 1.

⁷⁹ Istat, *Demographic indicators*. *Estimates for the year 2016*, cit., at p. 1.

3,931,133; amid these migrant people, the larger part came from two Muslim majority countries, namely Morocco (510,450) and Albania (482,959)⁸⁰.

Whilst new permits issued for work are strongly decreasing, the permits for asylum and other humanitarian reasons continue to grow in absolute and relative terms. Statics elucidate what follows: in 2015, the latter represented 28.2% of new inflows; in 2014, they were only 19.3%; in 2013, they were as low as 7.5%. Muslim majority countries are also highly represented amongst the states of origin of asylum seekers and refugees, as shown by these figures: Nigeria (13,739 permits), Pakistan (8,571), Gambia (7,229), Senegal (5,411), Mali (5,240), Bangladesh (5,085), Afghanistan (3,731), and Ghana (2,896)⁸¹. It has been emphasised that Gambia, Nigeria, and Pakistan were the countries of origin of the majority of migrants holding permits issued for asylum and other humanitarian reasons, reaching respectively 96.9%, 80.5%, and 59.4%. By way of illustration, in 2015, they represented 43.8% of all permits issued by the Italian government for this reason⁸².

When adopting a geographical perspective, North-Western areas accommodate 25.9% of asylum seekers and refugees on Italian soil; in 2015, the number of immigrants benefitting from a permit for asylum and other humanitarian reasons were 2,290 in the sole province of Torino⁸³. In the long term, it is thus to be expected that these nationalities will increasingly be found in the catchment area of local fertility clinics.

Amongst foreign Muslims, five communities represent two-third of the whole figure of Muslims settled in Italy; these are Moroccan, Albanian, Bangladeshi, Pakistani and Egyptian nationals⁸⁴. The highest numbers of Muslim immigrants (55%) is shared among four Italian regions; namely Lombardia, Emilia-Romagna, Veneto and Piemonte. In this area, Muslim immigrants amounted to 119,000, on 1st January 2016; Muslims thus represent 8.4% of local immigrants as a whole⁸⁵; and this figure only partially describes the Piedmontese Muslim population. In fact, it is worth mentioning that irregularly settled people, unrecorded nationals and naturalised foreigners are indeed excluded from the reported statistical data and therefore «invisible».

⁸⁰ Istat, Non-EU citizens: Presence, new inflows and acquisition of citizenship. Years 2016-2017, in Statistiche Report, 11th October 2017, pp. 1-2, at p. 1.

⁸¹ Istat, Non-EU citizens: Presence, new inflows and acquisition of citizenship. Years 2015-2016, in Statistiche Report, 29th September 2016, pp. 1-2, at p. 1. See also Istat, Indicatori demografici. Stime per l'anno 2015, in Statistiche Report, 19th February 2016, pp. 1-14, at pp. 6-8.

⁸² Istat, Non-EU citizens: Presence, new inflows and acquisition of citizenship. Years 2015-2016, cit., at p. 1.

⁸³ Istat, Indicatori demografici. Stime per l'anno 2015, cit., at p. 8.

⁸⁴ Ciocca, Quanti sono i musulmani in Italia? Stime, analisi e proiezioni, cit., at p. 6.

⁸⁵ Fondazione ISMU, *The Twenty-first Italian Report on Migrations 2015*, Milano, McGraw-Hill Education, 2016, p. 2.

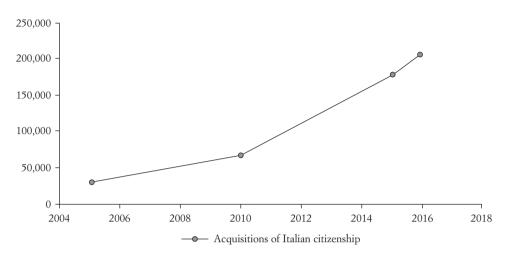


FIG. 1.4. Increase of naturalisation processes.

Naturalised aliens deserve specific attention in view of the fact that the number of foreigners admitted to Italian citizenship is regularly expanding. By way of illustration – as detailed in the Figure 1.4 – statistics reveal that, 29,000 acquisitions of Italian citizenship were recorded in 2005; 66,000 people were naturalised five years later, namely in 2010; in 2015, the number of naturalisation reached 178,000. Following on from that progression, 205,000 citizenship acquisitions have been estimated in 2016. Additionally, the number of acquisitions of citizenship granted to children by transmission and of young persons who chose Italian citizenship when reaching their eighteenth birthday (people born in Italy to foreign parents) increased from about 10,000 in 2011 to more than 66,000 in 2015⁸⁶.

This indicates that the country is facing a more mature stage of immigration, and that the overall figure of Italian Muslims is constantly and rapidly increasing. In 2015, for instance, 42% of citizenship acquisitions by non-EU regarded Albanian (35,134) and Moroccan (32,448) nationals. In the same year, naturalised aliens from Muslim majority countries and countries with a significant Muslim presence – such as India, Bangladesh, Pakistan, Tunisia, Macedonia, Egypt, and Senegal – were also abundant⁸⁷.

As a result, the local Muslim population is increasingly Italian. In 2015, for instance, out of 2.6 million of Muslims settled on Italian soil, only 1.7

⁸⁶ Istat, Non-EU citizens: Presence, new inflows and acquisition of citizenship. Years 2015-2016, cit., at p. 1.

⁸⁷ Detailed figures can be found in Istat, *Indicatori demografici. Stime per l'anno 2015*, cit., at pp. 1, 11-13.

were aliens⁸⁸. Additionally, it has been highlighted that only 57% of Muslims settled in Italy are foreign nationals; more specifically, 82% of Italian Muslims citizens are nowadays naturalised citizens, 9% are children born from naturalised parents, and 9% are indigenous people converted to *Islām*⁸⁹. These data, combined with the young age of naturalised foreigners (38% of the acquisitions are obtained from underage individuals, and 50% by people under 30 years of age)⁹⁰, naturally affects the (potential) fertility rate of foreign Muslim prospective parents. Furthermore, the incessant growth of local Muslim population potentially affects the services provided by domestic fertility centres in the long term. It is thus worth paying specific attentions to the needs and demands of prospective Muslim parents approaching hospitals and clinics offering MAPs.

6. Research subjects and methods

In order to achieve a comprehensive understanding of the investigated phenomena, the present study relies upon multiple data sources, in line with socio-legal research methods⁹¹. Each chapter elaborates available statistics, scholarly publications, relevant legislation, domestic case laws, religious rulings, Islamic sources, and Muslim customs; in addition to field-collected

⁸⁸ The estimates indicate 500,000 Muslims from Morocco, 270,000 from Albania, 117,000 from Bangladesh, 111,000 from Tunisia, 105,000 from Egypt, 101,000 from Pakistan, 97,000 from Senegal, 58,000 from Macedonia, 49,000 from Kosovo, 26,000 from Algeria, 25,000 from Bosnia-Herzegovina, 22,000 from Turkey. See Menonna, *La presenza musulmana in Italia*, cit., at pp. 2-3.

⁸⁹ See Ciocca, Quanti sono i musulmani in Italia? Stime, analisi e proiezioni, cit., at pp. 4-5.

⁹⁰ For further details, see Istat, *Indicatori demografici. Stime per l'anno 2015*, cit., at p. 12. People under 20 years represented 42% of the 2015's new Italian citizens Istat, *Non-EU citizens: Presence, new inflows and acquisition of citizenship. Years 2015-2016*, cit.

⁹¹ Due to word limit, it is not possible to provide in-depth information with respect to the adopted research methods. Accordingly, bibliographical references will be given in the footnotes. With regard to the chosen methodological approach, see A. Bryman, Social research methods, Oxford, New York, OUP, 2001; M. Bulmer (Ed.), Sociological research methods. An introduction, II ed., Piscataway, Macmillan Press, 2003; N.K. Denzin, The research act: A theoretical introduction to sociological methods, Englewood Cliffs, NJ, Prentice Hall, 1989; J. Elliott, Using Narrative in Social Research: Qualitative and Quantitative Approaches, London, Sage, 2005; G. Gray, and N. Guppy, Successful surveys: Research methods and practice, Toronto, Harcourt Brace, 1994; T.E. Huff, Max Weber and the methodology of the social sciences, New Brunswick, NJ, Transaction Publishers, 2003; F.K. Ringer, Max Weber's methodology: The unification of the cultural and social sciences, Cambridge, Harvard University Press, 1997; N.S.R. Walliman, Social research methods, London, Sage, 2006; M. Weber, The methodology of the social sciences, New York, Free Press, 1949; D. Yanow, and P. Schwartz-Shea (Eds.), Interpretation and method: Empirical research methods and the interpretive turn, New York, Armonk, London, M.E. Sharp, 2006. See also R. Banakar, and M. Travers (Eds.), Theory and method in socio-legal research, Oxford, Portland, OR, Hart, 2005.

qualitative and quantitative data⁹². Paying attention to Muslim specificities⁹³, medical contexts and bioethics⁹⁴, empirical evidence was collected through examination of documents, fieldwork (non)participant observations, group discussions, and semi-structured interviews. The interviewees were selected combining area sampling, accidental sampling and snowball techniques.

The timeline of fieldwork activities and data collection encompassed three stages: pilot survey from June 2016 to August 2016, in-depth stage from September 2016 to August 2017, and follow up stage from September 2017 to October 2017. The contacted research subjects include the following categories⁹⁵:

- administrative staff of medical centres and clinics offering MAP;

92 On the former see inter alia N.K. Denzin, and Y.S. Lincoln (Eds.), The handbook of qualitative research, London, Sage, 1994; Iid. (Eds.), Collecting and interpreting qualitative materials, London, Thousand Oaks, Sage, 1998; M. Fallon, Writing up quantitative research in the social and behavioural sciences, Rotterdam, Boston, Sense publishers, 2016; U. Flick, An introduction to qualitative research: Theory, method and applications, London, Sage, 1998. W. Hollway, and T. Jefferson, Doing qualitative research differently: Free association, narrative, and the interview method, London, Sage, 2000; D. Weinberg (Ed.), Qualitative research methods, Oxford, Blackwell, 2002. On the latter, see inter alia M. Balnaves, and P. Caputi, Introduction to Quantitative Research Methods: An Investigative Approach, London, Thousand Oaks, Sage, 2001; R.H. Bernard, Social Research Methods: Qualitative and Quantitative Approaches, Thousand Oaks, Sage, 2000; Id., Research Methods in Anthropology: Qualitative and Quantitative Approaches, V ed., Lanham, Altamira, 2011; N. Blaikie, Analyzing Quantitative Data: From Description to Explanation, London, Thousand Oaks, Sage, 2008; J.W. Creswell, Research Design: Oualitative, Ouantitative, and Mixed Methods Approaches, Los Angeles, Sage, 2014; P.S. Maxim, Quantitative Research Methods in the Social Sciences, Oxford, OUP, 1999; P.W. Vogt (Ed.), Sage Quantitative Research Methods, Los Angeles, Sage, 2011; R.K.Y. Yin, Case Study Research: Design and Method, IV ed, Thousand Oaks, Sage, 2009. See also these edited volumes T.D. Little (Ed.), The Oxford Handbook of Quantitative Methods: Foundations, Oxford, OUP, 2003; J.W. Osborne (Ed.), Best Practices in Quantitative Methods, Los Angeles, London, Sage, 2008; T. Panter, and S.K. Sterba (Eds.), Handbook of Ethics in Quantitative Methodology, New York, Routledge, 2011; M. Watzlawik, and B. Aristi (Eds.), Capturing Identity: Quantitative and Qualitative Methods, Plymouth, University Press of America, 2007.

⁹³ As elucidated by N. Jeldtoft, and J. Nielsen (Eds.), *Methods and contexts in the study of Muslim minorities: Visible and invisible Muslims*, London, Routledge, 2012.

⁹⁴ See for instance R.G. De Vries, and J. Subedi, *Bioethics and Society: Constructing the Ethical Enterprise*, Upper Saddle River, Prentice Hall, 1998; M. Düwell, *Bioethics: Methods, Theories, Domains*, London, Routledge, 2013; R.C. Fox, and J.P. Swazey, *Observing Bioethics*, Oxford, OUP, 2008; S. Holm, and M.F. Jonas (Eds.), *Engaging the World: The Use of Empirical Research in Bioethics and the Regulation of Biotechnology*, Amsterdam, IOS Press; J. Ives, M. Dunn, and A. Cribb (Eds.), *Empirical Bioethics: Theoretical and Practical Perspectives*, Cambridge, CUP, 2016; C. Rehmann-Sutter, M. Düwell, and D. Mieth (Eds.), *Bioethics in Cultural Contexts: Reflections on Methods and Finitude*, Dordrecht, Springer, 2006; B. Steinbock (Ed.), *The Oxford Handbook of Bioethics*, Oxford, OUP, 2007; G. Weisz (Ed.), *Social Science Perspectives on Medical Ethics*, Dordrecht, Kluwer, 1900.

⁹⁵ I am sincerely grateful to all the research subjects for welcoming and supporting this research project; without their support and help, the present study would have not been possible. All the field-collected data have been anonymised in this study, therefore their names cannot be reported.

- clinic staff of medical centres and clinics offering MAP;

- local cultural mediators operating in the medical field;

- patients of MAP clinics (e.g. prospective (Muslim) mothers and fa-thers);

- Islamic figures active at local, national, international levels;

- leaders of religious associations active at local and national levels.

Further details on the above-listed categories of research informants are provided in the subsections below.

6.1. Local medical centres and clinics offering MAP

With regard to local medical centres and clinics providing MAP techniques, the author contacted all medical centres providing reproductive and procreative treatments in Torino (Piemonte)⁹⁶, as assessed and recognised by the Italian National Registry of Assisted Reproductive Technologies (*Registro Nazionale Procreazione Medicalmente Assistita*)⁹⁷. These include eight centres: two publicly funded, one funded by the national health system (SSN), and five privately funded clinics. All the centres were invited to participate in the study. The directors of all centres were met and (partly) interviewed by the author; however, the health management of a publicly funded hospital eventually decided not to take part to this study. As a result, the data of seven MAP centres are reported and analysed in the present volume.

As far as the research activities are concerned, the participant medical centres and clinics offering MAP were invited to provide both qualitative and quantitative data. To varied extents, the fertility centres' participation encompassed data supply, document examination, field observations, focus groups, and interviews.

In particular, the centres taking part in the study were requested to disclose the total number of patients for the years 2015 and 2016, as communicated to the Italian National Registry of Assisted Reproductive Technologies⁹⁸. According to Italian laws, these data (in addition to more detailed material) are to be officially communicated to the Ministry of Health twice a year, and are to be made publicly available. Although originally guaranteed by all the seven participant clinics, mentioned figures were eventually disclosed only by some fertility centres⁹⁹. Copies of the fertility clinic's in-

 $^{^{\}rm 96}$ Via electronic correspondence and/or phone call and/or meeting through research informants.

⁹⁷ For details on this aspect, see *infra*, chapter II, sections 3 and 5-6.

⁹⁸ This figure was needed to extrapolate the number of Muslim prospective parents benefitting from the provided fertility services. For further details, see *infra*, chapter V.

⁹⁹ With the exception of one MAP centre that decided not to take part into the present study, all the interviewees medical professionals declared they would have provided men-

formed consent form(s) to be filled by patients, as well as other relevant documentation to be legally released by the MAP centre to patients undergoing fertility treatments were also requested by the author¹⁰⁰. Regrettably, only some centres felt comfortable enough to provide mentioned documentation for this study¹⁰¹. In real terms, although all the participant fertility clinics manifested their interest and willingness to take part in the present study, some of them eventually became elusive¹⁰². It should however be mentioned these difficulties were usually linked to ethnographic field-specificities, being interview postponements predominantly due to patients' medical emergencies.

Whereas some fertility centres eventually proved to be reluctant in disclosing the total figure of their patients and related material, others welcomed the research with vivid interest. As a result, the author was allowed to examine quantitative documentation. Additionally, access was granted to the MAP centre and related health environments – such as medical specialist clinics, cultural mediators' offices, and accident and emergency. The author was thus enabled to collect quantitative and qualitative data.

In addition to the patients' figure mentioned above, three clinics provided more detailed material. First, two private medical centres supplied details concerning Muslim patients accessing fertility treatments involving female/male donors. Secondly, a centre offering MAP procedures in the premises of a public hospital, granted the author access to the electronic lists of all patients' appointments for fertility treatments in order to identify foreign and/or Muslim patients.

tioned data. Nonetheless, collecting the patients' number was eventually proven to be an arduous task. In some cases, the author was invited to contact the centres several times, agree a telephone conversation with the personnel, and ask for a new meeting with the director; when eventually received, very rarely this material was provided. Frequently, the author was directed to another person, who was entitled to deal with the Ministry of Health and therefore was supposed to know the exact number of patients accessing the centre every year. On a few occasions, the meeting with this expert informant again required several phone calls and/or emails. In other cases, the correspondence was ignored for some months.

¹⁰⁰ As detailed *infra*, in chapter II, section 2.

¹⁰¹ Consequently, the meetings, which were formerly agreed to take place, were eventually delayed, and the submission of the data they were expected to provide was repeatedly postponed. In one fertility centre, the author was allowed to read a copy of some documents released to patients while in the MAP clinic's waiting room, but a copy of the document was never provided to be analysed in the present study.

¹⁰² By way of illustration, in some cases, the author was compelled to call the medical centre six-eight times before the call was actually transferred to the director, or before obtaining a telephone appointment. Once the author managed to talk to the clinic director and agree on a suitable day and time to meet, several-hour-wait was sometimes necessary. On a few occasions, the period of time by which the meeting was postponed was very long, therefore the meeting was eventually rescheduled. One of the examined lists comprised fertility procedures of levels I-III provided during the years 2009-2017, and a total of 16,028 patients¹⁰³. Out of 8,014 couples, the author identified 2,444 couples encompassing at least a foreign purported parent, and 712 couples encompassing at least a Muslim partner¹⁰⁴. Accordingly, a number of data were extracted, studied and analysed for more than 700 Muslim male and female patients¹⁰⁵.

A second list encompassed more in-depth information concerning a group of Muslim prospective mothers and fathers who underwent fertility treatments from 2005 to 2016. As previously agreed, the author inventoried all the details listed in the previous paragraph with respect to 712 Muslim patients. This document was then sent to the appointed physician who – being authorised to access the patients' electronic medical records – provided additional information, as requested by the author¹⁰⁶. The received electronic document was then completed by the author, before analysing the material discussed in the present volume.

The examined material additionally included five handwritten lists reporting the surnames of the patients attending medical appointments for fertility treatments during the Islamic month of fasting. The selected material concerning medical examinations during *ramadhān* was also intended to determine whether the number of Muslim patients decreases or increases at certain times

¹⁰³ Clarifications on the employed terminology can be found *infra*, in chapter II, section 3. ¹⁰⁴ This was determined through cross-factors such as patients' nationalities, countries of origins, Muslim surnames and names, wearing of religious symbols, and physical appearance (when possible). For further details on how to identify Muslim names, see Financial and Banking Information Infrastructure Committee, A Guide to Names and Naming Practices, UK, FBIIC, 2006, available online at https://www.fbiic.gov/public/2008/nov/ Naming_practice_guide_UK_2006.pdf; Hippocrene Books (Ed.), Arabic First Names, New York, Hippocrene Books, 1999; G.T. Horlacher, Various Country and Ethnic Naming Customs, in «ProGenealogists, Articles & Education», 2000, online at https://web.archive.org/ web/20140705131227/http://www.progenealogists.com/namingpatterns.htm; D. ibn Auda, Period Arabic Names and Naming Practices, in «Society for Creative Anachronism», 2013, online at http://heraldry.sca.org/laurel/names/arabic-naming2.htm; A. Schimmel, Islamic Names: An Introduction, Edinburgh, Edinburgh University Press, 1989; K.M. Sharma, What's in a Name: Law, Religion, and Islamic Names, in «Denver Journal of International Law and Policy», 26, 2, 1997, pp. 151-208; J. Stewart, 1,001 African Names: First and Last Names from the African Continent, New York, Citadel Press, 1997; S.M. Zawawi, African Muslim names: Images and identities, Trenton, NJ, Africa World Press, 1998.

¹⁰⁵ The data regarding names, surnames, and age of prospected mothers; names and surnames of prospected fathers; description of infertility/sterility of prospected mothers; description of infertility/sterility/sterility of prospected fathers; suggested treatments; date of first treatment; date of first medical appointment; notes.

¹⁰⁶ These concern nationality of prospected mothers and fathers; patient's tax exemption; prospective parents' consanguinity; type of undergone fertility treatment(s); number of treatments; number of occurred pregnancy/ies; number of born child/ren; notes. I would like to express my deepest gratitude to M.D. Noemi Di Segni for the invaluable help provided, and to Professor Alberto Revelli for his precious support and for granting access to the clinic and its patients. of the year. Completing the process of collecting and examining all these data implied logistic-related and quantity-related issues¹⁰⁷.

As far as qualitative data are concerned, one last aspect should be emphasised. In some MAR services, the author was authorised to meet and interview clinic personnel as well as patients. In particular, in some cases, the author was allowed to observe the interaction between Muslim prospective parents, physicians, gynaecologist, andrologists, and nurses.

In addition, in the participant medical centres and clinics offering MAR services, interviews were released by administrative staff – more precisely, by secretaries and other employees such as *operatori socio-sanitari* (OSS) – and clinic staff – namely healthcare practitioners such as medical doctors, clinicians, IVF physicians, obstetricians, nurses, biologists, embryologists, geneticists, and psychologists¹⁰⁸. The insights gained from the released interviews are examined in-depth in chapters II, IV and V.

6.2. Local cultural mediators

In order to achieve a better understanding of patient/doctor dynamics, in addition to the aforementioned research subjects, cultural mediators were also met and interviewed. This professional figure is indeed of pivotal importance acting as carrier of cultural transfer and bridging linguistic and geo-cultural borders, more specifically in healthcare matters¹⁰⁹.

Seven cultural mediators operating in the medical (and psychological) field in the city of Torino were contacted¹¹⁰. These included six women and one man with field experience ranging from three to fifteen years.

¹¹⁰ Via electronic correspondence and/or phone call also facilitated by some LDF colleagues and research informants.

¹⁰⁷ Further details are provided *infra*, in chapter V.

¹⁰⁸ The number of healthcare professionals who were interviewed varies from one to eight medical doctors for each centre.

¹⁰⁹ For further details on this professional figure and its role in mediating the interaction between different stakeholders, see *inter alia* C. Baraldi, V. Barbieri, and G. Giarelli, *Immigrazione, mediazione culturale e salute*, Milano, Franco Angeli, 2008; M. Castiglioni, *La mediazione linguistico-culturale. Principi, strategie, esperienze*, Milano, Franco Angeli, 1997; I.E.T. de Souza, *Intercultural Mediation in Healthcare: From the Professional Medical Interpreters' Perspective*, Bloomington, Xilibris, 2016; M. Fiorucci, *La mediazione culturale: strategie per l'incontro*, Roma, Armando, 2007; L. Gavioli, *La mediazione linguistico culturale: una prospettiva interazionista*, Perugia, Guerra, 2009; V. Olivieri, *Il mediatore culturale linguistico: ponte tra le culture*, Verona, Cortina, 2011. For a comparative perspective, see the following essay collections: M. Russo, and G. Mack (Eds.), *Interpretazione di trattativa: la mediazione linguistico-culturale nel contesto formativo e professionale*, Milano, Hoepli, 2005; H. Tonkin, and F.M. Esposito (Eds.), *The Translator as Mediator of Cultures*, Amsterdam, John Benjamins Publishing Company, 2010; R. Mette, and C. Spinzi (Eds.), *Mediazione linguistica e interpretariato: regolamentazione, problematiche presenti e prospettive future in ambito giuridico*, Bologna, CLUEB, 2013.

Five of them were formerly associated with public hospitals and five were/ are linked to state funded organisations. They are all Italian citizens whose countries of origin were Middle Eastern (e.g. Lebanon, Syria), North African (e.g. Morocco, Egypt), and Eastern European (e.g. Albania). The age range of this group of informants fluctuated from 25 to 50 years. With respect to religious belonging, two declared themselves to be Muslim, three declared themselves to be Christian, one identified herself as a lay person.

The collaboration offered included detailed interview(s), access to clinical centres/hospital, access to patients, access to clinic staff. More precisely, amid the group of contacted cultural mediators, five decided to take part in this study and released one or more interviews. In one case, the author was also allowed to observe the interaction between this professional figure, patients and clinic staff members, while shadowing the cultural mediator both in accident and emergency services and in medical specialist clinics. The declarations released by these informants are specifically addressed and analysed in chapters III, IV and V.

6.3. Patients undergoing fertility treatments

Patients undergoing fertility treatments in the ISS registered clinics¹¹¹ based in Torino were also invited to contribute to the present study. Two groups of patients can be identified: those who underwent fertility treatments in private medical centres and those who opted for public medical centres. As far as the former are concerned, three patients (two women and one man whose age range was 30-50 years) were contacted through medical doctors working in private centres. To a varied extent, they released interviews and provided partial access to their medical files.

With regard to patients in public medical centres offering MAR, a participant clinic granted the author the opportunity to meet and interview personnel as well as patients. Semi-structured interviews and focus groups thus took place in a room the author was granted access in the clinic premises¹¹². Twenty-seven patients – thirteen women and eight men – were interviewed and/or took part in focus groups. When available and willing to do so, couples of prospective parents undergoing fertility treatments were interviewed together. The participants' countries of origin were Morocco, Egypt, Tunisia, Bangladesh, and Pakistan.

¹¹¹ For further details on the employed terminology, see *infra*, chapter II, section 3.

¹¹² The procedure adopted was the following: the personnel of a participant MAP clinic introduced the author of the volume to Muslim patients. After all relevant detailed information concerning the study and the researcher had been provided, if the patients agreed, the interview(s) were conducted and/or the focus group was arranged.

Interviews were conducted in Italian when possible, in order to test the understanding of Italian language by the parties (more specifically, of foreign Muslims)¹¹³. When the partners were not comfortable in communicating using Italian language, they were allowed to reply in Arabic; when this was also not possible, interviews were conducted in Arabic and/or English language accommodating the patients' requests and needs¹¹⁴.

The collaboration offered by the patients varied and encompassed released interviews, participation to focus groups, observation of patients' interaction with medical personnel in the centre, access to documents provided by the clinic, partial access to their medical file. The latter were not needed, however, some patients insisted on requesting the author to act as translator/interpreter/cultural mediator, to verify whether they understood the medical therapy properly, to provide clarifications on the medical treatments they were undergoing, or to offer legal advice. When the author explained that she was not authorised to meet any of those requests, foreign patients frequently asked for Italian language courses and/or translation to be provided by the hospital.

It should be mentioned that Muslim patients were «honoured» (to use the vocabulary employed by some of them) to receive what they perceived as a sort of «special treatment», therefore the study participation rate was very high. The patients' refusal to take part in the research was only related to the limited amount of time they could spend in the clinic/hospital after the medical appointment(s), due to previous commitments, mostly linked to logistics and/or childcare issues.

6.4. Religious figures and Islamic associations

As far as Muslim scholars and Islamic associations are concerned, two types of informants were contacted and invited to participate to the study: national Islamic associations, local mosques and worship centres.

First, all Islamic worship centres and mosques registered in Torino were invited to participate to this study¹¹⁵. The author therefore contacted eight-

¹¹⁵ Via electronic correspondence and/or phone call and/or meeting through research informants. When the religious figure (*imām*, *shaykb*, or head of the centre) was not fluent in the Italian language, a written description of the project in Arabic language was provided by the author.

¹¹³ On Muslim foreign patients' language barriers and communication difficulties, see *in-fra*, chapter IV, sections under 2 and 4-4.1.3.

¹¹⁴ With respect to language, it should be stressed that – although less common in the English language – the present report widely relies upon passive forms in describing the research undertaken by the author and the examined data. This choice was justified by the fact that the publication will be translated into the Italian language and to mirror the previous publications of the LDF Series.

een Islamic religious figures and/or members of the board of directors of Islamic centres. Eight people – seven men and one woman – agreed to be interviewed, at least once, for this study. To a different extent, the participation of local Islamic worship centres and/or Islamic associations encompassed data supply, field observations, focus groups, and interviews, as well as potential future collaborations with clinics offering fertility treatments.

It should be emphasised that, when conducting the empirical investigations some difficulties became evident, specifically with regard to this group of research informants. On the one hand, not all the *a'immab/shuyūkh* settled in the area are fluent in the Italian language¹¹⁶. Accordingly, a written description of the project and the research questions was provided in Modern Standard Arabic when requested. Additionally, some interviews were conducted in Arabic language or in local dialects (in this case the author was supported by a mosque member trusted by the religious figure). On the other hand, the head of the worship centre and/or the person responsible of the mosque activities was rarely comfortable in addressing the research topics¹¹⁷. Although being fluent in Italian language and conversant with the local administrative systems, these informants voiced their uneasiness in dealing with Islamic issues such as rights and duties of parents/children in *Islām, sharī'ah* compliant remedies to infertile Muslim partners, and Islamically permitted ART/MAP techniques.

Despite the aforementioned hindrance, Islamic worship centres offered collaboration in terms of access to local building and religious facilities, invitation to cultural/religious events in the centre, and meetings organisation in the centre premises. Based on preliminary evidence as disclosed by this study, a local mosque declared that the board of directors should discuss the possibility of providing a free of charge translation service for Muslim women in hospitals¹¹⁸.

In addition to local mosques and worship centres, three Islamic national associations, which are particularly active in Torino and in the Piedmontese region, were also contacted and invited to participate to the present study. These are the following:

- Confederazione Islamica Italiana (CII), self-defined as the «organisation grouping independent Islamic centres»;

- Comunità Religiosa Islamica Italiana (CoReIs) self-defined as «the first autochthonous Italian Muslim community», encompassing mostly converts;

¹¹⁶ The word *a'immah* is the plural form of the word *imām*, and this identifies the person who leads the prayers by staying in front of the other believers. The word *shuyūkh* is the plural of the Arabic word *shaykh*, this word is employed to identify an Islamic scholar. In other cases, the word *'ulamā'* is used: this is the plural of the word *'ālim* and it denotes a learned person or a scholar.

¹¹⁷ As highlighted *infra*, in chapter III.

¹¹⁸ For further details, see *infra*, chapters IV, section 4.1.2 and VI, section 5.

- Unione delle Comunità Islamiche d'Italia (UCOII) self-defined as «the association of associations».

The presidents of two associations were interviewed after the end of the month of *ramadhān*, in 2017¹¹⁹; the secretary of another association asked for two in-depth project descriptions and a detailed list of research questions, his answers were pending at the time of writing and were eventually never submitted to the author or to LDF.

The fact that the above-mentioned Islamic associations manifested their willingness to voice their ideas through released interviews and asked for a copy of the report indicate that data concerning Italian Muslim communities are still missing. Italian *Islām* is indeed a highly under-explored phenomenon; Muslim intended parents' needs are voiced and met with difficulties by both religious associations and state bodies.

It should also be mentioned that these informants were specifically chosen to address the topics from very different angles, therefore unveiling *shari* ah compliant norms as interpreted and enacted in Torino by local Muslims. More specifically, the declarations released by these privileged observers of Muslim prospective patients are discussed in chapters III, IV and V.

7. Study outline

Examining new parenthood and childhood patterns amongst Muslims intended parents¹²⁰, the volume encompasses six chapters. This first one framed the relevant issues whilst introducing context, focus and rationale of the study. Attention was also paid to specific terminology and adopted research methodologies, in addition to field-collected data and interviewed research subjects.

The second and third chapters discuss the frames of reference of the two examined realities: the Italian one and the Muslim one. Accordingly, the second chapter focuses upon the evolution of Italian legislation, case law and praxes on nationally permitted fertility treatments, also addressing the specificities of MAP clinics in Torino. The third chapter examines the relevant sources of Islamic law and Muslim customs with respect to *sharīʿah*

¹¹⁹ The 9th month of the Islamic calendar, when Muslims are commemorating the first revelation of *al-Qur'ān* through fasting from dawn to sunset. In 2016, it lasted from 7th June to 6th July; in 2017 it lasted from 27th May to 25th June.

¹²⁰ In this volume, the terms «parenthood» and «childhood» are respectively used to identify the state of being a parent (i.e. mother or father) or a child (i.e. daughter or son). Accordingly, the chosen words denote the condition (i.e. -hood) of being regarded as a parent, or as a person's child, relying upon biological, legal, religious, or customary provisions, sometimes independently from actual parenting and/or filiation.

compliant remedies to childlessness, while paying specific attention to the issues raised by the interviewed Islamic scholars and local religious figures.

Chapters four and five delve more in-depth in local Muslim communities. Attempting to identify Muslim patients' specificities beyond stereotypes, this part of the volume focuses on healthcare professionals' perception of Muslim patients. The former explores (potentially) problematic aspects faced by Muslim prospective parents undergoing fertility treatments. The latter discusses the access, usage and outcome of homologous and heterologous fertility procedures locally underwent by Muslim prospective mothers and fathers.

The last chapter then reframes the research's findings in a transversal manner in order to contextualise the emerged peculiarities of new (Islamically compliant) parenthood and childhood patterns. Offering new insights on Muslim (prospective) parents settled in Italy, the study also provides some suggestions for more fruitful interactions between local fertility clinics and Muslim patients.

Chapter two

Italian framework of medically assisted procreation

1. Italian legal system and permitted fertility treatments

In Italy, a law regulating medically assisted reproduction practices did not exist until 2004, when the Parliament issued Law No. 40¹. The present chapter delineates the legal and operational framework of Italian legislation on medically assisted procreation (MAP), and it briefly shows how original statutory provisions have been gradually eroded by the judiciary in responding to social changes, prospective parents' demands, and child's best interest².

Law 40/2004 was the product of what has been described as a long and troubled journey that lasted nineteen years. The law entitled «Rules on medically assisted procreation» was immediately highly criticised as being too conservative, and leading to either reproductive tourism or malpractice³.

¹ Law No. 40, 19th February 2004, in «Gazzetta Ufficiale», 45, 24th February 2004.

³ See inter alia G. Benagiano, Una legge che impone la malpractice? Osservazioni di un ginecologo sulla proposta di legge, in «Bioetica», 10, 2002, pp. 561-563; A. Boggio, Italy enacts new law on medically assisted reproduction, in «Human Reproduction», 20, 5, 2005, pp. 1153-1157; F. Buzzi, and G. Tassi, La procreazione medicalmente assistita: normativa, giurisprudenza e aspetti medico legali, Milano, Giuffrè, 2011; A. Conti, and P. Delbon, Medically-Assisted Procreation in Italy, in «Medicine and Law», 24, 1, 2005, pp. 163-172; E. DiMarco, The Tides of Vatican Influence in Italian Reproductive Matters: From Abortion to Assisted Reproduction, in «Rutgers Journal of Law and Religion», 10, 2, 2009, pp. 1-30; V. Fineschi, M. Neri, and E. Turillazzi, Law, ethics, and medicine. The new Italian law on assisted reproduction technology (Law 40/2004), in «Journal of Medical Ethics», 31, 9, 2005, pp. 536-539; G.B. La Sala et al., Pregnancy loss and assisted reproduction: Preliminary results after the law 40/2004 in Italy, in «Reproductive BioMedicine», 13, 1, 2006, pp. 65-70. See also supra, in chapter I, section 1.

² This chapter provides only a summary of the main provisions and sources. For in-depth studies, *inter alia* refer to the volumes edited by M. Dossetti, M. Lupo, and M. Moretti (Eds.), *Cinque anni di applicazione della legge sulla procreazione assistita: problemi e responsabilità*, Milano, Giuffrè, 2009; P. Stanzione, and G. Sciancalepore (Eds.), *Procreazione assistita. Commento alla legge 19 febbraio 2004, n. 40*, Milano, Giuffrè, 2004.

Formerly no proper regulations were in place⁴, and Italy was well known for «complete regulatory freedom» and «its artificial reproductive liberalism», which included gamete donation, surrogate motherhood and posthumously conceived children⁵. Constitutional implications were then raised⁶. and the legislative vacuum was filled.

The advent of Law 40/2004 thus immediately stopped widespread practices in MAP related procedures on Italian soil⁷. In fact, the 2004 law encompasses several restrictions and prohibitions; in its original form⁸, the statutory limitations to ART/MAP on Italian soil concern:

- heterologous forms of MAP, including female/male gamete donation (eggs and spermatozoa), embryo donation (art. 4, para 3; art. 9, para 3), and surrogate motherhood (art. 9, paras 2-3);

- cryopreservation and destruction of embryos (art. 14)⁹;
- experimentation (and research) on human embryos (art. 13);
- pre-implantation genetic diagnosis (art. 13, para 3);
- post-mortem insemination (art. 5);
- paternity withdrawal (art. 9, para 1)¹⁰;

⁴ The only sources were administrative rules issued by the Ministry of Health and the medical ethical code of practitioners. M.D. Panforti, *Waiting for the Law: Assisted Reproduction in Italy*, in A. Bainham (Ed.), *International Survey of Family Law*, Hague, Boston, London, International Society of Family Law, 1997, pp. 183-192. For further discussion, see Comitato Nazionale per la Bioetica (Ed.), *La fecondazione assistita. Documenti del Comintato Nazionale per la Bioetica*, Roma, Istituto Poligrafico e Zecca dello Stato, 1995, pp. 73-86. Amid early academic comments, see A. Trabucchi, *Inseminazione artificiale. Diritto civile*, in *Novissimo Digesto Italiano*, 1962, pp. 732 ff.; Id., *La procreazione e il concetto giuridico di paternità e maternità*, in «Rivista di Diritto Civile», I, 1982, pp. 597 ff.; F. Santosuosso, *La fecondazione artificiale umana*, Milano, Giuffrè, 1984; L. Lenti, *La procreazione artificiale. Genoma della persona e at tribuzione della paternità*, Padova, Cedam, 1993; M. Dogliotti, *Inseminazione eterologa e azione di disconoscimento: una sentenza da dimenticare*, in «Famiglia e Diritto», 1994, pp. 182 ff. See also G. Ferrando (Ed.), *Atti del convegno tenuto a Genova nel 1987*, Padova, Cedam, 1991.

⁵ As discussed by M.R. Bundren, *Influence of Catholicism, Islam and Judaism on the Assisted Reproductive Technologies (ART) Bioethical and Legal Debate: A Comparative Survey of ART in Italy, Egypt and Israel, in «University of Detroit Mercy Law Review», 84, 5, 2007, pp. 715-746 at p. 730. For a definition of PHC and relevant case law, see C. Grothaus-Day, From Pipette to Cradle, from Immortality to Extinction, in «Rutgers Journal of Law and Religion», 7, 2, 2005, pp. 1-44, paras 13-17, 22-34.*

⁶ See for instance, Constitutional Court No. 347, 22nd-26th September 1998, in «Giurisprudenza Italiana», 1999, pp. 461 ff.

⁷ And indeed, case law concerning posthumous insemination, paternity disownment and surrogate motherhood were growing on Italian soil. These cases are discussed in another volume of LDF Series, see A. Margaria, *Nuove forme di genitorilià e filiazione. Leggi e giudici di fronte alle nuove realtà*, Bologna, Il Mulino, 2018.

⁸ See *infra*, section 4.

⁹ See also Law 22nd May 1978, No. 194, in «Gazzetta Ufficiale», 140, 22nd May 1978.

¹⁰ See also articles 235 (para. 1, points 1 and 2) and 263 of the Italian Civil Code (ICC), Royal Decree 16th March 1942, No. 262, in «Gazzetta Ufficiale», 79. For a translation into English language of the ICC, see Beltramo *et al.*, *The Italian civil code*, Dobbs Ferry, NY, Oceana, 1969-2017. – mother's anonymity (art. 9, para 2)¹¹.

Additionally, only adults who are part of a stable heterosexual married or cohabiting couple are regarded as prospective parents legally allowed to recur to MAP. No single women, no same-sex couples can thus benefit from MAR treatments on Italian soil. As a further requirement, the law spells an age limit: MAP procedures are to be undergone during the adult parties' potentially fertile lifetime (art. 5), and prospective parents must be clinically infertile (art. 4, para 1).

Adopting the Italian legislator's point of view¹², these limits are justified by the main purpose of the law, which is to guarantee the rights of everyone involved in the process, including the *conceptus*¹³. More specifically, the future child is regarded as being the legitimate or recognised child of the couple who expressed its willingness to enter into a MAP procedure, as requested by law (art. 8).

As a result, the mother's anonymity cannot be granted when the woman underwent MAR treatments (art. 9, para 2). Similarly, paternity withdrawal is prevented in cases where the couple undertook (forbidden) heterologous MAP procedures (art. 9, para 1). The last paragraph of article 9 of Law 40/2004 further corroborates the legal link of the child conceived through MAP to the social parents only. Indeed, it states that, even if the couple underwent forbidden heterologous MAR procedures, gamete donors are not entitled to any right and duty with respect to the baby born, just as they do not have any legal parental relationship with the child (despite being *de facto* biological parents). Islamically compliant kinships *ad hoc* created to accommodate donor's fertility procedures (such as those grounded on blood, milk, temporary or polygynous marriages) are thus not acknowledged by Italian laws¹⁴.

With regard to the Italian legal landscape, it has also been noted that the legal status of children born out of MAP procedures and those «natu-

¹¹ Article 30 (para. 1), President of the Republic Decree, 3rd November 2000, No. 396, in «Gazzetta Ufficiale», 303, 30th December 2000.

¹² To some scholars, however, the Italian legislator ideologically places the rights of the embryos above the rights of everyone else involved in MAR treatments. See *inter alia* D'Amico, *La fecondazione artificiale fra legislatore e giudici*, in L. Lombardi, and S. De Zordo (Eds.), *La procreazione medicalmente assistita e le sue sfide. Generi, tecnologie e disuguaglianze*, Milano, Franco Angeli, 2013, pp. 91-104.

¹³ Article 1, para. 1. Italian law uses the word *concepito* (similarly to art. 1, Italian Civil Code), which can be literally translated as *conceptus*. A legal definition of the term *conceptus* however does not exist in Italy. According to the Organisation for Economic Co-operation and Development, this is «the sum of derivatives of a fertilised ovum at any stage of development from fertilisation until birth including the extra-embryonic membranes as well as the embryo or foetus». For a comparison with the anthropological dimension and a discussion on the social perception of the various forms of (still) «unborn», see *inter alia* D. Lupton, *The Social Worlds of the Unborn*, Basingstoke, Palgrave, 2013.

¹⁴ On these issues see *infra*, chapter III, sections 4.2, 4.3 and 6.

rally conceived» by non-married parents differs, in compliance with the Italian legal system. Whereas a child born as result of the application of MAR immediately acquires the status of either legitimate or recognised child, children born to non-married cohabiting partners relying upon MAP are not automatically recognised¹⁵. Problematic situations may thus arise with respect to Muslim couples who are married only religiously; to some of the Islamic scholars interviewed, only a religious union is indeed necessary for Muslim partners to undergo *sharīʿah* compliant fertility procedures¹⁶. Another potentially problematic scenario encompasses a prospective father undergoing a fertility treatment who illegally gives another's man sperm to the biologist/IVF physician entitled to proceed with the fertilisation procedure – as noted by some physicians interviewed¹⁷. In compliance with some Islamic interpretations, certain siblings might indeed act as gamete donors for Muslim intended parents undergoing MAP procedures¹⁸.

2. Healthcare professionals offering MAP

Law 40/2004 is intended to «facilitate resolution of problems stemming from infertility or reproductive human infertility»¹⁹ and it does that by permitting the recourse to medically assisted procreation when a list of detailed requirements is met. First, the use of MAP is permitted only to infertile and/or sterile partners; more precisely couples can recur to fertility treatments only

- «if there are no other effective treatment methods to remove the causes of sterility or infertility» (art. 1, para 2);

- «only when it is found impossible to differently remove causes impeding procreation» (art. 4, para 1);

- «and is, in any case, confined to infertility cases or unexplained infertility cases as documented by medical report, as well as the cases of sterility or infertility as proven and certified by medical procedure» (art. 4, para 1).

¹⁵ See C. Cicero, *The Italian Reform of the Law on Filiation and Constitutional Legality*, in «Italian Law Journal», 2, 2, 2016, pp. 237-252; G. Ferrando, *La nuova legge sulla filiazione. Profili sostanziali*, in «Corriere giuridico», IV, 2013, pp. 525-535; and Id., *La fecondazione assistita nel dialogo fra le corti*, in «Nuova Giurisprudenza Civile Commentata», I, 2016, pp. 165-170.

¹⁶ See *infra*, chapter III, section 7.1.

¹⁷ For further details on this aspect, see *infra*, chapter IV, sections 4.2.2 and 4.2.3.

¹⁸ This is addressed *infra*, in chapter III, section 6.2.

¹⁹ The Italian National Registry of Assisted Reproductive Technology (INRART) provides an unofficial (and sometimes partly inaccurate) translation in English language of Law 40/2004 on the ISS website. (See http://www.iss.it/binary/rpma/cont/legge_40_en.pdf, 12th May 2016). When possible, the legal quotation reports extract from this version.

The three situations listed above are the limited cases in which Italian fertility clinics are allowed to offer MAP treatments to stable married/cohabiting couples. In addition to that, the law also details the information medical doctors are required to provide to their patients (arts. 6-7) as well as the procedure to be undergone by medical clinics in order to be recognised as assessed and authorised MAP centres (arts. 10-11). With respect to fertility clinics, the law asserts that both private and public fertility clinics can offer MAR procedures, provided some requirements are satisfied, as further clarified below in section 3.

As far as healthcare professionals are concerned, in order to legally provide ART/MAR services, they need to conform to two main principles, that is to say gradual approach and patients' informed consent. In compliance with the former, physicians must avoid recurring to invasive interventions, which show a degree of technical and psychological invasiveness that is highly distressful for patients. In other words, medical doctors must abide by the principle of minor invasiveness (art. 4, para 2, letter A). All authorised clinics offering MAP must also conform to the periodically updated «guidelines detailing the procedures and the techniques of medically assisted procreation», as issued by the Ministry of Health through the National Health Institute (art. 7)²⁰.

Furthermore, physicians providing MAR services are requested to provide in-depth information regarding the fertility treatment(s) offered, more specifically, the details must concern methods, bioethical problems, possible medical and psychological side effects, success rate of the treatment(s), MAP-related risks, and the degree of invasiveness of MAR female/male procedures (art. 6, para 1). Physicians must also inform the couple on the number of embryos to be transferred into the uterus (arts. 13-14). In case of private clinics²¹, the economic cost of the entire MAP procedure is to be clearly estimated and stated (art. 6, para 2).

Additionally, medical doctors are required by law to explain to the couple that they can recur to adoption or foster care (art. 6, para 1)²², as parenthood methods alternative to medically assisted procreation²³. The legal consequences concerning all parties involved (woman, man and future child) must equally be mentioned with specific reference to the legal status

²⁰ See *inter alia* Ministry of Health Decree 21st July 2004, in «Gazzetta Ufficiale», 191, 16th August 2004; Ministry of Health Decree 11th April 2008, in «Gazzetta Ufficiale», 101, 30th April 2008; Ministry of Health Decree 1st July 2015, in «Gazzetta Ufficiale», 161, 14th July 2015.

²¹ See *infra*, section 3.

²² Law 4th May 1983, No. 184, in «Gazzetta Ufficiale», 133 SO, 17th May 1983, as amended.

²³ Information concerning MAP techniques as well as adoption procedures and foster care are also to be provided by family services infrastructures. See Law 29th July 1975, No. 405 («Gazzetta Ufficiale», 227, 27th August 1975), as amended by art. 3 Law 40/2004.

of the future child, paternity withdrawal, and mother's anonymity (art. 6, paras. 5, 8-9).

Once the information detailed above has been provided by the competent IVF physician, patients have to express their willingness to undergo MAR procedure(s). The patients' informed consent must be given jointly by the partners, in written form, before the director of the fertility clinic, and at least seven days prior to beginning of the medical treatment(s). The consent can be withdrawn by each partner until the oocytes are fertilised (art. 6, para 3)²⁴; once the embryos are produced, these must be implanted.

According to Italian law, the fertility treatment can be terminated by patients and/or medical doctors. More precisely, physicians are allowed «not to proceed» with MAR treatment(s) if the director of the fertility clinic envisages healthcare reasons and provides the couple with a written explanation of his/her own withdrawal decision (art. 6, para 4). Furthermore, it should be stressed that medical staff and health care ancillary operators are not required to take part in MAP procedures in the case of conscientious objection that has been previously notified to the hospital or clinic (art. 15)²⁵.

In light of this discussion, it has thus been highlighted that physicians working in assessed and registered MAP centres play a key role with respect to the actual interpretation of legal principles and, therefore, in the *de facto* definition of the boundaries of (non) permitted fertility treatments. Academia emphasised three main aspects, namely the responsibility of IVF physicians in ascertaining whether the parties meet the legal requirements to undergo a MAR treatment (as listed above), in counselling the couple with respect to potential abnormalities in the embryos to be implanted, and in discretionally filling any legislative gaps²⁶.

In the scenario described, an additional aspect should be highlighted with regard to Muslim prospective parents undergoing fertility procedures. Although healthcare professionals are required to provide the detailed indepth information to the patients in order for them to express their informed consents in undergoing a fertility treatment, religious, cultural and linguistic barriers can actually prevent fruitful communication and reciprocal comprehension between Muslim patients and medical doctors²⁷.

 24 See also Ministry of Justice Decree No. 265, 28th December 2016, in «Gazzetta Ufficiale», 40, 17th December 2017.

²⁵ For a definition of conscientious objection in medical practices, see *inter alia* J. Pawlikowski, *Conscientious Objection of Health Care Workers in the Context of Genetic Testing*, in M. Soniewicka (Ed.), *The Ethics of Reproductive Genetics: Between Utility, Principles, and Virtue*, Dordrecht, Springer, 2018, pp. 103-116.

²⁶ See inter alia Boggio, Italy enacts new law on medically assisted reproduction, cit.

²⁷ Additionally, some topics such as adoption might be highly contentious for Muslims. These issues are explored in chapters III, IV and V.

3. Register of assessed and registered fertility centres

As mentioned above, Law 40/2004 details the procedure to be undertaken by public and private medical clinics in order to be recognised as centres authorised to provide reproductive and biotechnological medical treatments.

In compliance with article 11 (paras 1-2), since 2005, all Italian Centres performing ART procedures and IUI are compelled to be assessed and registered in the Italian National Registry of Assisted Reproductive Technology (RNPMA)²⁸. This is part of the National Centre for Epidemiology Surveillance and Health Promotion (CNESPS)²⁹ of the National Health Institute (ISS)³⁰. The latter (ISS) is the main Italian research institute in the biomedical and public health field; and it is the technical and scientific body of the Italian National Health Service (SSN)³¹. The technical and scientific area of ISS includes six departments, sixteen national centres, two reference centres, and five technical-scientific services³².

Data on efficacy, safety and outcomes of reproductive techniques are collected twice a year from the ISS assessed and registered clinics (art. 11, para 5)³³. In compliance with the national law on privacy protection³⁴, each medical centre must send summary data concerning the number of cycles performed for each MAR technique, number of patients treated, kind of infertility diagnosed, complications during treatments and results, pregnancies outcomes, and babies born³⁵. These data are then evaluated and elaborated

²⁸ In Italian, *Registro Nazionale Procreazione Medicalmente Assistita.* The acronym used in the English version is IARTR (Italian Assisted Reproductive Technology Register). The register shall also report details regarding the embryos and the children born as a result of MAP techniques (art. 11, para 1, Law 40/2004). See also Ministry of Health Decree 7th October 2005, in «Gazzetta Ufficiale», 282, 3rd December 2005; Decree of the ISS President 18th December 2006; Opinion of Data Protection Authority 26th July 2006.

²⁹ In Italian, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.

³⁰ In Italian, Istituto Superiore di Sanità.

³¹ The acronym SSN usually identifies the *Servizio Sanitario Nazionale*, which means National Health Service.

³² See Istituto Superiore di Sanità, *Research for public health*, Roma, Istituto Superiore di Sanità, 2017, pp. 2-3.

³³ The first phase regards data on the conducted activities and the obtained results; the second phase concerns the outcome of pregnancies resulting from the above-mentioned fertility treatments.

³⁴ See Legislative Decree No. 196, 30th June 2003, in «Gazzetta Ufficiale», 174, 29th July 2003, SO No. 123.

³⁵ See article 11 (para 5), Law 40/2004. The data collected by the ART National Register thus concern «descriptive, technical, structural and organizational information of ART centers authorized to conduct ART, and anonymous, aggregate data sets on all the ART treatments, plus information on the infertile couples, on embryos created and on children born after ART application». See IARTR, Italian Assisted Reproductive Technology Register, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015*, Roma, by the Register in form of a complete annual national report on all the ART treatments, IUI and MAR procedures performed in the country.

Although the ISS – in cooperation with the regional epidemiological observatories – must collect and disseminate all the necessary information to ensure transparency and publicity regarding the MAP techniques as well as the results achieved (art. 11, para 3), the data are not made immediately available to the wider public. According to article 15, Law 40/2004, each year, by the end of February, the ISS completes a report on the activities of the authorised MAP centres to be sent to the Minister of Health; by the end of June, the Minister of Health must then illustrate to the Parliament the situation of MAPs in Italy. The data collected on the national register of assisted reproductive technology are also sent to the European IVF Monitoring Consortium (EIM)³⁶, and to the International Committee Monitoring Assisted Reproductive Technologies (ICMART). Once these procedures have been completed, the annual national report on all treatments is published on the website of the Italian National Registry of Assisted Reproductive Technology³⁷.

The data discussed in the present work rely upon the 2005-2015 Annual Reports on the activities of the RNPMA, the corresponding Report of the Minister of Health to the Parliament, and the three Executive Summaries completed by IARTR³⁸. In addition, some local fertility centres that decided to take part in this study, kindly provided the data they submitted to the ISS with respect to the years 2015 and 2016³⁹.

³⁶ The consortium collected the data on ARTs from 36 European countries (in 2013 and 2014) and 39 European countries (in 2015).

³⁷ See http://www.iss.it.

³⁸ See respectively RNPMA, Registro Nazionale della Procreazione Medicalmente Assistita, *I-XI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2007-2017; Ministero della Salute, *Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita* (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2004-2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2004-2016, Roma, Ministero della Salute, 2005-2017; IARTR, Italian Assisted Reproductive Technology Register, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers*, cit., 2015-2017.

³⁹ On this, see *supra*, chapters I and V.

Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, p. 5; IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2016, p. 4. See also IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2013*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, 2016, p. 4. See also IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2013*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, p. 7.

4. Italian judiciary and law on MAP

The practice of MAP on Italian soil is restricted by the bans encompassed in Law 40/2004⁴⁰; nonetheless, some limitation to MAR procedures have been gradually amended since 2009. The present section reports original statutory prohibitions and the pragmatic approach adopted by the judiciary, which eventually lead to what has been called the «jagged path» of Law 40/2004⁴¹.

The original form of Law 40/2004 includes restrictions and prohibitions predominately concerning heterologous MAP procedures as well as embryos selection and cryopreservation. As elucidated above, in MAR procedures, the involvement of a third party – such as surrogate mothers as well as donors of female/male gametes and embryos – is not allowed on Italian soil by the existing legislation on MAP.

According to Law 40/2004, furthermore, only the cryopreservation of male and female gametes is permitted (art. 13, para 8), whereas cryopreservation of embryos is not allowed as a general rule (arts. 13-14). More specifically, cryopreservation and destruction of embryos is forbidden unless a severe risk exists for the mother's health and the pregnancy is terminated through abortion within ninety days from the date of conception⁴². Additionally, embryonic reduction is forbidden also in case of multiple pregnancies (art. 14, para 4). On the contrary, only a maximum number of three embryos can be produced during each fertility treatment and all of these embryos are to be simultaneously implanted into the woman's uterus (art. 14, paras 2-3).

A clause permitting embryo cryopreservation however exists: if «unforeseeable serious and documented reasons of *force majeure*, which are connected to the woman's health, are identified», then the embryos can be cryopreserved, provided their implantation into the uterus happens «as soon as possible»⁴³. The Italian law on medically assisted procreation thus recognises two types of cryopreserved embryos, namely those to be implanted «as soon as possible», and those abandoned (for instance, cryopreserved (donor) embryos already existing when Law 40/2004 was enacted or embryos of women who are post-menopausal)⁴⁴.

⁴⁴ See Ministry of Health Decree 4th August 2004, in «Gazzetta Ufficiale», 200, 26th August 2004.

⁴⁰ See *supra*, sections 1-2.

⁴¹ M.C. Campagnoli, Procreazione medicalmente assistita e fecondazione eterologa: il percorso frastagliato della legge 40/2004. Fattispecie, disciplina e profili giurisprudenziali, Vicalvi, Key, 2017.

⁴² See also Law 22nd May 1978, No. 194, in «Gazzetta Ufficiale», 140, 22nd May 1978.

⁴³ As suggested by Boggio, this ambiguous language, as well as the one adopted by the guidelines issued by the Ministry of Health in 2004, can lead to speculation on which circumstances can legally delay embryo cryopreservation. See Boggio, *Italy enacts new law on medically assisted reproduction*, cit.

Scientific research and testing on embryos is also forbidden, including any kind of eugenic selection – e.g. predetermining genetic traits or patrimony – and alteration of the genetic patrimony of gametes and embryos. Similarly, reproductive cloning and inter-species embryo fertilisation is banned (art. 13). Research on human embryos is however permitted only for diagnostic and therapeutic purposes (art. 13, para 2).

As time passed, the above-mentioned limits to MAP procedures – as stated in Law 40/2004 – have been gradually eroded by the judiciary⁴⁵. The Italian Constitutional Court, in particular, declared some provisions (partly) unconstitutional⁴⁶. In some cases, pre-2004 medical practices were eventually reinstated; in other situations, fresh ways to accommodate new family constellations and child's best interest were found.

With regard to the role played by legal actors in the field of MAR, three years deserve some specific attention: 2009, 2014 and 2015. In 2009, the Court declared the constitutional illegitimacy of two commas of article 14; these regard

- the request of «one single and simultaneous implantation [of all the produced embryos], and in any case not more than three»;

⁴⁵ In real terms, in June 2005, a referendum was proposed to repeal some of the prohibitions included in Law 40/2004, however the minimum number of voters was not reached. Delay and silence adopted by some courts in avoiding highly contentious and *de facto* politicised decisions were however criticised by academia. See *inter alia* M. D'Amico, *La fecondazione artificiale fra legislatore e giudici*, cit.; G. Ricci, N. Cannovo, and A. Sirignano, *Medically Assisted Procreation, a Discussion Still Open in Italy*, in «Medicine and Law», 34, 2015, pp. 487-496; C. Tripodina, *Il «diritto» a procreare artificialmente in Italia: una storia emblematica, tra legislatore, giudici e corti*, in «Rivista di BioDiritto», 2, 2014, pp. 67-87; and V. Zagrebelsky, *La irragionevolezza della legge italiana sulla procreazione assistita nel giudizio della Corte europea dei diritti umani*, in «Diritti umani e diritto internazionale», 3, 2012.

⁴⁶ The proceedings I am referring to are the following: Constitutional Court No. 151, 1st April-8th May 2009, in «Gazzetta Ufficiale», 19 S.S. 13th May 2009; Constitutional Court No. 162, 9th April-10th June 2014, in «Gazzetta Ufficiale», 26 S.S., 18th June 2014; Constitutio-nal Court No. 96, 14th May-5th June 2015, in «Gazzetta Ufficiale», 23 S.S., 10th June 2015; Constitutional Court No. 229, 21st October-11th November 2015, in «Gazzetta Ufficiale», 46 S.S., 18th November 2015. For further discussion, see also G. Benagiano et al., Italian Constitutional Court removes the prohibition on gamete donation in Italy, in «Reproductive Bio-Medicine», 29, 6, 2014, pp. 662-664; Buzzi, and Tassi, La procreazione medicalmente assistita: normativa, giurisprudenza e aspetti medico legali, cit., at pp. 185-229; L. Isolani, La giurisprudenza costituzionale in materia di procreazione medicalmente assistita, in G. Campanelli, F. Dal Canto, E. Malfatti, S. Panizza, P. Passaglia, and A. Pertici (Eds.), Le garanzie giurisdizionali: il ruolo delle giurisprudenze nell'evoluzione degli ordinamenti, Torino, Giappichelli, 2010, pp. 15-33; Ricci, Cannovo and Sirignano, Medically Assisted Procreation, a Discussion Still Open in Italy, cit.; Tripodina, Il «diritto» a procreare artificialmente in Italia: una storia emblematica, tra legislatore, giudici e corti, cit. For a broader discussion on the briefly addressed case laws, also the following essays collection Dossetti, Lupo, and Moretti (Eds.), Cinque anni di applicazione della legge sulla procreazione assistita: problemi e responsabilità, cit.; Stanzione, and Sciancalepore (Eds.), Procreazione assistita. Commento alla legge 19 febbraio 2004, n. 40, cit.; A. Santosuosso et al. (Ed.), I giudici davanti alla genetica, Pavia, Collegio Ghislieri, 2002.

- and the fact that the law «does not provide that the transfer of embryos – which according to that provision must be carried out as soon as possible – is to be performed without prejudice for the woman's health».

Physicians are thus now entitled to evaluate the concrete possibility of producing a viable foetus and achieving a successful pregnancy⁴⁷. Relying upon the parties' specific health conditions, the number of inseminated oocytes is decided by the competent medical doctor in agreement with prospective parents, and the embryos produced are partly implanted and partly cryopreserved⁴⁸.

In real terms, before 2004, the medical praxis was already to limit invasive female hormone-stimulation treatments. Accordingly, all the produced oocytes were fertilised; out of the total number of produced embryos, up to two were implanted and the others frozen for future fertility procedures⁴⁹. As a result, from 2009, the former medical praxes were legally back in place, and the fertility success rate began to increase, as reported by some studies⁵⁰.

In 2014, the Italian Constitutional Court declared unconstitutional the provision stated in article 5, paragraph 1⁵¹, namely the ban on heterologous medically assisted reproduction in the case of couples affected by a pathology that implies irreversible sterility or infertility.

It is worth mentioning that academia highlighted that proponents of the legal ban on third-party reproductive assistance endorsed in Law 40/2004 used moral justifications similar to those employed in *Sunnī* Muslim Egypt⁵².

⁴⁷ See *inter alia* G. Benagiano, and L. Gianaroli, *The Italian Constitutional Court modifies Italian legislation on assisted reproduction technology*, in «Reproductive BioMedicine», 20, 3, 2010, pp. 398-402.

⁴⁸ See E. Chelo, L'evoluzione delle techniche di procreazione assistita e gli effetti della legge 40, in L. Lombardi, and S. De Zordo, La procreazione medicalmente assistita e le sue sfide. Generi, tecnologie e disuguaglianze, Milano, Franco Angeli, 2013, pp. 144-152, at pp. 151-152.

⁴⁹ On this, see for instance Tripodina, Il «diritto» a procreare artificialmente in Italia: una storia emblematica, tra legislatore, giudici e corti, cit., at p. 71.

⁵⁰ More specifically, the multiple pregnancy/delivery rate declined, whereas pregnancy rate improved. See P. Levi Setti *et al.*, *Italian Constitutional Court modifications of a restrictive assisted reproduction technology law significantly improve pregnancy rate*, in «Human Reproduction», 26, 2, 2011, pp. 376-378; A.P. Ferraretti *et al.*, *Assisted reproductive technology in Europe*, 2008: Results generated from European registers by ESHRE, in «Human Reproduction», 27, 9, 2012, pp. 2571-2584; A.P. Ferraretti *et al.*, *Assisted reproductive technology in Europe*, 2009. Results generated from European registers by ESHRE, in «Human Reproduction», 28, 9, 2013, pp. 2318-2331. See also *infra*.

⁵¹ And also of art. 9, paras 1 and 3, art. 12 para 1.

⁵² M.C. Inhorn, P. Patrizio, and G.I. Serour, *Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon*, in «Reproductive BioMedicine Online», 21, 7, 2010, pp. 848-853 at p. 850. See also M.C. Inhorn, P. Patrizio, and G.I. Serour, *Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon*, in M.C. Inhorn, and S. Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, New York, Oxford, Berghahn, pp. 223-260 at pp. 227-228 and 235-237. As emphasised by Inhorn, Patrizio, and Serour, the reasons for prohibiting fertilisation procedures relying upon donors, in effects, were grounded on:

- the risk of future incestuous relationships amongst anonymous donors' children;

- the damage occurring to the child's personal identity (due to the lack of knowledge about his/her biological origins);

- the potential donor child's rejection by his/her parents, especially by infertile men who cannot claim biological paternity;

- and risks of eugenics.

To these scholars, the Italian ban of donor's MAP procedures led to IVF physicians relocating their clinics outside the country⁵³, Italian couples opting for reproductive tourism, and caused the Italian fertility rate to drop⁵⁴.

Since 2014, however, MAR procedures involving one or two donor(s) can be performed on Italian soil. Accordingly, Law 190/2014 established a national register for donors of reproductive cells (para 298)⁵⁵. Basic principles were also put forward by the Ministry of Health. As clarified by the latest Report of the Minister of Health (dated 29th June 2017), a number of legal decrees have been issued in light of the ruling of the Constitutional Court and some EU Directives⁵⁶. Additionally, in January 2017, the definition of «essential level of assistance» (LEA) was expanded to include also genetic counselling and some MAP procedures which were formerly granted only when a prospective parent was hospitalised⁵⁷. It should be emphasised that, in Italy, LEA encompasses a set of healthcare services that are identified at national level and are to be granted to all residents⁵⁸. Accordingly,

⁵³ In real terms, field-collected data disclosed that some Italian IVF physicians were (and some of them still are) offering abroad fertility treatments involving third-parties to Italian or foreign intended parents. See *infra*, chapter V, section 6.

⁵⁴ Data on fertility rate can be found *supra*, in chapter I, section 4.

⁵⁵ The law refers to a «registro nazionale dei donatori di cellule riproduttive a scopi di procreazione medicalmente assistita di tipo eterologo»; see Law 23rd December 2014, No. 190, in «Gazzetta Ufficiale», 99 SO, 29th December 2014.

⁵⁶ See respectively, Ministry of Health Decree 1st July 2015, in «Gazzetta Ufficiale», 161, 14th July 2015; Law Decree 16th December 2016, No. 256, in «Gazzetta Ufficiale», 10, 13th January 2017; Ministry of Health Decree 15th November 2016, in «Gazzetta Ufficiale», 271, 19th November 2016; Ministry of Health Decree 28th December 2016, No. 265, in «Gazzetta Ufficiale», 40, 14th February 2017.

⁵⁷ See the Decree issued by the President of the Council of Ministers 12th January 2017, in «Gazzetta Ufficiale», 65, 18th March 2017. See also Servizio Studi Senato della Repubblica e Camera dei Deputati, *Definizione e aggiornamento dei livelli di assistenza (LEA). Atto del Governo No. 358. Schede di lettura. Dossier – XVII Legislatura*, Roma, Senato della Repubblica e Camera dei Deputati, 2016.

⁵⁸ Constitutional Law 18th October 2001, No. 3, in «Gazzetta Ufficiale», 248, 24th October 2001; Legislative Decree 30th December 1992, No. 502, in «Gazzetta Ufficiale», 4, 7th January 1994, SO No. 3; Decree of the President of the Council of Ministers 29th November 2001, in «Gazzetta Ufficiale», 33, 8th February 2002, SO No. 26.

regions are accountable for their provision⁵⁹, and indeed operational guidelines and clinical suggestions are locally provided.

The decree issued by the President of the Council of Ministers also clarified that the costs of collection, cryopreservation and distribution of MAP reproductive cells are to be shared between the Italian National Health Service (SSN) and prospective parents, as established by regions and autonomous provinces. A key role in establishing basic MAP principles was played by these administrative divisions in September 201460. More specifically, the Conference of Regions and Autonomous Provinces (Conferenza delle Regioni e delle Province Autonome) detailed the requirements ISS-authorised MAR centres have to satisfy as well as the physical and mental characteristics of prospective donors⁶¹. This document was endorsed by the Piedmontese region while also identifying a list of four centres authorised to perform heterologous fertility treatments⁶². However, the interviewed physicians noted that, because of the ten-year ban and the principle of voluntary gamete/embryo donation. Italian MAP clinics rarely have a sufficient number of female and male donors; gametes and embryos are thus often provided by foreign countries. It could thus be argued that the formerly lamented Italian health tourism⁶³ eventually became a sort of «donors' tourism», as discussed *infra* in section 5.

In 2015, two further proceedings affected the limits to MAP as originally posed by Law 40/2004. The constitutional illegitimacy of two prohibitions were indeed raised. The first regarded the ban to resort to MAR procedures for fertile couples carrying serious transmissible genetic diseases⁶⁴; the second concerned criminal sanctions to any form of embryonic selection for eugenic purposes as asserted in art. 13, para 3, letter A.

Consequently, eugenic and pre-implantation genetic diagnosis is now permitted on Italian soil⁶⁵. The legal definition of MAP has therefore been

⁵⁹ Torbica and Fattore noted that regions «have virtually exclusive powers over regulation, organisation, administration, and funding of publicly financed healthcare». See A. Torbica, and G. Fattore, *The «Essential Levels of Care» in Italy: When being explicit serves the devolution of powers*, in «The European Journal of Health Economics», 6, I, 2005, pp. 46-52, at p. 46.

⁶⁰ Since the Italian government decided not to intervene, and given the sensitivity of this matter and its ethical implications, the Parliament, the Regions and the Autonomous Provinces were entitled to contribute to bridging the gap in this area of law. See Resolution of the Regional Council 15th September 2014, No. 12-311.

61 See Rep. 14/09/CR02/C7SAN.

⁶² Resolution of the Regional Council 15th September 2014, No. 12-311.

⁶³ See for instance G. Zanini, *Abandoned by the State, betrayed by the Church: Italian experiences of cross-border reproductive care*, in «Reproductive BioMedicine, 23, 5, 2011, pp. 565-572.

⁶⁴ As stated in art. 1, paras 1-2, and art. 4, para 1.

⁶⁵ See S. Biondi, Access to medical-assisted reproduction and PGD in Italian law: A deadly blow to an illiberal statute? Commentary to the European Court on Human Rights's decision Costa and Pavan v. Italy (ECtHR, 28 August 2012, App. 54270/2010), in «Medical Law Reextended to include not only infertile and/or sterile partners (as formerly stated by art. 1, para 1, Law 40/2004), but also fertile prospective parents carrying potentially transmissible genetic diseases⁶⁶. This extended definition of potential MAR patients may however not encompass migrant Muslim couples eager to conceive⁶⁷.

As discussed further in chapters IV and V, the briefly sketched case law highly affected the agency of prospective (Muslim) parents settled on Italian soil. Similarly, the room for manoeuvre of assessed and registered fertility clinics significantly changed with respect to MAR procedures potentially enacted in Italy⁶⁸. The next two sections focus upon the types of reproductive and procreative techniques permitted in Italy and local fertility clinics.

5. Medically assisted procreation centres and techniques

At the beginning of the present study, the report of the Italian National Registry of Assisted Reproductive Technology listed 366 centres offering MAP in 2016; at the time of writing, the latest available report discloses, as temporary result, 362 fertility clinics in 2017⁶⁹. As shown in the Table 2.1, the number of centres providing fertility services on Italian soil notably grew from 2005 to 2016⁷⁰. More specifically, few years (2009, 2011, 2014) registered a re-

⁶⁶ Cfr. Tripodina, Il «diritto» a procreare artificialmente in Italia: una storia emblematica, tra legislatore, giudici e corti, cit., at p. 79. See also E. Bracchi, and C. Simoncini, La Reglementation de l'Assistance Medicale a la Procreation en Italie: le Droit Face a une Nouvelle Conception de la Famille, in «Canadian Journal of Women and the Law/Revue Femmes et Droit», 28, 2016, pp. 548-567.

⁶⁷ On the specific need for a child in case of Muslim intended parents, see *infra*, chapter IV, section 6.

⁶⁸ As discussed *infra*, in chapter IV, MAR procedures which were, or still are, prohibited in Italy can be performed abroad by Italian physicians on couples settled on Italian soil.

⁶⁹ See RNPMA, X Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at pp. 12 and 133; and RNPMA, XI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 11. See also Table 2.1; the entry of an asterisk in the Table indeed indicates provisional data. The number of ISS registered centres can still change by the end of 2017. At the beginning of 2015, for instance, the number of ISS listed fertility centres were 361; namely, 163 (I level) and 198 (II-III levels). At the end of the year the registered fertility clinics amounted to 366, see RNPMA, IX Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 12; and RNPMA, XI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 8.

⁷⁰ See RNPMA, X Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 8.

view», 21, 3, 2013, pp. 474-486; and E. Turillazi *et al.*, *The European Court Legitimates Access of Italian Couples to Assisted Reproductive Techniques and the Pre-Implantation Genetic Diagnosis*, in «Medicine, Science and the Law», 55, 3, 2015, pp. 194-200. With regard to Islamic provisions and Muslim praxes on these topics, see *infra*, chapter III, section 7.3.2, and chapter IV, section 3.3.

2005	2001						 0.04
Тав. 2.1.	Clinics	providing	g fertilit <u>;</u>	y treatm	ents in	Italy	

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
316	329	342	354	350	357	354	355	369	362	366	366	362

duction in the number of ISS assessed and registered fertility centres; overall, however, the total number increase was of 15.8% in ten years.

Italian MAP centres assessed and registered by the National Health Institute (ISS) can deliver different types of fertility treatments, the categories of service provided also vary from clinic to clinic. These aspects are clarified below.

First of all, on Italian soil, three different genres of MAR services can be identified. Fertility clinics can offer private service only, or they can operate within the national health service either as public service, or as private providers delivering treatments funded by the national health service (SSN).

The majority of fertility clinics offering public service in Italy are located in Northern areas, where 58.8% of public centres performing Intra Uterine Insemination (IUI) are established⁷¹. North-Western Italian regions therefore count 76.3% of public fertility centres⁷². Interestingly, the majority of fertility treatments delivered in Italy take place in public hospitals or in private clinics offering services covered by the national health service (SSN)⁷³.

As far as Piemonte is concerned, in 2015, out of a total of ten centres offering MAP techniques, six were private, three were public, and one was a private clinic whose treatments could be funded by the national health service (SSN)⁷⁴. When looking at local centres performing IUI, out of twenty-seven Piedmontese centres, fifteen were private, eleven were public, and one was private covered by the national health service (SSN-funded)⁷⁵.

⁷¹ IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014, cit., at p. 34.

⁷² *Ibidem*, p. 9.

⁷³ Ministero della Salute, Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2016, cit., at p. 18.

⁷⁴ IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015, cit., at p. 10. Similar data were reported in 2014 and 2013; see respectively IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014, cit., at p. 9; and IARTR, Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2013, cit., at p. 15.

⁷⁵ IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015*, cit., at p. 39. In 2014, the centres were 26 of which 42.3% was public, 3,8% was private covered by SSN, and 53,8% was private. See IARTR, *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014*, cit., at p. 34. Further details regarding fertility clinics located in Torino are discussed *infra*, in section 6.

With respect to nationally permitted fertility procedures, Italian centres can provide three different types of treatments. The RNPMA's register indeed divides Italian MAR clinics in compliance to the level of fertilisation technique offered. A tier of three levels can be identified. Level I centres provide Intra Uterine Insemination (IUI) and cryopreservation of male gametes⁷⁶. IUI can be performed using couple's male gametes (IUI-H), or sperm donors can be involved (IUI-D)⁷⁷. In addition to these forms of ARTs, level II and III fertility centres deliver also the following:

- Gamete Intra-Fallopian Transfer (GIFT);

- Fertilisation In Vitro Embryo Transfer (FIVET);

- Intra Cytoplasmic Sperm Injection (ICSI);

- Frozen Embryo Replacement (FER);

- Gamete Intra-Fallopian Transfer (GIFT);

- Zygote Intra-Fallopian Transfer (ZIFT);

- Tubal Embryo Transfer (TET);

- Frozen Oocyte (FO);

- cryopreservation of embryos and oocytes;

– surgical techniques of sperm retrieval⁷⁸, including Surgical Sperm Retrieval (SSR)⁷⁹.

In level II fertility centres, the procedures are performed under local anaesthesia and/or deep sedation; in level III clinics, procedures requiring general anaesthesia with intubation might also be performed⁸⁰.

When this research began in 2016, out of 366 Italian registered centres, 166 clinics offered ART procedures of level I, and 201 provided treatments of level II and III⁸¹. In 2017, the figure changed slightly counting 166 cen-

⁷⁶ See *supra*, section 4.

⁷⁷ On homologous and heterologous MAP see *supra*, chapter I. See also Ministero della Salute, *Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2016*, cit., at p. 135.

⁷⁸ Such as Percutaneous Epididymal Sperm Aspiration (PESA) or Testicular Sperm Extraction (TESE).

⁷⁹ See RNPMA, X Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 14. Please note that the reported ART terminology relies upon the IC-MART and WHO glossary. See Zegers-Hochschild *et al.*, International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009, in «Fertility and Sterility», 92, 5, 2009, pp. 1520-1524 and Iid., International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009, in «Fertility and Sterility», 92, 5, 2009, pp. 1520-1524 and Iid., International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009, in «Human Reproduction», 24, 11, 2009, pp. 2683-2687.

⁸⁰ With respect to Piemonte, see also Resolution of Regional Council No. 43/4707, 3rd December 2001, and Technical and Programmatic Charter on Medically Assisted Procreation in the Piedmont Region, October 2009.

⁸¹ RNPMA, X Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 12. tres offering I level treatments, and 196 clinics performing II-III levels MAR procedures⁸². It should also be emphasised that fertility clinics providing level I treatments are mostly located in Northern Italian regions, more precisely 56.7% of Italian MAP centres⁸³.

As elucidated in the former section, the scope of permitted treatments in assessed and registered fertility clinics was gradually widened in Italy. Since 2009, physicians performing ART cycles can use fresh or cryopreserved (frozen/thaw) female and male gametes, or embryos. Fresh cycles include in vitro fertilisation (IVF) and intra-cytoplasmic sperm injection (ICSI); frozen/ thawed cycles encompass frozen/thawed embryo replacement (FER), and frozen/thawed oocyte replacement (FOR).

Since 2014, the use of donor female and male gametes is also no longer prohibited on Italian soil; medically assisted reproduction procedures can thus include female or male gametes donated by third parties⁸⁴. Italian centres can now offer both homologous and heterologous medically assisted procreation techniques. Donor's oocytes can be used in fresh or thawing cycles, whereas male gametes can only be cryopreserved. In 2014, a total of 209 procedures involving gamete(s) or embryo(s) donation were conducted in Italy; in 2015, the number rocketed to 2,287 indicating an annual growth rate of 994%. Further details are reported in the Table 2.2⁸⁵.

Data regarding the year 2016 have not been published by the ISS yet, however, it can be ventured that the treatment figures reported above are projected to increase in the years to come.

Additionally, as noted by the Ministry of Health, since the entry into force of Law 40/2004, this type of fertility treatments has been applied in a consistent number of cases in Italy during the year 2015 for the first time⁸⁶. Building upon the data reported by the Ministry of Health, the Table 2.3

⁸² RNPMA, XI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 11.

⁸³ *Ibidem*, at p. 19.

⁸⁴ Constitutional Court No. 162, 9th April-10th June 2014, in «Gazzetta Ufficiale», 26, Special Series, 18 June 2014.

⁸⁵ Data from Ministero della Salute, Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2014 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2015, cit., at p. 72; Ministero della Salute, Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2016, cit., at p. 71.

⁸⁶ Ministero della Salute, *Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge* 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2016, Roma, Ministero della Salute, 2017, at p. 5.

	Gamete/embryo donation cycles	Fresh oocytes cycles	Cryopreserved oocyte cycles	Cryopreserved sperm cycles	Cryopreserved embryo cycles	
2014	209	23	110	42	34	
2015	2,287	110	1,198	559	420	

TAB. 2.2. Increase of provided medical treatments

TAB. 2.3. Homologous and heterologous treatments

	Fertility centres	Treated couples	Cycles
Homologous			
IUI I level (centre)	131	3,379	5,839
Homologous IUI II-II levels (centre)	166	10,787	16,710
Homologous FIVET ICSI FER FO II-III levels	178	57,664	69,761
Total Homologous Treatments	475	71,830	92,310
Heterologous IUI I level (centre)	3	18	31
Heterologous IUI II-III levels (centre)	49	361	482
Heterologous FIVET ICSI FER FO II-III levels	69	2,083	2,287
Total Heterologous Treatments	121	2,462	2,800

compares homologous and heterologous fertility treatments, and it indicates that homologous cycles amounted to 92,310, and heterologous cycles reached 2,800 in 2015⁸⁷.

Only time will tell if heterologous treatments will increase in Italy and if the fact that these treatments are now permitted will contrast the so-called reproductive tourism phenomenon⁸⁸. Although MAP procedures involving third parties can now be performed in Italy, the figure of imported gametes and embryos greatly exceeds the number of indigenous ones. By way of illustration, in 2015, out of 513 IUI cycles with donors' semen, 69% (namely 354) were performed with imported male gametes. Similarly, out of 2,287 FIVET/ICSI/FER/FO cycles, 1,915 were performed with imported male/ female gametes or embryos, that is to say 83.7% of all heterologous procedures⁸⁹. In 2015, indeed, 3,304 containers of cryopreserved oocytes and

⁸⁷ *Ibidem*, at pp. 7-10. With respect to homologous FIVET, ICSI, FER, FO, II-III levels cycles, 55,329 were fresh cycles and 14,432 were frozen/thawed cycles.

⁸⁸ As far as Muslim patients are concerned, see *infra*, chapter IV, section 4.3.

⁸⁹ More precisely, out of 559 cycles with donors' male gametes, 419 used imported semen; out of 1,308 cycles with donors' female gametes, 1,137 used imported oocytes; out of 420 cycles with donors' embryos, 359 used imported embryos. See Ministero della Salute, *Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme*

1,982 containers of cryopreserved semen were imported from Denmark, Greece, Check Republic, Spain and Switzerland. Similarly, 744 containers of cryopreserved embryos were imported from Austria, Greece, Check Republic, Spain and Switzerland⁹⁰.

With respect to Piemonte, out of 46 Italian clinics importing donors' gametes, only two fertility centres can be counted among those importing semen, oocytes and embryos⁹¹. In this region, all donors' gametes and embryos were imported either from Spain or from Greece in 2015. As far as export is concerned, only one Piedmontese fertility clinic exported Italian male gametes to Spain.

Before focusing on medically assisted procreation centres specifically established in the city of Torino, additional information is to be provided concerning the Piedmontese region. In other words, details must be reported combining the two aspects described at the beginning of the present section: categories of MAR services provided by local clinics, and types of fertility treatments regionally offered.

When this work began in March 2016, I level fertility techniques were locally delivered by eight public centres and nine private centres, respectively amounting to 19.5% and 7.5% of MAR services provided on Italian soil. When looking at Piedmontese centres offering II and III levels fertility procedures, six clinics were private, three clinics were public, and one was private although covered by national health service⁹². In 2017, Piedmontese I level fertility clinics amounted to sixteen: public centres decreased to seven, whereas private centres were still nine. The number of centres providing II and III levels fertility procedures raised from three to four, whilst the figure of private and private SSN-funded clinics remained the same⁹³.

Building upon RNPMA 2016-2017 reports, the Table 2.4 gives an account of the percentages of national fertility services provided in Piemonte, according to the latest available data. It shows that, from 2016 to 2017, the number of

⁹⁰ Export of Italian gametes and embryos is much lower counting 19, 2,638 and 22 respectively. See Ministero della Salute, *Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge* 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2016, cit., at pp. 9-10, and 214-219.

⁹¹ *Ibidem*, at pp. 215-219.

⁹² These amounted respectively to 5.6%, 4.1%, and 5% of nationally provided procedures. RNPMA, *X Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita*, cit., at p. 139. Data reported in Table 2.4.

⁹³ RNPMA, XI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita, cit., at p. 139. Percentages reported in Table 2.4.

in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2016, cit., at pp. 8-9.

Piedmontese MAP centres	2016 (%)	2017 (%)
Level I -Public	19.5	17.5
Level I – SSN-funded private	_	-
Level I – Private	7.5	7.3
Levels II-III – Public	4.1	5.6
Levels II-III – SSN-funded private	5	5.3
Levels II-III – Private	5.6	5.7

TAB. 2.4. Fertility services provided by public and private Piedmontese clinics

regional MAR centres offering II and III levels fertility procedures increased both in private and in public Piedmontese ISS-assessed and registered clinics.

6. Medically assisted procreation centres in Torino

In the autumn 2017, the Italian National Registry of Assisted Reproductive Technology counted 29 fertility centres in Piemonte⁹⁴. As shown in the Table 2.5, this is the highest number ever reached of regional ISS-assessed and registered centres.

At the beginning of the study in March 2016, the fertility centres were located in the provinces of Alessandria (No. 3), Asti (No. 2), Biella (No. 2), Cuneo (No. 4), Novara (No. 5), Torino (No. 11), and Vercelli (No. 1)⁹⁵. In September 2017, two more centres were counted in Asti and in Cuneo. The sole city of Torino encompasses eight ISS-registered and assessed MAR clinics. These are the following:

– Centro Medicina della Riproduzione – AOU Città della Salute e della Scienza di Torino – Ospedale Sant'Anna (hereinafter S. Anna);

- Centro di Fisiopatologia della Riproduzione Ospedale «Maria Vittoria» (hereinafter M. Vitt.);

- Promea s.p.a. (hereinafter Promea);

– ARTES s.r.l. – Endoscopia Ambulatoriale e Tecniche di Riproduzione Assistita (hereinafter ARTES);

– CMR – Centro di Medicina Riproduttiva e Procreazione Assistita (hereinafter CMR);

- Centro Clinico San Carlo di Fecondazione Assistita e Ginecologia (hereinafter S. Carlo);

Livet s.r.l. – (hereinafter Livet);

- Sedes Sapientiae (hereinafter S. Sap.).

⁹⁵ See the Registro Nazionale of MAP, online at https://w3.iss.it/site/RegistroPMA/PUB/ Centri/CentriPma.aspx?regione=1 (12th May 2016).

⁹⁴ See https://w3.iss.it/site/RegistroPMA/PUB/Centri/CentriPma.aspx?regione=1 (11th September 2017).

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
28	27	25	26	25	26	26	27	27	29

TAB. 2.5. Piedmontese fertility centres

TAB. 2.6. Fertility clinics in Torino

	S. Anna	M. Vitt.	Promea	ARTES	CMR	Livet	S. Carlo	S. Sap.
Type of service Level of techniques		Public II	SSN-funded III	Private I		Private II	Private II	Private III

Amongst the eight above-mentioned clinics, two are public, one is private but SSN-funded, and five are private – as clarified by the Table 2.6. Level III techniques are provided by three centres: one is private, one is public, and one is private covered by the national health system (SSN). Three private clinics and one public centre offer level II techniques and only one private centre offers level I techniques.

In Piedmontese public/SSN-funded centres, the cost of fertility procedures is funded by the national health service when the treatment is listed among the essential level of assistance (LEA)⁹⁶.

On Italian soil, indeed, the general objectives of the health care system are ensued at national level by the national health system (SSN); whereas regions are responsible for the delivery of care facilities through a network of population-based health management organisations (ASL)⁹⁷, public hospitals or private accredited hospitals⁹⁸. Beyond LEA-treatments – which are uniformly provided in Italy – each region can partly/totally cover the cost of non-LEA-treatments. In this case, an Italian region finances through its own resources some benefits granted by SSN to the resident population⁹⁹.

According to both the Regional Council (*Giunta Regionale*) and the Health and Sanitation Council (*Assessorato alla Salute e alla Sanità*) the cost of medically assisted procreation is «regionally reasonably sustainable as a whole»¹⁰⁰. Nonetheless, the latter concedes that the current system causes patients' unequal treatment in Italy. This happens since some Italian re-

⁹⁶ See *supra*, section 4.

⁹⁷ The acronym identifies the *azienda sanitaria locale* which means «local health enterprise».

⁹⁸ Hospitals can the provide both inpatient and outpatient services.

⁹⁹ For further details in the English language on the Italian health system see *inter alia* the report for the European Observatory completed by A. Lo Scalzo *et al.*, *Italy: Health system review*, in «Health Systems in Transition», 11, 6, 2009, pp. 1-126.

¹⁰⁰ See Resolution of Regional Council No. 7-12382, 26th October 2009; Resolution of Regional Council No. 49-12479, 2nd November 2009; Technical and Programmatic Charter on Medically Assisted Procreation in the Piedmont Region, October 2009. gions cover the full cost of MAR procedures, whereas others do not; additional differences in the MAP service publicly provided might also exist, locally. With respect to Piemonte, the fact that only some costs of fertility treatments are funded by the regional health system, the migration of local resident couples to the neighbouring region of Lombardia was reported and lamented by some informants¹⁰¹.

The Italian health care system is indeed regionally based, accordingly existing facilities and publicly offered treatments vary in terms of quality in different regions, and this also happens with respect to ART and MAP. Fertility treatments to be paid by prospective parents approaching public/SSN-funded clinics may thus vary significantly, as well as the prospective mother's age. By way of illustration, when looking at public/SSN-funded centres, the prospective mother's age limit is 41 years in Toscana, 42 years in Liguria, and 43 years in Lombardia; whereas no mother's age limit exist in Trentino Alto Adige¹⁰². In Piemonte, up to three fertility complete cycles of II and III levels are funded by SSN in case of prospective mothers who are not older than 43 years. The number of complete cycles reaches six and the prospective mother's age limit is pushed to 45 years in case of level I techniques¹⁰³.

When investigating the number of insemination cycles performed in the fertility centres based in Torino during the years 2014 and 2015, the data disclose that, whereas the number of treatments steadily grew in public and SSN-funded centres, only two private centres reported an increase (CMR and S. Carlo). In real terms, when comparing the years 2014 and 2015, a growth is also to be emphasised with respect to the activities performed by one private clinic offering fertility treatments involving donors. In Livet, actually, the number of homologous insemination cycles decreased from 789 to 749 from 2014 to 2015; however, the total number of treatments performed in 2015 also counted 91 heterologous cycles involving donor's gametes.

The figures detailed in the Table 2.7 and in the Figure 2.1 rely upon the data reported on the Italian National Registry of Assisted Reproductive Technology in 2016 and 2017¹⁰⁴, and indicate that the majority of fertility treatments perfected in Torino are (partially/totally) funded by the national health system (SSN). More specifically, in 2014, 45.9% of homol-

¹⁰¹ On this aspect see also *infra*, chapter IV.

¹⁰² See Technical and Programmatic Charter on Medically Assisted Procreation in the Piedmont Region, October 2009.

¹⁰³ See *infra*, chapter V.

¹⁰⁴ More precisely, ARTES, 13th February 2017-25th July 2017; CMR, 10th November 2016-29th May 2017; Livet, 25th November 2016-23rd May 2017; Maria Vittoria, 13th December 2016-28th March 2017; Promea, 29th November 2016-9th May 2017; Sant'Anna, 13th October 2016-7th September 2017; San Carlo, 3th November 2016-5th September 2017; and Sedes Sapientiae, 5th December 2016-1st August 2017.

	Tot.	S. Anna	M. Vitt.	Promea	ARTES	CMR	Livet	S. Carlo	S. Sap.
Homologous Insemi-									
nation Cycles 2014	3,017	742	316	1,385	31	224	789	172	68
of which ICSI, FI-									
VET, and GIFT	2,429	582	186	747	-	184	566	124	40
Homologous Insemi-									
nation Cycles 2015	3,748	828	340	1,344	24	242	749	174	47
of which ICSI, FI-									
VET, and GIFT	2,247	451	206	763	-	174	505	121	27

TAB. 2.7. Local ART cycles

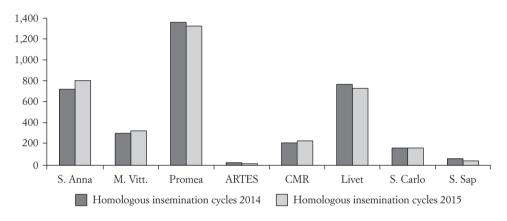


FIG. 2.1. MAP treatments in Torino.

ogous insemination cycles perfected in Torino were performed in the sole local SSN-funded fertility clinic (i.e. Promea); in 2015, the number decreased to 35.6%. The two Piedmontese MAP centres located in public hospitals – Ospedale Sant'Anna and Ospedale Maria Vittoria – granted up to 35% of homologous insemination cycles in 2014 and 31.2% in 2015. As a whole, in 2015, public and SSN-funded centres provided 67% of homologous fertility treatments in Torino¹⁰⁵. Local MAP procedures are thus granted mostly by public or SSN-funded clinics, although the number of private fertility centres is higher.

The impact of medical expenses on local prospective MAR patients is also affected by another element. Actually, in addition to SSN-funded treatments, patients who are resident in Piemonte can benefit from medical ticket exemptions. In Italy, indeed, patients can opt for private or public fertility treatments. When the private system is involved, patients purchase private

¹⁰⁵ Details on local fertility centres were provided *supra*, in chapter I, section 6.1. For indepth discussion on collected qualitative and quantitative data, see *infra*, chapters IV and V.

health care services and over-the-counter drugs. In case the used facilities are linked to the national health service's structures (SSN), patients co-pay for diagnostic procedures, specialist visits and pharmaceuticals through a so-called «ticket»¹⁰⁶. Patients are thus compelled to make direct payments to health care providers at the time of service use (out-of-pocket payments); nonetheless, cost-sharing exemptions exist for various groups. More specifically, some categories are exempted from paying the (entire) cost of medical tickets. These are the following: children, elderly people, prisoners, terrorist/crime victims, disabled people, people with HIV, people with chronic/rare diseases, recipients of social pensions, unemployed people, and pregnant women. Some categories of patients have to satisfy further requirements in terms of annual gross income. For instance, when the gross household income is less than 8,263.31 euro, unemployed people and their family members (e.g. spouse and children) are entitled to these financial benefits for medical treatments¹⁰⁷.

As further discussed in chapters IV and V, (foreign) Muslim patients highly benefit from the above-mentioned medical exemptions in SSN-funded and/or public hospitals providing fertility treatments¹⁰⁸. Undergoing MAR procedures, therefore, can almost be cost-free for some patients in Piemonte, as corroborated by empirical data.

¹⁰⁶ This process is called cost-sharing. For further details on the adopted terminology, see *inter alia* the report for the European Observatory completed by Lo Scalzo *et al.*, *Italy: Health system review*, cit.

¹⁰⁷ If the unemployed patient is married, the annual gross income limit is raised to 11,362.05 euro and each dependent child implies a further income increase of 516.46 euro. See the following national and local web-links http://www.salute.gov.it/portale/esenzioni/dettaglioFaqEsenzioni.jsp?lingua=italiano&id=206; http://www.regione.piemonte.it/sanita/cms2/guida-al-serviziosanitario/sostegno-alle-cure/286-esenzione-ticket-visite-ed-esami (6th October 2017). See also art. 1, Minister of Health's Decree 22nd January 1993, in «Gazzetta Ufficiale», 21, 27th January 1993.

¹⁰⁸ See for instance the following local guides specifically created for foreign people: S. Dacquino, and A. Bergallo, *Guida ai servizi sanitari per immigrati*, Torino, Regione Piemonte, LDF, 2016; F. Prunotto, and C. Martoglio, *Living in Piedmont. A guide to services for foreign citizens*, Torino, Regional Observatory of Immigration in Piedmont, 2004.

Chapter three

Shari'ah compliant MAP and remedies to childlessness

1. Muslim world and halal families

Islām is conventionally described as a pro-natalist religion. Children are highly valued and adult married Muslims are invited to procreate. Therefore, this chapter focuses upon Islamic ethics and Muslim practices, specifically considering the creation of vertical familial relationships.

Exploring Islamic sources and Muslim customs, the analysis intends to investigate both traditional and new *sharīʿah* compliant remedies to involuntary childlessness, in order to unveil to what extent parenthood and filiation can be created also through assisted reproductive technologies¹. The present discussion refers to legal and customary sources and gives voice to religious figures and Islamic scholars, whilst reporting informants' declarations. Accordingly, the present chapter intends to reveal and discuss Muslim patients' Islamic frame of reference with regard to old-new parenthood and childhood patterns.

The chapter counts seven sections investigating Islamic provisions and Muslim practices with regard to infertile Muslim couples and the creation of so-called «*halāl* families»². It should be highlighted that the proposed discussion is not aimed to present a comprehensive study on Islamically com-

¹ The actual usage of these methods to bear children by intended Muslim parents is discussed in chapters IV and V.

² This Arabic word means «permissible» and identifies lawful matters in Islamic law. The opposite is *harām*, which means «forbidden». For an introduction to Islamic law, see *inter alia* A.A.D. Ajijola, *Introduction to Islamic law*, New Delhi, International Islamic Publishers, 1989; F. Castro, *Il modello islamico*, G.M. Piccinelli (Ed.), Torino, Giappichelli, 2007; W.B. Hallaq, *An Introduction to Islamic Law*, Cambridge, CUP, 2009; H.H. Hassan, *An introduction to the study of Islamic law*, Islamabad, International Islamic University, 1997; S. Khalid-Rashid, *Muslim law*, Lucknow, Eastern Book, 2008; J. Schacht, *An introduction to Islamic law: Theory and practice*, London, I.B. Tauris Publishers, 1997; and R. Peters, and P. Bearman (Eds.), *The Ashgate Research Companion to Islamic Law*, Oxon, Ashgate, Routledge, 2016.

pliant families and Islamic bioethics, but rather to focus upon core issues relying upon the wording of Islamic sources, Muslim guidelines and advice provided by *a'immah* active in Torino, heads of local worship centres, and chiefs of national Islamic associations³.

2. ARTs, MAPs and Islām

Before delving deeper into the discussion, as a starting point, some terminological clarifications are to be briefly addressed. First, the Arabic word *sharī'ah* literally designates the (right) path (to a watering place), and it is widely used to indicate Islamic divine law. Indeed, from the wording of the Qur'an, it can be inferred that the word *sharī'ah* identifies the way that shall be followed by Muslims⁴.

In this volume, the expression *«sharīʿah* compliant» is therefore used to indicate an act that conforms to Islamic and/or Muslim provisions⁵. The adjective *«Islamic»* is usually referred to Islamic sources, whereas *«Muslim»* denotes Islamic laws as (officially) recognised by Muslim majority countries and Muslim customary norms as endorsed by Muslim local communities and/or kinship circles⁶.

⁴ Different layers of reading can however be employed, and the etymological analysis is complex. For further discussion see *inter alia* R. Aluffi, *Šarī'a*, in *Enciclopedia giuridica*, VIII, 2015, pp. 741-754; Castro, *Il modello islamico*, cit., at pp. 9-10; A.E. Mayer, *The shari'ah: A methodology or a body of substantive rules?*, in N. Heer (Ed.), *Islamic law and jurisprudence*, London, University of Washington Press, 1990, pp. 177-198; S.G. Vesey-Fitzgerald, *Nature and sources of the Sharī'a*, in M. Khadduri, and H.J. Liebesny (Eds.), *Origin and development of Islamic law*, Clark, NJ, The Lawbook Exchange, 2008, pp. 85-112; S. Zubaida, *Law and Power in the Islamic World*, London, I.B. Tauris, 2003, at pp. 10-19. See also *Qur'ān* V: 48; XLII: 13 and 42; XLV: 18. This applies also to the terms and verbs which derive from the same root of the Arabic word *sharī'ah*.

⁵ In real terms, human actions are divided into five *abkām*: compulsory/obligatory (*farg, wāğib*), recommended (*mandūb, mustahabb*), neutral (*mubāh*), reprehensible (*makrāh*), and forbidden (*harām*). For instance, see Schacht, *An introduction to Islamic law*, cit., at pp. 120-124; Id., *Introduzione al diritto musulmano*, Torino, Fondazione Giovanni Agnelli, 1995, at pp. 129-132. For a Muslim perspective on the lawful (*halāl*) and the prohibited (*harām*), see also Y. al-Qaradawi, *The Lawful and the Prohibited in Islam – Al-Halal Wal Haram Fil Islam*, Cairo, al-Falah Foundation and American Trust Publications, 1999.

⁶ Actually, the word *Islām* derives from the Arabic verb *sallama li...* that means «to submit to... [God's will]». *Muslim* is the participle of the same Arabic verb, thus the meaning of the word Muslim is «the submitter». See also F. Sona, *Defending the family treasure-chest: Navigating Muslim families and secured positivistic islands of European legal system*, in P. Shah, M.C. Foblets, and M. Rohe (Eds.), *Family, Religion, and Law: Cultural Encounters in Europe*, Farrnham, Ashgate, 2014, pp. 115-141, at p. 116; Id., *Griglie di lettura ed analisi dell'islām europeo. Diritto interculturale e relazioni sciaraitiche*, in «Stato, Chiese e pluralismo confessionale», 40, 2016, 1-33, at pp. 17-18.

³ Further details on these research informants can be found *supra*, in chapter I, section 6.4.

Two primary textual sources of Islamic law are acknowledged and shared by all Muslims; these are the $Qur'\bar{a}n$ and the $Sunnah^7$. The main source of Islamic law is the $Qur'\bar{a}n$ that is traditionally described as the message verbally revealed by God ($All\bar{a}h$) to the Prophet Muhammad⁸. The revelation was written down by the Prophet's companions in one hundred and fourteen chapters (*suwar*, plural of *sūrah*), which are divided into verses ($\bar{a}y\bar{a}t$, plural of $\bar{a}yah$)⁹. The *Sunnah* is the second primary textual source of Islamic law and it can be described as the (verbally transmitted) record of the Prophet Muhammad's living habits reported through the $ah\bar{a}d\bar{i}th$ (plural of $had\bar{i}th$). The $ah\bar{a}d\bar{i}th$ narrate the Prophet's life as role model behaviour and set out detailing teachings, sayings, practices and conduct enacted by the Prophet and his companions.

Islamic jurisprudence $(fiqh)^{10}$, then, recognises and relies upon different sources and/or methods. The other sources of Islamic law (e.g. consensus and analogical reasoning) are arranged following a different hierarchy by the various and numerous Islamic denominations, sects, branches, subgroups and schools of judicial thought. Accordingly, different interpretations are given with respect to *sharī'ah* compliant assisted reproductive technologies

⁷ The literal meaning of these two Arabic words is «recitation» and «habit» respectively. According to the traditional definition, *Qur'ān, Sunnah*, consensus, and analogical reasoning are the roots of Islamic jurisprudence (*uṣūl al-fiqh*). See *inter alia* F. Castro, *Diritto musulmano e dei paesi musulmani*, in *Enciclopedia giuridica*, IV, 1985, pp. 1-18; Id., *Il modello islamico*, cit., at pp. 12-24; M.A. Baderin (Ed.), *Islamic legal theory*, Farnham, Ashgate, 2014, at pp. XI-XXXVII; L.Y. De Bellefonds, *Traité de droit musulman comparé*, Paris, La Haye, 1965, at pp. 17-50; Hallaq, *An Introduction to Islamic Law*, cit., at pp. 14-30; Schacht, *An introduction to Islamic law*, cit., at pp. 122-124.

⁸ See *Qur'ān* III: 4,7; IV: 82; VI: 114, 155-157; VII: 2; XVIII: 1; XX: 2-4; XXI: 50; XXIX: 46-49; XXXII: 2; XXXVIII: 1-8; XL: 2; XLI: 2, 41-42; XLII: 17; XLV: 2; XLVI: 2.

⁹ Generally, scholars divide Quranic verses into Meccan and Medinese; the former were revealed in Mecca between 610 and 622, and the latter until 632 in Medina. For a study, see *inter alia* P. Branca, *Il Corano. Il libro sacro della civiltà islamica*, Bologna, Il Mulino, 2001; M. Campanini, *Il Corano e la sua interpretazione*, Roma-Bari, Laterza, 2008; M.A. Draz, *Introduction to the Quran*, London, New York, I.B. Tauris, 2000; J.D. McAuliffe (Ed.), *The Cambridge Companion to the Qur`an*, Cambridge, CUP, 2007; A. Rippin (Ed.), *Approaches to the History of the Interpretation of the Qur`an*, Oxford, Clarendon, 1988.

¹⁰ Literally, this Arabic word can be translated as «deep understanding»; it is usually employed when referring to the knowledge process enacted by the Islamic jurisprudence in extracting the body of Islamic law from Islamic sources. See T.J. Alwani, *Uşūl al-fiqh al-'islāmī.* Source methodology in Islamic jurisprudence, II ed., London, International Institute of Islamic Thought, 1993; O. Arabi, *Studies in modern Islamic law and jurisprudence*, The Hague, Kluwer Law International, 2001; W.B. Hallaq, *A history of Islamic legal theories: An introduction to Sunnī uşūl al-fiqh*, Cambridge, CUP, 1997; M.H. Kamali, *Principles of Islamic jurisprudence*, III ed., Cambridge, Islamic Texts Society, 2003; A.A. Qadri, *Islamic jurisprudence in the modern world. A reflection upon comparative study of the law*, Bombay, N.M. Tripathi private Ltd, 1963.

(ART) and medically assisted procreation $(MAP)^{11}$. Additionally, divergent (authoritative) opinions and/or rulings ($fat\bar{a}w\bar{a}$, plural of $fatw\bar{a}$) might be frequent even within the same Islamic group.

Assisted reproductive technologies and medically assisted procreation are not discussed in the above-mentioned two primary textual sources of Islamic law. As a result, Islamic scholars and religious authorities refer to Islamic sources and early Islamic texts in order to better delineate the perimeter of what can be called $\ll hal\bar{a}l$ families» and verify which kinds of fertility treatments can be regarded as being *sharī'ah* compliant¹². As clarified

¹¹ On this terminology, see *supra*, chapter I, section 2.

¹² In-depth analysis on Islamic bioethics is beyond the scope of the present work. For an introduction see inter alia M.A. Al-Bar, and H. Chamsi-Pasha, Contemporary Bioethics Islamic Perspective, Dordrecht, Springer, 2015; D. Atighetchi, Islamic Bioethics: Problems and Perspectives, Dordrecht, Springer, 2007; Id., Islam e bioetica, Roma, Armando, 2009; Id., Aspects of the Management of the Rising Life Comparing Islamic Law and the Laws of Modern Muslim States – De la manière de considérer l'aube de la vie: une comparaison entre droit musulman et droits des États musulmans contemporains, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, 2010, pp. 305-329; Id., Islamic perspectives on vulnerable groups, in J. Tham, A. Garcia, and G. Miranda (Eds.), Religious Perspectives on Human Vulnerability in Bioethics, Dordrecht, Springer, 2014, pp. 175-191; Id., Human rights and bioethics, an Islamic overview, in Tham, Garcia, and Miranda (Eds.), Religious Perspectives on Human Vulnerability in Bioethics, cit., pp. 231-242; M. Clarke, Islam, kinship and new reproductive technology, in «Anthropology Today», 22, 5, 2006, pp. 17-20; Id., Shiite perspectives on kinship and new reproductive technologies, in «ISIM Review», 17, Spring, 2006, pp. 26-27; Id., The modernity of milk kinship, in «Social Anthropology», 15, 3, 2007, pp. 271-411; Id., Closeness in the Age of Mechanical Reproduction: Debating Kinship and Biomedicine in Lebanon and the Middle East, in «Anthropological Quarterly», 80, 2, Kinship and Globalization, Spring, 2007, pp. 379-402; Id., Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon, NY, Oxford, Berghahn, 2009; H.E. Fadel, The Islamic Viewpoint On New Assisted Reproductive Technologies, in «Fordham Urban Law Journal», 30, 1, 2002, pp. 147-157; Id., Islamic Shari'ah Rulings on New Reproductive Choices, in «Journal of the Islamic Medical Association of North America», 37, 2005, pp. 70-77; M. Ghaly, Islamic Perspectives on the Principles of Biomedical Ethics, London, World Scientific Publishing, 2016; Z.B. Gürtin, M.C. Inhorn, and S. Tremayne, Islam and Assisted Reproduction in the Middle East: Comparing the Sunni Arab World, Shia Iran and Secular Turkey, in S.D. Brunn, and D.A. Gilbreath (Eds.), The Changing World Religion Map. Sacred Places, Identities, Practices and Politics, Dordrecht, New York, London, Heidelberg, Springer, 2015, pp. 3137-3153; K. Hampshire, and B. Simpson (Eds.), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, New York, Oxford, Berghahn, 2015, at pp. 1-91; J. Kelsay, Islam and medical ethics, in P.F. Camenisch (Ed.), Religious Methods and Resources in Bioethics, Dordrecht, Springer, 1994, pp. 93-107; M.C. Inhorn, Ouest for Conception Gender, Infertility and Egyptian Medical Traditions, Philadelphia, University of Pennsylvania Press, 1994; Id., Local Babies, Global Science: Gender, Religion and In Vitro Fertilization in Egypt, London, Routledge, 2003; Id., Fatwas and ARTs: IVF and Gamete Donation in Sunni v. Shi'a Islam, in «Journal of Gender, Race & Justice», 9, 2, 2005, pp. 291-318; Id., Making muslim babies: IVF and gamete donation in sunni versus shi'a islam, in «Culture, Medicine and Psychiatry», 30, 4, 2006, pp. 427-450; Id., Reproduction: New Technologies, in S. Joseph, and A. Nămābādī (Eds.), Encyclopedia of Women & Islamic Cultures: Family, Body, Sexuality and Health, vol. III, 2006, pp. 350-352; Id., The New Arab Man: Emergent Masculinities, Technologies, and Islam in the Middle East, Princeton, Princeton University Press,

by academia, Islamic scholars use concepts from traditional *fiqh* to justify the recourse to ARTs and/or MAPs¹³.

2012; Id., (Islamic), ART Journeys and moral pioneers. New reproductive technologies in Islamic local moral worlds, in Hampshire, and Simpson (Eds.), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, cit.; Id., The New Arab Man: Emergent Masculinities, Technologies, and Islam in the Middle East, in Key Issues in Religion and World Affairs, Boston, Institute on Culture, Religion & World Affairs, pp. 1-14; M.C. Inhorn, and Z.B. Gürtin, Infertility and Assisted Reproduction in the Muslim Middle East: Social. Religious, and Resource Considerations, in «Facts, Views and Vision in Obstetrics and Gynecology», Monograph, 2012, pp. 24-29; M.C. Inhorn and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, 2012; lid., Islam, Assisted Reproduction, and the Bioethical Aftermath, in «Journal of Religion and Health», 55, 2, April 2016, pp. 422-430; S. Islam, Ethics of Assisted Reproductive Medicine. A Comparative Study of Western Secular and Islamic Bioethics, London, International Institute of Islamic Thought, 2013; S. Islam et al., Ethics of Human Cloning: A Comparative Study of Western Secular and Islamic Bioethics Perspectives, in «Bangladesh Journal of Medical Science», 11, 4, 2012, pp. 258-266; S. Islam et al., Ethics of surrogacy: A comparative study of Western secular and islamic bioethics, in «Journal of IMA Islamic Medical Association of North America». 44, 1, 2013, pp. 1-7; G. Ragozzino, L'Islam e la bioetica. Principi di bioetica comune, Napoli, Edizioni Scientifiche Italiane, 1998; A. Sachedina, Islamic Biomedical Ethics: Principles and Application, Oxford, OUP, 2009; J.G. Schenker, Assisted reproductive practice: Religious perspectives, in «Reproductive BioMedicine Online», 10, 3, 2005, pp. 310-319; Id., Ethical Dilemmas in Assisted Reproductive Technologies, Berlin, DEG, 2011; G.I. Serour, Religious perspectives of ethical issues in ART, in «Middle East Fertility Society Journal», 10, 3, 2005; Id., Islamic perspectives in human reproduction, in «Reproductive BioMedicine Online», 17, 3, 2008, pp. 34-38; Id., Islamic laws and reproduction, in J.G. Schenker (Ed.), Ethical Dilemmas in Assisted Reproductive Technologies, Berlin, DEG, pp. 333-342; Id., Ethical issues in human reproduction: Islamic perspectives, in «Gynecological Endocrinology», 29, 11, 2013, pp. 949-952; G.I. Serour et al., Infertility: A health problem in the Muslim world, in «Population Sciences», 10, 1991, pp. 41-58; G.I. Serour et al. (Eds.), International Conference on «Bioethics in Human Reproduction Research in the Muslim World» (1st 1991 Cairo Egypt), Markaz al-Dawlī al-Islāmī lil-Dirāsāt waal-Buhūth al-Sukkānīyah. Ethical guidelines for human reproduction research in the Muslim world: Based on highlights, papers, discussions, and recommendations of the the [sic] First International Conference on Bioethics in Human Reproduction Research in the Muslim World, Cairo 10-13th December 1991, Cairo, Al-Azhar University, International Islamic Center for Population Studies and Research, 1992; G.I. Serour et al., Bioethics in medically assisted conception in the Muslim World, in «Journal of Assisted Reproduction and Genetics», 12, 9, 1995, pp. 559-565 and M.S. Yeprem, Current assisted reproduction treatment practices from an Islamic perspective, in «Reproductive BioMedicine Online», 14, 1, 2007, pp. 44-47. These sources are relied upon in the following sections of the present chapter, whereas additional bibliographic details are reported at the end of the volume.

¹³ For instance, Mahmoud refers to «equitable solution», see F. Mahmoud, *Controversies in Islamic evaluation of assisted reproductive technologies*, in Inhorn, and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., pp. 70-97. Houot mentions necessity and public interest: see S. Houot, *Islamic jurisprudence (Fiqb), and assisted reproduction: Establishing limits to avoid social disorders*, in Inhorn, and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., pp. 53-69. See also S. Houot, *Des usages éthiques du droit islamique: une réponse aux enjeux posés par la reproduction médicalement assistée*, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, 2010, pp. 331-355. Nowadays, provisions and guidelines are thus to be found either in some (*ad hoc* given) Islamic legal/judicial rulings, options, recommendations, or resolutions of some scientific Islamic religious organisations, biomedical bodies, and pan-Muslim congresses and conferences¹⁴. Amongst the guidelines for Muslims most often referred to, the following are to be mentioned:

- resolutions of the Islamic Fiqh Council (since 1984);

- resolution of *fiqh* (Muslim Law) of the Academy of Jeddah (OIC);

- recommendations of the First International Conference on Bioethics in Human Reproduction Research in the Muslim World, held in Cairo (1991);

- recommendations of the Seminar on ethical implications of use of assisted reproductive technologies for treatment of human infertility, held in Cairo (1997);

- recommendations of the international conference on Population and Reproductive Health in the Muslim World, held in Cairo (1998);

- recommendations of the International Workshop on Ethical Implications of ART, held at the University of al-Azhar in Cairo and at the International Islamic Center for Population Studies and Research (IICPSR) of al-Azhar (2000);

- declarations of the Islamic Organization for Medical Sciences (IOMS) issued in Kuwait (1983 and 1997);

- *Fatāwā* of the International Islamic Fiqh Academy and the International Islamic Centre for Population Studies and Research held at al-Azhar University (1986);

- Fatāwā of the European Council for Fatwa and Research (ECFR).

Further guidelines on *shari'ah* compliant ARTs and MAPs are to be found in codes of medical ethics such as the Islamic code of medical ethics endorsed by the International Organization of Islamic, Medicine, Islamic Medical Association of South Africa and the code of ethics of the Pakistani Medical and Dental Council¹⁵. The documents issued by the following scientific and/or religious

¹⁴ As highlighted by Krawietz, «One needs to turn to sources other than often too succinct *fatwas*. Spontaneous, apodictic answers are not possible when it comes to complicated medical procedures. In the second half of the twentieth century, some international Islamic committees were therefore established». See B. Krawietz, *Sharia and medical ethics*, in P. Rudolph, and P. Bearman (Eds.), *The Ashgate Research Companion to Islamic Law*, Oxon, Ashgate, Routledge, 2016, pp. 291-306, at p. 296. For further debate on Islamic sources and methods, see *inter alia* M.K. Masud, B. Messick, and D.S. Powers (Eds.), *Islamic legal interpretation: Muftis and their fatwas*, Oxford, OUP, 1996.

¹⁵ See IMANA Ethics Committee, *Islamic medical ethics: The IMANA Perspective*, in «Journal of the Islamic Medical Association of North America», 37, 2005, pp. 33-42; Id., *Islamic medical ethics: The IMANA Perspective*, in «JK-Practitioner», 12, 4, 2005, pp. 231-237; IOIM, International Organization of Islamic Medicine, Islamic Medical Association of South Africa, *Islamic code of medical ethics*, Qualbert, Kuwait document, 1982. See also International Islamic Center for Population Studies and Research, *Islamic Manual of Family Planning*, Cairo, IICPSR, 1998.

organisations and committees are also recurrently regarded as reliable *shari'ah* compliant directions to patients and Muslim healthcare providers:

- assembly of Islamic Research;

- Islamic Jurisprudence Council (Islamic World League);

- International Academy of Islamic Jurisprudence (Organisation of Islamic Conference);

- National Ethical Guidelines for Biomedical Research.

In addition to the above-mentioned sources, Islamic legal/judicial options are usually referred to¹⁶. Two are the most often quoted *fatāwā*: the *fatwā* issued in 1980 by Jad al-Haq as the Grand *muftī* of Egypt¹⁷; and the *fatwā* pronounced in 1999 by the *āyatollāh* Ali Hussein Khamene'i as the religious leader of Republic of Iran (successor of *āyatollāh* Khomeini)¹⁸. The former legitimised ARTs among *Sunnī* Muslims provided the parties were husband and wife in compliance with *sharī'ah*; whereas the latter permitted MAPs among *Shī'ī* Muslim (married) couples.

Sunnī and Shī'ī are indeed to be mentioned as the main Muslim denominations and these encompass a number of sects, branches, and judicial schools of thought¹⁹. The majority of Muslims define themselves as Sunni²⁰;

¹⁶ For a discussion of *fatāwā*, see for instance A. Black, E. Hossein, and H. Nadirsyah, *Modern perspectives on Islamic Law*, Cheltenham, Edward Elgar, 2013, at pp. 83-106.

¹⁷ For a summary in English, see Atighetchi, *Islamic Bioethics: Problems and Perspectives*, cit.

¹⁸ A summary in English language can be found in M.C. Inhorn, *Globalization and gametes: Reproductive «tourism», Islamic bioethics, and Middle Eastern modernity,* in «Anthropology & Medicine», 18, 2011, pp. 87-103; Id., *Globalization and gametes,* in C.H. Browner, and C.F. Sargent (Eds.), *Reproduction, Globalization, and the State: New Theoretical and Ethnographic Perspectives,* London, Duke University Press, 2011, pp. 126-137.

¹⁹ More details can be found in S. Akhter, *Faith & Philosophy of Islam*, Delhi, Kalpaz, 2009, at pp. 171-186; A.S. El-Kosheri, *Islamic schools of law*, in C. Bar (Ed.), «Islamic Law and its reception by the courts in the West», Köln, 1999, pp. 35-46; A. Ventura, *Confessioni scismatiche, eterodossie e nuove religioni sorte nell'islam*, in G. Filoramo (Ed.), *Islam*, Roma-Bari, Laterza, 2007, pp. 309-401; Hallaq, *An Introduction to Islamic Law*, cit., at pp. 31-37; Schacht, *An introduction to Islamic law*, cit., pp. 23-74; Id., *Introduzione al diritto musulmano*, cit., at pp. 27-79.

²⁰ According to the Pew Research Center's Forum on Religion & Public Life, the overwhelming majority of Muslims is *Sunnī*. Worldwide, the estimates of the *Shī'ī* Muslim population vary from 20% to 10% and, among those, between 68% and 80% live in Iran, Pakistan, India, and Iraq. See PRC, Pew Research Center's Forum on Religion & Public Life, *The Global Religious Landscape*, Roma, Pew Research Center, 2012, at p. 21; and Id., *The Future of the Global Muslim Population. Projections for 2010-2050. Why Muslims Are Rising Fastest and the Unaffiliated Are Shrinking as a Share of the World's Population*, Washington, Pew Research Center, 2015, at p. 232. See also Id., *Mapping the Global Muslim Population. A Report on the Size and Distribution of the World's Muslim Population*, Washington, Pew Research Center, 2009, at pp. 1-2 and 8-9. In Italy, *Shī'ī* Muslims are predominantly Albanian, Moroccan and Iranian citizens (nowadays frequently naturalised as Italians). For further details see A. Menonna, *La presenza musulmana in Italia*, in «Fact sheet ISMU», 1st-5th June 2016, at p. 4. See also *supra*, chapter I, section 5. some Muslim prospective parents may nonetheless refer to $Sh\bar{i}'i$ principles and rulings with respect to fertility treatments²¹, as discussed below in sections under 6 and in chapters IV and V.

3. The importance of procreation

Shari'ah promotes human reproduction and favours high birth rates among Muslim married partners. The *Qur'an* exhorts Muslims to produce offspring²², and in some Muslim majority countries, procreation was even regarded as a national duty²³. A resolution adopted by the Islamic Fiqh Council also prohibits birth control on the grounds that this practice is contrary to human nature and therefore violates the provisions of the *Qur'an* and the *Sunnah*. The wording reported below elucidates the issues raised by the Council.

In view of the fact that Islamic *Shari'ah* calls for growth and spread of the Muslims population and considers it a great favour that Almighty *Allah* has bestowed upon the human beings, and many textual provisions in the *Qur'an* and *Sunnah* point out that the concept of birth control or use of contraceptive methods is contrary to the human nature, on which *Allah* has created the human beings. It is also contrary to the Islamic *Shari'ah*, which Almighty *Allah* has selected for His servants. And in view of the fact that subscribers of this concept are such a group whose aim is to plot against Muslims through decreasing their population so that they have power to control the Muslim countries and enslave their people in order to exploit their resources and riches, and since such thinking represents kind of *Jahiliyah* (pre-Islamic period of ignorance) and bad opinion about Almighty *Allah*, as well as it weakens the Islamic entity which is strengthened through the growth of man power, the Islamic Fiqh Council unanimously decides that birth control is not allowed at all, and likewise, it is not allowed to use the contraceptive methods if the intention is fear of poverty, [...]²⁴.

The desire for parenthood is described as an innate component of human nature also in some analyses of contemporary Islamic bioethics²⁵. The

²¹ For an introduction of *Sunnī* and *Shī'ī* see Islamic legal theories, see respectively M.I. Dien, *Introduction to Islamic law: The Sunni tradition*, Edinburgh, Edinburgh University Press, 2004; and Hallaq, *A history of Islamic legal theories: An introduction to Sunnī uşūl al-fiqh*, cit.; M.B. al-Şadr, *Principles of Islamic jurisprudence according to Shi'i Law*, London, ICAS Press, 2003, and M.Y.K. Far (Ed.), *A Selection of Islamic Laws Based on the verdicts of Grand Ayatollah Yousof Saanei*, Qom, Feqh, 2007.

²² See for instance the following $\bar{a}y\bar{a}t$ XVI: 72; XVIII: 46; XXV: 74.

²³ By way of illustration, during the Iraq-Iran war, the Iraqi women's governmental duty was to bear five or more children. See A.A. An-Na'im (Ed.), *Islamic family law in a changing world. A global resource book*, London, Zed Books, 2002, at p. 101.

²⁴ Resolution No. 1, III Session, 23-30 Rabi Al-Aakhir 1400H, in Islamic Fiqh Council, *Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from 1st to 18th Sessions, during 1398-1427H (1977-2006)*, Makkah, Muslim World League, 2007, at pp. 75-77.

²⁵ Cfr. C.S. Ford, *A Comparative Study of Human Reproduction*, New Haven, Yale University Press, 1945.

study proposed by Al-Bar and Chamsi-Pasha, for instance, pinpoints the decisive role of the wish for offspring in *Islām*, a religion that «gives strong and unequivocal emphasis to high fertility»²⁶. Academia has indeed highlighted the pro-natalist attitude of Islamic law. Sachedina, amongst the others, describes procreation as a divinely ordained obligation, a sort of moral imperative for pious married Muslims. In his words,

[w]hat is clear is that the moral dimensions of the issues [e.g. family planning – control of fertility and abortion] are closely tied to cultural attitudes about the need to have children as part as one's entry into manhood and womanhood. Procreation is taken as divinely ordained obligation provided it is not harmful to one of the spouses²⁷.

As a result, infertility and sterility are perceived as highly problematic and contentious issues when adopting the Islamic perspective. The need to procreate was indeed voiced by all the interviewed Muslim patients and similarly reported by both clinical staff and cultural mediators²⁸. Similarly, religious figures promoted child – bearing and parenthood as highly desirable for pious Muslims. Quoting the *Qur'an*, the informants variously expressed this priority²⁹.

Although procreation is not the sole and the highest purpose of marriage in $Isl\bar{a}m^{30}$, childbearing is constantly described as a natural act and frequently perceived as a sort of religious duty within local Muslim communities. The wording chosen by some religious figures can better clarify these points. The president of a nationally recognised Islamic organisation, for instance, stated that $Isl\bar{a}m$ encourages marriage and procreation as part of human beings' natural life³¹. He further elaborated this concept saying that

Islām invites human [beings] to marry – surely to have a family – but certainly one of the reasons [to marry] is also to have children... because, actually, the society, the world does not go on if we have no growth... and often we feel this also as demographic [growth]. One of the most natural things for human beings – male and female – is therefore to produce descendants, to have children... obviously, not only to have children and to give them birth in this world, but to educate them to be good citizens.

²⁶ Al-Bar and Chamsi-Pasha, *Contemporary Bioethics Islamic Perspective*, cit., at pp. 173-174.

²⁷ A. Sachedina, Islamic Biomedical Ethics: Principles and Application, cit., at p. 127.

²⁸ On this, see *supra*, chapter I, sections 6.2-6.3, and *infra*, chapter IV, section 2.6.

- ²⁹ Qur'ān (XVII: 32; XXIV: 2, 4-5).
- ³⁰ *Qur'ān* (II: 187; VII: 189; XXX: 21).

³¹ On the concept of nature in *Islām*, see *inter alia* A.M. Emon, *Islamic natural law theories*. Oxford, OUP, 2012, and Y. Mohamed, *Human nature in Islam*, Kuala Lumpur, A.S. Noordeen, 1998. Regarding nature in assisted procreation, see I. Bertini, *Nuove forme di genitorialità e filiazione. Uso e abuso del richiamo alla natura*, Bologna, Il Mulino, 2018.

In Torino, one *imām* similarly emphasised what can be called «the innate human natural procreative attitude», whilst adding further arguments (based on *sharīʿah*) to support a numerous Muslim offspring. In his words:

Children in *Islām* are very very important! One. This is nature. A man likes having children: that's natural! In Europe too, you used to have five/six children... The Prophet Muḥammad (PBUH) tells us to have many children for several reasons... Two. Two/three children are the continuation of my good on the Earth; this is our teaching. Three. The *Ummah* becomes great; the collaborative society becomes a multitude.

Muslim spouses are thus firmly invited to bear children as part of their Islamic right-and-duty to marry and to widen the worldwide Muslim community. These points were analogously raised by other local *a'immab* who briefly reported that «procreation is a natural gift, a privilege, a blessing», and that «men and women have been created also – though not only – for this, to reproduce [themselves]!».

When adopting a more pragmatic viewpoint, procreation is not only related to the numerical growth of the worldwide Muslim population (*Um-mah*), but also to the issue of care within the extended family network. By way of illustration, the head of an Islamic worship centre in Torino asserted that «in *Islām*, having children is essential! In practice, the new generation gives the bread back to the parents... So, you must have children! And... the more, the merrier!». Nonetheless, he also conceded that producing a large number of offspring might be challenging for Muslim couples, particularly when the spouses are foreigners settled in European countries. In his words:

But here, nowadays, with the difficulties to face – education, money... it's a bit difficult, so... they're struggling. Also in the Islamic world... the Arab world, is getting closer to the West. Here, [Muslim spouses] do one or two [children], and then [they] stop... In Islamic countries, maybe they do up to ten [children]... but the majority – today – one or two [children]... they can't pull it off anymore. [...] As they say: two is not enough, three is too many. But this is not so for the religion!³².

Muslim parents living in European environments may adjust this sort of «Islamic natural procreative imperative» to their daily needs, as suggested by interviewed local religious figures. In line with the European trend, the ideal family size is in effect declining amongst Muslim households as well³³.

³² The English version if this idiom can also be translated as «two is company, three is a crowd» but this has a slightly different meaning. Literally, the informant said: «Due sono pochi, tre son troppi!».

³³ See *inter alia* G. Nargund, *Declining birth rate in Developed Countries: A radical policy rethink is required*, in «Facts, views and vision in obstetrics and gynaecology», 1, 3, 2009, pp. 191-193; Collins *et al., Europe the continent with the lowest fertility*, in «Human Reproduction Update», 16, 6, 2010, pp. 590-602. For further discussion on fertility rate, see *infra*, section 4.

The Islamic teaching nonetheless remains highly pro-natalist; as a result, social and familial pressure to procreate greatly affects Muslim prospective parents, as clearly perceived by the healthcare providers who were interviewed in MAP centres in Torino³⁴. When adopting the viewpoint of Islamic law, however, assisted human reproduction is not the sole and, sometimes, the first solution for Muslim partners willing to conceive a child. In real terms, infertility and sterility can be interpreted and coped with in different ways, as clarified in the following sections.

4. Traditional shari'ah compliant remedies to childlessness

Traditionally, when Muslim spouses face procreative problems, they can rely upon one of the following *shari'ah* compliant remedies to involuntary childlessness: acts of worship, divorce, polygyny, foster care, and child custody. As time passed, some fertility treatments (ARTs and/or MAPs) were gradually included in the list of Islamically permitted alternative routes to parenting. Traditional Islamic principles were thus used to justify and to regulate newly created parenthood and childhood patterns. In some cases, Muslim prospective parents can resort to fertility treatments; in other cases, a combination of «old» and «new» Islamically compliant remedies to childlessness are merged by Muslim intended parents in order to undergo homologous or heterologous fertility treatments³⁵.

The following subsections sketch the boundaries of possible concurrent solutions offered by *sharī'ah* to Muslims who are unable to conceive, whilst also highlighting the manner in which these traditional remedies can *de facto* become complementary to fertility treatments pursued by intended Muslim parents. Traditional solutions to couples' infertility/sterility are therefore explored comparing the points of view of Islamic sources and religious figures. The proposed analysis intends to shed light on mind frames and attitudes affecting the conduct of Muslim prospective parents accessing local health-care environments, as further explored and analysed in chapters IV and V.

4.1. Acts of worship and infertility acceptance

Embracing an Islamic viewpoint, pregnancy is compared to the fullness of spirit Muslims acquire during the pilgrimage to the holy city of Mecca or when they fast during the ninth month of the Islamic calendar³⁶. Building

³⁴ See *infra*, chapter IV, section 6.

³⁵ As clarified *infra*, in section 5.

³⁶ C.I.A. Ferrero, *Concepimento e gestazione: Islam*, in Various Authors, *Salute e identità religiose. Per un approccio multiculturale nell'assistenza alla persona*, Milano, Biblioteca Am-

upon the *Qur'ān* (IV: 4; XVI: 72), procreation is also regarded as an act of worship in *Islām*³⁷. Acts of worship and prayers are of pivotal importance in the Muslim world. The Arabic word frequently used is $du'\bar{a}'$ to indicate supplication³⁸. This is based on the *Qur'ān* (XL: 60) that recites: «Call upon Me; I will respond to you.».

Although invited to pray for intercession, Muslims are most of all asked to willingly accept their fate and to be content with what God has given to them. The fact that Muslim prospective parents should feel satisfied with their own matrimonial life and «be at peace with themselves» was indeed voiced by a number of interviewed Islamic scholars and/or heads of local worship centres. As an opening statement, they uniformly referred to the following Qur'anic verse: «Indeed, those who do not expect the meeting with Us and are satisfied with the life of this world and feel secure therein and those who are heedless of Our signs³⁹».

Emphasis was, however, placed upon different aspects by the informants, when interviewed. For instance, one religious figure declared:

As an *imām*, I would recommend that the *ratio* is the union between man and woman. Then, God can give you children or not. [...] The ultimate goal of marriage is not procreation. If a couple has no children, they are not less blessed by God than... they aren't a «B series» family! We must not conceive «the family» as if a man and a woman are only generative tools. This is wrong.

According to the opinion of this informant, the Muslim family unit is blessed by God independently from the reproductive ability of its members. He repeatedly highlighted that, unlike other religious beliefs, the primary purpose of Islamic marriage is not procreation. Muslim prospective parents may nonetheless face difficulties in accepting their own childless destiny, therefore acts of worship become of pivotal importance, as well as theological knowledge of spiritual aspects of religion. Nurturing the spiritual side of faith can indeed help Muslim spouses coping with their unmet desire for offspring.

Other religious figures stressed the key significance of embracing divine willingness and «God's mysterious ways». By way of illustration, a local

³⁸ Literally, this word means *invocation*.

brosiana, CoReIs, and Collegio IPASVI, 2017, p. 126. This book was kindly provided by an informant. On Islamic fasting, see *infra*, section 7.3.1, and chapter IV, section 3.2.

³⁷ For further discussion, see Al-Bar and Chamsi-Pasha, *Contemporary Bioethics Islamic Perspective*, cit., at pp. 163-167.

³⁹ Qur'ān (X: 7). The English translation of the Qur'ān reported here is the one published respectively by Dar Qiraat (2010), Umm Muhammed Al-Muntada al-Islami (2004), and Abul Qasim Publishing House (1997), as the so-called *The Qur'an: Saheeh International* is widely available in worship prayer centres and therefore well known to European Muslims. See also A.M.A.S. Haleem (Ed.), *The Qur'an*, Oxford, OUP, 2004, and T. Mahmood, *Law in the Qur'ān: A draft code*, in «Islamic Comparative Law Quarterly», VII, 1, 1987, pp. 1-32.

imām voiced the need to foster the ability to accept and appreciate the realities of life when he stated:

God gives you what He wants! That's it. He knows better... than me, you, ...all of us. You never know why this happens. *Allāb* knows best the truth, the plans... He does what He wants and it's all right! So, you do what you think is right in *Is-lām*, but you never know what happens...

Spiritual rewards are thus granted to pious Muslim spouses who faithfully accept their fate. Favourably welcoming divine willingness is a noteworthy part of being a good Muslim, during life as well as in afterlife⁴⁰. Accordingly, Muslim believers should faithfully embrace their own destiny, even if this includes infertility or sterility – as the *a'immah* teach to (local) childless couples.

Additional reasons supporting and clarifying divine willingness were reported by some religious figures. The head of a local worship centre, for example, clarified that

Destiny and God is the same thing. You want; you don't want... you have to accept it! *Al-Qur'ān* recites that God gives males to whom He wants, females to whom He wants, and... nothing to whom He wants. Maybe you'll get reward [for this] in the Other World. Maybe it's better like this – who knows? – 'cos your child may then become a bad boy, a thug... so you'll cry. In this way, you won't.

An analogous point was raised by the head of a mosque in Torino:

I often say this: you know, maybe God was right [in not giving you any children]. Maybe you'll have children who won't be right, who'll be giving you lots of troubles... I say: $(A l l \bar{a} h)$ loves me; maybe He hasn't given me children so that I'll be peaceful», and that's it.

These religious figures stressed that, since God wants only the best for pious Muslims, when the spouses cannot procreate, then this should always be interpreted as their best life route; in other words, God's schemes are invariably «far better» than the life plan each person could ever devise him/ herself. In order to clarify the aforementioned aspects, several *a'immah* described hypothetical scenarios stating that in God's plan everything fits together harmoniously and perfectly. The behaviour of offspring eventually parented by an infertile/sterile couple might, for instance, become a challenge in the future. As a result, childless pious Muslims should gratefully accept, and even appreciate, their infertility or sterility.

⁴⁰ For an introduction on the multiple ways of «believing, behaving and belonging» to *Is-lām*, see J. Césari, *Introduction*, in Id. (Ed.), *The Oxford Handbook of European Islam*, Oxford, OUP, pp. 1-20, at pp. 9-11.

It should be emphasised that, from a Western viewpoint, this might appear to be a non-solution. Adopting a religious perspective, however, acceptance is the first step towards a solution that might, or not, lead to pregnancy (through traditional or medical means). In *Islām*, the problem is nonetheless solved once childlessness has been accepted as a divine plan; the medicalisation of infertility is therefore not necessary from a theological viewpoint⁴¹. The religious mind frame and teaching described above is to be borne in mind as this can explain a number of dynamics emerging frequently in Muslim patient-doctor relations⁴².

Realistically and sensibly dealing with difficult family situations caused by involuntary childlessness, other religious figures provided different explanations, whilst analogously focusing on the key role played by faith. To some Islamic scholars, even if *sharī'ah* compliant solutions to couples' infertility/sterility exist, and a Muslim resorts to one or more of them, these remedies – including MAR treatments – may not solve the party's infertility/ sterility problem. This usually happens when «God has different plans» for the spouses. By way of illustration, one local *imām* asserted:

[...] if you are born so [infertile], this happened because God wanted it! Believe it or not, even if you pay lots of money... to doctors, to physicians... then, you may not end up with children as well. Why? 'cos it's God's decision!

When embracing this perspective, Muslim intended parents might be more inclined to wait for a long period of time before undergoing fertility

⁴¹ On the idea of infertility resulting in involuntary childlessness as a medical condition rather than a social problem in Western societies, see for instance F. van Balen, and M.C. Inhorn, *Interpreting infertility*, in M.C. Inhorn, and F. van Balen (Eds.), *Infertility around the Globe. New Thinking on Childlessness, Gender, and Reproductive Technologies*, Berkeley, University of California Press, 2002, pp. 3-32, at pp. 5-7.

⁴² As further elucidated *infra*, in chapter IV, section 3.1, when interviewing Muslim patients and healthcare professionals, it was repeatedly stressed that Muslim intended parents tend to constantly refer to God's will when undergoing fertility treatments or facing pregnancy complications such as miscarriage or abortion. This attitude was clearly perceived and reported by medical staff as an identity marker characterising (those who they perceive as) Muslim patients. The majority of healthcare personnel of ART/MAP clinics indeed felt that Muslim patients trusted them completely. On the other hand, the tendency to constantly voice the need to embrace divine plans can negatively affect interpersonal patient-doctor relations: some physicians indeed expressed discomfort and uneasiness when dealing with conservative Muslim patients. In actual fact, in both the narrated scenarios, the two interlocutors' mind-sets and assumptions were rather different. The Muslim fatalistic view of life might nonetheless impact on the therapy, as shown for example by P.R. Springer, D.A. Abbott, and A.M.J. Reisbig, *Therapy with Muslim Couples and Families: Basic Guidelines for Effective Practice*, in «The Family Journal: Counselling and Therapy for Couples and Families», 17, 3, 2009, pp. 229-235.

treatments in a public hospital, and to accept the failure of an ART cycle or the negative outcome of pre-natal genetic investigations⁴³.

Adopting the way of thinking of a pious Muslim, recourse to prayer and acceptance of infertility can also be perceived as an ancillary solution to couple's procreative problems, which can be perceived as being «almost equivalent» to ART techniques. As disclosed by ethnographic observations, this approach might offend local physicians performing MAPs⁴⁴. Nonetheless, some Muslim patients' attitude is not due to lack to trust in man-made remedies, but to absolute faith in God's plan. With regard to this issue, an additional aspect is worth of attention; the head of another local mosque stated what follows.

I solved quite a lot of issues like that [infertility/sterility]. Well, you try to talk about *Islām* and what that means... including child problems. So, we manage to explain that it's God who gives you [children]. «You marry four wives, ...all right, but if God doesn't want, He will not give to you any [children]» – I said to a boy who asked for advice. He had problems; we talked a bit... We also did $du'\bar{a}'$ together, here. He was feeling better, then; he was more relaxed, in peace... Let's hope for the best now!⁴⁵

Accordingly, from the viewpoint of these locally-based religious figures, not only man-made remedies (such as medicine, biology and ART procedures) but also Islamic remedies (such as polygynous marriages) might not help childless couples in conceiving offspring; and this occurs when the Muslims' parenthood desire does not conform to divine planning.

The need to understand God's plans for childless couples, the perception of divine will, and the decisive importance of personal fate in moulding individual destiny were unanimously voiced by Muslim prospective parents. The informants the author met in fertility clinics used similar arguments when realising interviews and when interacting with local healthcare professionals, as discussed *infra*, in chapter IV.

4.2. Changes in intended parents' nuclear families

Additional Islamic solutions to the condition of being without offspring imply changes in the structure of the intended parents' nuclear family. In particular, in case of (supposed) female/male infertility or sterility, two other Islamic traditional remedies can be named: polygyny or divorce.

The above-mentioned two *shari*'ah compliant ways of coping with child-lessness are particularly interesting since they are strictly intertwined with

⁴³ These issues are addressed *infra*, respectively in chapter V, section 8 and chapter IV, section 3.3.

⁴⁴ See for instance chapter IV, section 3.1.

⁴⁵ Literally, the informant said: «Speriamo che Dio ce la mandi buona!».

ART/MAP procedures. On the one hand, a combination of marriage(s) and divorce(s) might be necessary to undergo heterologous Islamically compliant procedures. On the other hand, the fact that Muslim husbands can resort to these traditional remedies, considerably affects Muslim women undergoing fertility treatments⁴⁶.

According to Islamic law, a Muslim husband can marry more than one wife, thus becoming a polygynous man⁴⁷. As alternative *sharī* ah compliant path, a Muslim man can divorce his infertile/sterile wife through repudiation ($tal\bar{a}q$)⁴⁸. The codifications of some Muslim majority countries also allow Muslim wives to submit an application for (judicial) divorce in the case of infertile/sterile husbands, provided this condition was included in the parties' nuptial contract⁴⁹.

A study of the *shari*'ab compliant ways to dissolve the Islamic/Muslim marriage of infertile/sterile partners is beyond the scope of the present volume, these topics are thus briefly investigated adopting the perspectives of local Muslim communities. Relevant declarations released by the research subjects are accordingly reported and discussed below. As a starting point, the wording chosen by one Muslim woman (who is involved in the mosque's administration) deserves specific attention. She summarised the applicable Islamic provisions and Muslim praxes that were briefly mentioned above as follows:

We can talk and talk... but it's simple, really. In the Arab word, the solution [to sterility or infertility] is one of two things. Typically, if it's the man, then the man remarries. Also at religious level, if the woman agrees, he takes a second wife. So, at this point, everything is solved! [...] usually, she's the one who decides; well, theoretically, she's the one who decides [...] She has also the right to ask to the judge to be divorced from her [infertile] husband; so, she can be separated, if she wants children. I know this is possible, but I never saw anything like that, here – you know what I mean. [...] When the woman can't bear children, then she's divorced by him [her husband]. Unless they stay together with no children... That's it. That's what happens.

⁴⁶ As explored *supra*, in chapter IV, sections 2.3 and 6.

⁴⁷ According to the *al-Qur'ān* (IV: 3), indeed, a Muslim man can indeed have up to four contemporaneous co-wives. For a comment, see for instance R. Aluffi, *Il matrimonio nel dirit-to islamico*, in S. Ferrari (Ed.), *Il matrimonio. Diritto ebraico, canonico e islamico: un commen-to alle fonti*, Torino, Giappichelli, 2006, pp. 181-246.

⁴⁸ See for instance An-Na'im, Islamic family law in a changing world. A global resource book, cit.; R. Arshad, Islamic family law, London, Thomson Reuters, 2010; J.D. Rehman, The Sharia, Islamic Family Laws and International Human Rights Law: Examining the Theory and the Practice of Polygamy and Talaq, in «International Journal of Law, Policy and the Family», 21, 2007, pp. 108-127.

⁴⁹ This written document is usually called *'aqd al-zawāğ or nikāḥnama*. The first expression is mostly used by Arabic-speaking Muslims whereas the second is more common in South Asia. Others may use the expression *'aqd al-Qur'ān*.

When facing relationship difficulties and personal distress due to childlessness, national and local religious figures have thus to deal with possible changes in the nuclear family of the prospective parents. With respect to dissolution of marriages, the majority of the interviewed *a'immah* declared that they usually try to discourage childless couples from separating or divorcing on the ground of their unmet desire for offspring. Some of them lamented ignorance of *sharī'ah* and even the abuse of Islamic provisions, mostly by married men. By way of illustration, an *imām* in Torino explained:

Well, $tal\bar{a}q...$ That's a problem. Sometimes they tell me: «I'll leave my wife 'cos she hasn't given me a son!». This is complete ignorance! I had a case... a friend of mine; his wife had six daughters. When he was waiting for the seventh [child], he told her: «If the next one's female too, you'll be divorced!». You see, this is non-sense! «Then $All\bar{a}h$ will ask you why you left your wife... on the day of judgement, you'll have to explain» – I told him.

The case narrated by the interviewed *imām* does not regard a medically infertile Muslim couple, but a Muslim woman who is socially perceived as being affected by a sort of «gender selective infertility» since she gave birth to daughters only. This scenario is relevant in pinpointing the interpretation of Islamic provisions that may be given locally and, therefore, endorsed by Muslim married partners settled in Torino. As further clarified by the religious figure during interviews, if a Muslim husband is under the impression that he is entitled to divorce his wife because their offspring encompasses only daughters, the same man would feel even more legitimised to repudiate his (supposedly) sterile wife. Additionally, Muslim prospective parents affected by «gender selective infertility» could also try to resort to ART techniques in trying to meet their wish for female or male offspring⁵⁰.

When addressing talaq as a shari ah compliant remedy to childlessness, the head of a local Islamic centre pinpointed other aspects when declaring:

What can I tell you? It's up to the husband! [...] I usually tell them to be patient: «Even if you divorce her... even if marry a new one, there's no guarantee that you'll have any [children]. The fault can also be yours, can't it? You can wait and believe in God...». You see, we try to cheer people up but... the mosque isn't always full... people who come here are more educated, those who don't attend, they haven't big faith in God... they don't know much.

Lack of knowledge of Islamic norms combined with urgency to conceive can thus lead Muslim men to divorce their (supposedly) infertile/sterile wives. Actually, the fear of being divorced through repudiation was voiced with anxiety by almost all the Muslim women undergoing fertility treatments

⁵⁰ See *infra*, section 7.3.2 and chapter IV, section 3.3.

in Torino. The pressing need to bear a child, to avoid being divorced by their husbands, was clearly perceived by the healthcare personnel responsible for offering fertility treatments, and also confirmed by the cultural mediators, during interviews⁵¹. The actual understanding and implementation of Islamic provisions within Muslim communities thus considerably affects Muslim women opting for fertility procedures. A second aspect is to be emphasised. In this scenario, when facing social and familial pressure to divorce an infertile wife, a socially undisclosed (non-Islamically) compliant heterologous fertility treatment might become a more attractive option for Muslim partners unwilling to resort to divorce⁵².

Nonetheless, divorce cannot be condemned *per se* as the worst *shari'ah* compliant solution in case of infertile couples. The same informant indeed conceded:

I have many friends who didn't have any children and didn't separate from their wives. Many have waited years and years. But in some cases, it's *Islām* that doesn't want them to go on together...

To put it differently, the fact that two spouses cannot conceive children can be interpreted as a «sign from God» disclosing that the partners are not a couple that is supposed to continue their life together as husband and wife. In *Islām*, pious Muslim spouses can thus (consensually) opt for divorce when being childless in order to marry another partner in search for a child.

With regard to this matter, an Arabic-only speaking $im\bar{a}m$ declared that he usually invites Muslim couples to divorce when they cannot conceive children. In particular, he manifested his worries for childless Muslim wives who are instead willing to procreate. Narrating a case in which he helped an Egyptian woman settled in Torino to obtain a divorce decree in her own country of origin and then to remarry an Italian man, he stressed that all Muslim couples must find an agreeable solution. Moreover, an $im\bar{a}m$ or a *shaykh* is compelled to help the spouses to find their right path. If parenthood cannot be disregarded by one of the Muslim partners – either the wife or the husband – divorce then may be the best option, in very practical terms. In some cases, this solution can be better that undergoing time-consuming and (potentially) expensive ART procedures⁵³.

⁵¹ As discussed *infra*, in chapter IV, section 6.

⁵² On Muslim intended parents undergoing heterologous MAR treatments in Torino, see *infra*, chapter V, section 6. It should also be emphasised that some Muslim women declared that they requested to undergo cycles involving donors whilst asking the IVF physician not to disclose this to their husbands in order to protect their nuclear family and not to be forced to leave their country of settlement. See *infra*, chapter IV, section 6.

⁵³ On the length and the cost of fertility treatments, see *infra*, chapter V, sections 7-8.

Polygyny is the second traditional *shari*^{*}*ah* compliant remedy to involuntary childlessness for Muslim couples. In this scenario, the spouses continue their married life together while another person enters the nuclear family – a second wife. When adopting the perspective of *Islām*, polygyny can be resorted to in three hypotheses: the wife's primary or secondary infertility/sterility, when the husband wishes to have a very large number of offspring, and when the wife has borne only daughters and the husband wants a son⁵⁴. Not only medical infertility/sterility but also additional internal factors – such as «gender selective infertility» – can therefore explain intended Muslim parents' polygynous choices.

Although addressing this topic very cautiously, local religious figures eventually exchanged views on this matter. By way of illustration, a local *imām* clarified that, in case of infertile wives, polygyny is to be regarded as a fair *sharī'ah* compliant solution. He highlighted that

An issue shall exist for a man to marry a second wife, in compliance with Islamic law. If they have no sexual relationships – for instance, she doesn't feel good – or if she can't have children... then, he can [marry a second wife]. Anyway, the decision isn't in our hands... always! Let me give you an example. My uncle, he was married for nineteen years with his wife and they had no children. So, he married a second one and they had a son straightaway. Two months after the birth of the second wife's son, the first wife got pregnant too. So, you see... you never know. In the end, it worked well for the first one too! *Allāh* sometimes wants this, He knows best...

In the case narrated, the husband eventually had children from both cowives, and this episode was interpreted as a demonstration that Muslim prospective parents shall incessantly place trust in God and in *halāl* solutions to their desire of parenthood.

Other local religious figures narrated situations in which the first wife did not conceive any children; nonetheless, the two co-wives raised together the offspring delivered by the husband's second wife, as if they were one large extended family. Polygygny is therefore understood and described as a good *sharī'ah* compliant solution to childlessness. In the words of the head of an Islamic worship centre,

Practically, there's this option [polygyny] in *Islām*. Namely, the man marries a second one to have children. There are couples who forget about children and go ahead together, in any case... Anyway, my sister's husband is a good example. His father married the first [wife] but she had no child; so, he married another one. This girl, the second one, had children and the two looked after them together, as

⁵⁴ For further discussion, see M.A.Z. Yamani, *Polygamy and law in contemporary Saudi Arabia*, Reading, Ithaca, 2008. These are not only hypothetical situations, as clarified further in the section 7.3.2 and *infra*, in chapter IV, section 6.

friends, in the same house... Then, he died and they all still live together! ...only them [co-wives] actually, as their children are grown up and married now. The two [wives] became almost as sisters – we can say.

As a result, when embracing an Islamic viewpoint, it can be inferred that polygyny can meet the human natural wish for offspring and desire of parenthood without dissolving the matrimonial bond of an infertile pious couple.

Additionally, empirical evidence disclosed that polygyny is preferable to divorce in the opinion of some Muslim women. In fact, a Muslim woman can be ostracised by local communities and find it difficult to enter into a second marriage if the rumour about her (supposedly) infertility/sterility spreads⁵⁵. A woman might thus be neglected also by her extended families when she is divorced on the grounds of her inability to conceive (male) offspring, and this fear was voiced by Muslim woman patients undergoing ART procedures in Torino⁵⁶.

Potentially damaging effects of speculations on childless women, however, are not the sole reason supporting co-wives as effective religious and customary remedies to female infertility/sterility. As illustrated by an *imām* in Torino:

In *Islām* a man can marry up to four [women]. When they have no children, it's customary for the wife to... I had a case. She was sterile. She – herself, yes! – recommended her husband to marry a second wife to have a child. [...] It wasn't my case – we have five kids, indeed – but my wife and myself agreed that, in case I would have looked for a second wife, she would have chosen her [the co-wife] for me. I told her: «If I do it, I'll do it through you... 'cos if I take another one, you shall know and help me in finding someone suitable...». That's the key.

Accordingly, the *imām* deemed pivotal the cooperation amongst the members of an extended family; more specifically, the fact that the (potentially) infertile/sterile wife supports her husband's choice to marry a co-wife is of crucial importance. The first wife is invited to help her own husband in finding a suitable second wife, if the Muslim couple did not conceive a child and at least one of the spouses wished to bear offspring. With respect to this matter, it should also be stressed that the reported reasoning is echoed in the arguments put forward by (Muslim) patients undergoing MAP procedures involving third parties⁵⁷.

Although being a *sharī'ah* compliant remedy for childless couples, polygynous matrimonial unions must nonetheless meet some specific requirements in order to be valid and fair, as clarified by the research informants. The president of a nationally and locally active Islamic organisation and the

⁵⁵ As further discussed *infra*, in chapter IV, section 5.1.

⁵⁶ See *infra*, chapter IV, section 6.

⁵⁷ On this see *infra*, section 6.2 and chapter V, section 6.

head of a local worship centre raised additional points when stating what reported below:

In the Qur'an, polygamy has been permitted as a possibility. But, it's a possibility and not a duty, not a necessity! In fact, God demands the man be fair to his wives... God maintained that you cannot be equitable and fair-minded with all your wives, so... this is indirect advice that you should marry one and not four! [...] So, we can say that, sometimes, this is a possibility that is mixed up with a duty and a right... also in this case [childless couples],

and

In *Islām* you can, yes. But, the first wife cannot be abandoned, and you cannot take away a single shred of dignity from the first one! At any rate, the relationship with the husband is unique... To be honest with you, no woman is comfortable with polygamy – I think... So, when the woman is infertile, this can be a solution, but only after having explored all other options. For instance, you go to the hospital and do the three [fertility] treatments there.

In other words, polygyny – despite being an Islamically compliant remedy to childlessness – is not necessarily a solution that suits the needs of all infertile Muslim spouses wishing for parenthood, more specifically in European countries and in the XXI century. As a result, this should be regarded as a sort of supplementary Islamic remedy to the need for a child. To some informants, «modern» remedies such as ARTs and/or MAPs are instead to be favoured by Muslim intended parents living in European environments. Nonetheless, in some cases, polygynous nuptial unions are necessarily entered into in order to abide by Islamic provisions if the Muslim couple undergoes heterologous fertility procedures.

Empirical investigations therefore disclosed that changes affecting the composition and structure of the nuclear family (such as divorce and polygyny) are socially and religiously perceived as second best option in the search for *shari'ah* compliant solutions for childless Muslim partners⁵⁸. Nonetheless, (temporary) nuptial dissolutions as well as polygynous matrimonial unions might also be relied upon in order to allow third party donation in Islamically compliant MAP treatments⁵⁹. To put it differently, what was originally perceived as a remedy to Muslims' infertility/sterility can be strategically and skilfully used as a tool to facilitate the usage of heterologous fertility treatments by Muslim prospective parents.

⁵⁸ See for instance chapter IV, section 5.2.

⁵⁹ As discussed below in sections under 6.

4.3. Adoption, child custody and foster care

When pious Muslim prospective parents do not intend either to divorce or to enter into a polygynous nuptial relationship, then the options are limited. In compliance with Islamic law, adoption (*tabanni*) is indeed forbidden⁶⁰; only *kafālah* is permitted⁶¹. On the contrary, according to Italian law, physicians are required to inform the couple willing to undergo a fertility treatment that they can resort to adoption or foster care⁶² – options which are *de facto* regarded as additional remedies to involuntary childlessness by the Italian legal system.

In real terms, however, Muslim intended parents may turn to adoption, child custody or foster care to bear children. In some cases, this might imply not abiding by Islamic provisions; in other situations, pious Muslim intended parents may rely upon *sharī'ah* to create kinship relations when undergoing heterologous fertility procedures. These potentially conflicting perspectives are to be further explored.

The Qur' $\bar{a}n$ exhorts the faithful ones to take care of orphans and abandoned children⁶³, but indicates that the child's lineage $(nasab)^{64}$ is to be protected and preserved⁶⁵. Therefore, adoption is to be avoided by Muslims⁶⁶. More specifically, the prohibition concerns the creation of a fictive parent-child relationship through naming and endowment of the biological child's rights and duties⁶⁷.

⁶² See *supra*, chapter II, section 2.

⁶³ See for instance *Qur^jān* (II: 177, 215; IV: 2,6,10, 127; VI: 152; LXXVI: 7-10; LXXXIX: 15-18; XCIII: 9; XCVI: 6).

⁶⁴ On this see further in the chapter, see *infra*, section 6.2.

⁶⁵ Qur'ān (XXXIII: 1-9; 37-40).

⁶⁶ The head of a worship centre in Torino explained in his own words the historical reason behind the Islamic ban on adoption declaring that: «There's a story in *Islām*. Muhammad adopted a slave named Zayd saying that he was like his own son. So, Zayd got the Prophet's (PBUH) name and had inheritance rights. But, then, God wanted it differently... So, the Prophet (PBUH) married a woman who was formerly married to Zayd... So, now, people are to be named with their own names and surnames – this is very important to us!». Apart from the narrative here quoted, complex reasons support the prohibition of adoption in *Islām*; see *inter alia* J. Bargach, *Orphans of Islam. Family, Abandonment, and Secret Adoption in Morocco*, Lanham, Rowman & Littlefield Publishers, 2002.

⁶⁷ See inter alia Bargach, Orphans of Islam. Family, Abandonment, and Secret Adoption in Morocco, cit.; S. Ishaque, Islamic Principles on Adoption: Examining the Impact of Illegitimacy and Inheritance Related Concerns in Context of a Child's Right to an Identity, in «International Journal of Law, Policy and the Family», 22, 3, 2008, pp. 393-420, and I. Mattson, Adoption and fostering, in S. Joseph, A. Nămābādī, J. Peteet, S. Shami, J. Siapno, and J.I. Smith, Brill (Eds.), Encyclopedia of Women and Islamic Cultures. Family, Law and Politics,

⁶⁰ Qur'ān (XXXIII: 4-5).

⁶¹ Literally, this word means guarantee (*fideiussione* in Italian language) as this is a system of Islamic sponsorship eventually used to take care of orphans. For an introduction, see *inter alia* U.M. Assim, and J. Sloth-Nielsen, *Islamic kafalah as an alternative care option for children deprived of a family environment*, in «African Human Rights Law Journal», 14, 2014, pp. 322-345.

When approaching Islamic associations and local religious figures, it became soon clear that, from an Islamic perspective, considering adoption as a remedy to couple's infertility/sterility is a highly contentious issue. Two main reasons justify the banning of adoption in *Islām:* the Islamic rule, and the different inherent nature of adoptive and biological parenthood. The director of a national organisation indeed stressed that assisted reproduction and adoption «are two different things» since these regard «two different jurisdictions». In his words,

Kafālab allows me not to... not to meet the need of having offspring (which would be of different nature), but this allows me to meet the need to take care of someone, therefore to do charitable work – for instance, fostering an orphan [...] and this corresponds to a specific *ratio* allowing me to take care, in this way...

He developed the argument in further detail as follows:

God tells you: «I grant you the permission to take care of other people's offspring, other peoples' children: you can nourish them, educate them, prepare them for life... you can foster them, stay with them until the end of life; but... they are not your blood-offspring!». This doesn't mean that these are «B series» children, but there is no confusion. This isn't a subterfuge to have offspring if God didn't give me any! Therefore, you have to accept your own situation... so that equilibrium is restored between various jurisdictions.

Accordingly, adoption cannot be used to create «fictitious» parenthood and childhood in Muslim families. God only can give offspring to intended parents, and perhaps this can happen thorough fertility treatments⁶⁸. Consequently, an adopted Muslim child never becomes a «full family member» since his/her biological bloodline has to be preserved. When embracing the perspective of Islamic law, adoption is very similar to MAP techniques involving third parties. If Muslim intended parents undergo heterologous procedures, indeed, there is lineage confusion, and this violates the child's rights in *Islām*.

As a result, changing child's birth name to the adoptive family's surname is not permitted; the adopted child's right to an identity is to be protected

vol. II, Leiden, 2005, pp. 1-3. For further discussion on infertile Muslim parents and adoption/custody, see L. Culley, N. Hudson, and F. Van Rooij (Eds.), *Marginalized Reproduction: Ethnicity, Infertility and Reproductive Technologies*, London, Earthscan, 2009; A. Daher, Y. Rosenfeld, and L. Keinan-Boker, *Adoption Law, Dilemmas, Attitudes and Barriers to Adoption among Infertility Patients in Israel*, in «Medicine and Law», 34, 1, 2015, pp. 55-68; R.F. Storrow, *Quests for Conception: Fertility Tourists, Globalization and Feminist Legal Theory*, in «Hastings Law Journal», 57, 2, 2005, pp. 295-330.

⁶⁸ And indeed, medical doctors reported that, in the event of successful ART/MAP treatments, Muslim patients usually express their gratitude to God. See for instance chapter IV, section 3.1 and chapter V, section 3.

in *Islām*. In the opinion of the president of another Islamic national organisation, this happens since

Islām respects the dignity and the legal personality of every human being, therefore we cannot change a person's surname and give him the one of the new family... Then, there's $kaf\bar{a}lah$ – a possibility within the Islamic system. [...] However, in Italy you cannot do it because adoption is «taking the surname» of the adopting family. Regrettably, our legislation has still to be adjusted not to change the surname of the adopted child.

On Italian soil, therefore, *kafālab* is described as a sort of «theoretical possibility only» for Muslim couples – as reported by some informants. Furthermore, *a'immab* highlighted that, whereas so-called «distance adoptions» and relatives' (temporary) adoptions are practised by (local) Muslim communities⁶⁹, the «Western adoption model» is usually avoided, since this is explicitly prohibited according to *sharī'ab*. In real terms, Muslim patients were not comfortable in addressing this matter with IVF physicians, despite being required to (briefly) do so by the Italian legal provisions on MAPs⁷⁰.

The understanding of the right to a private family life as well as the idea of parenthood and childhood are nonetheless increasingly individualised within local Muslim communities. In real-life situations, (infertile/sterile) Muslim prospective parents may therefore decide to legally adopt a child and claim s/he is actually their own offspring. In this scenario, the «fictive non-blood parent-child relationship» is normally not disclosed to the local community and/or the extended family⁷¹. Naturally, this can more easily happen when the adoptive couple is settled in a European country. The path of *kafālah* is instead usually pursued by infertile/sterile couples in Muslim majority countries⁷².

Under those circumstances, some legal subterfuges might be relied upon to create some sort of kinship, and/or to grant inheritance rights (e.g. through an act of deed) to this non-biological offspring⁷³. It can thus be in-

⁶⁹ An *imām*, for instance, said to me: «Adoption? Yes. We do many here, in the mosque! You know there are many orphans now in Syria... I'll show you the paperwork, it's here... You see? We have many many... it's important to take care of orphans for us». Although labelled as adoptions, these were forms of sponsoring and/or fostering orphans.

⁷⁰ See respectively *supra*, chapter II and *infra*, chapters IV-V.

⁷¹ This also happens in the case of MAP involving donors, as discussed *infra*, sections under 6, and also in chapter IV, section 5.1 and chapter V, section 6.

⁷² For a study on Islamic family norms and Muslim kinship practices and their (non) acknowledgement in European countries, see for instance Brunet on France, Duca and Orlandi on Italy. L. Brunet, *La réception en droit français des institutions familiales de droit musulman: vertus et faiblesses d'un compromis*, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, I, 2010, pp. 231-251; R. Duca, *Family Reunification: The Case of the Muslim Migrant Children in Europe*, in «Athens Journal of Social Sciences», April 2014, pp. 111-120; M. Orlandi, *La kafala islamica e la sua riconoscibilità quale adozione*, in «Il Diritto di Famiglia e delle Persone», XXXIV, 2005, pp. 635-665.

⁷³ With respect to the second aspect, for instance, an *imām* elucidated some social-religious dynamics whilst asserting what follows: *«Kafālah* is all right... If you bring a child in ferred that the Islamic family order cannot be subverted through adoption and this is perceived as one of the higher moral imperative of Islamic law⁷⁴. Nevertheless, pragmatic solutions can be found in the flexible system of *shari* ah, provided both father's and child's lineage are preserved.

By way of illustration, in the case of custody or foster care, some additional *escamotages* can be relied upon to build some sort of Islamically compliant family ties. In fact, kinship relationships can be created thorough two bodily substances – blood and milk – according to *sharī'ah*⁷⁵. The foster mother may thus be invited to ask for induced lactation in order to wet-nurse the offspring placed in her custody. This action is aimed to create a milk relationship with the child (more specifically, with a male child), according to Islamic scholars⁷⁶. As a result, a sort of what can be called «Islamic biological

your household and raise him until he's independent, but he can't inherit from you and you don't give him your name. That's the norm. Then, he can't inherit... but – you know – you can make a donation to anyone before dying, so... a remedy exists, if you want... But Islām protects the bloodline and we must abide by that».

⁷⁴ According to some interpretations, adoption is even equal to apostasy in *Islām*. In real terms, Tunisia, Turkey and Iran are the sole Muslim majority countries in the Middle East where adoption can be legal. See *inter alia* Inhorn, *(Islamic) ART Journeys and moral pioneers*. New reproductive technologies in Islamic local moral worlds, cit., pp. 20-28.

⁷⁵ For further discussion on these *shari'ah* compliant kinship ties see *inter alia* Clarke, Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon, cit.; É. Conte, Affinités electives et parenté arabe, in «Études rurales», 157/158, Jeux, conflits, représentations, 2001, pp. 65-94; C. Fortier, Le lait, le sperme, le dos. Et le sang? Représentations physiologiques de la filiation et de la parenté de lait en islam malékite et dans la société maure, in «Cahiers d'Études Africaines», 41, 161, 2001, pp. 97-138; Id., Le droit musulman en pratique: Genre, filiation et bioéthique, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, 2010, pp. 15-40; P. Parkes, Fostering Fealty: A Comparative Analysis of Tributary Allegiances of Adoptive Kinship, in «Comparative Studies in Society and History», 45, 4, October 2003, pp. 741-782; Id., Fosterage, Kinship, and Legend: When Milk Was Thicker than Blood?, in «Comparative Studies in Society and History», 46, 3, July 2004, pp. 587-615; Id., Milk kinship in Islam. Substance, structure, history, in «Social Anthropology», 13, 3, 2005, pp. 307-329; N. Rosen, The Milk Relationship: The Evolution and Significance of Wet-nurses, in «Anthropology Senior Theses», Paper 138, 2013, pp. 1-39. For a biomedical perspective see L. Moran, and J. Gilad, From Folklore to Scientific Evidence: Breast-Feeding and Wet-Nursing in Islam and the Case of Non-Puerperal Lactation, in «International Journal of Biomedical Sciences», 3, 4, 2007, pp. 251-257.

⁷⁶ In practical terms, this implies that Islamic nuptial impediments exist between the foster mother and the child. Accordingly, once the fostered son reaches puberty, no wearing of the headscarf will be required if the mother and the child spend time alone in the household. The same foster-kinship marriage impediment applies between milk-siblings (milk-sisters and milk-brothers), and (to *Shī'ī* Muslims) also to consanguineous kin of milk-parents who becomes *mahram* (unmarriageable). On Islamic nuptial impediments, see *Qur'ān* (IV, 22-23). For details, see S. Altorki, *Milk-Kinship in Arab Society: An Unexplored Problem in the Ethnography of Marriage*, in «Ethnology», 19, 2, April 1980, pp. 233-244; M.H. Benkheira, *Alliance, asymétrie et différence des sexes. Un problème d'exégèse juridique: la prohibition de la belle-mère et de la belle-fille*, in «Islamic Law & Society», 13, 2, 2006, pp. 153-207; S.S. Shah, *Fosterage as a Ground of Marital Prohibition in Islam and the Status of Human Milk Banks*, in «Arab Law Quarterly», 9, 1, 1994, pp. 3-7; M. Tabiu, *Unlawful marriages and their effect in*

kinship» exists between the non-biological mother and the fostered breastfed child through non-puerperal lactation. This legitimate relationship results from suckling ($rid\bar{a}'$) and it is grounded on milk instead of blood.

The fact that an infant can be breastfed by a woman other than his/her own mother is also specifically relevant in MAP procedures. This norm is indeed used by $Sh\bar{i}'\bar{i}$ Muslims to create biological kinship in case of surrogate motherhood and oocyte donation. As further discussed further in section 6.2⁷⁷, the surrogate mother can indeed be regarded as the offspring's milk mother in order to create an unusual and yet *halāl* family.

For the same reasons, the utilisation of donor's human milk in some gynaecological hospitals may negatively impact on Muslim patients. This procedure, in effect, creates Islamically relevant kinship relations amid family members belonging to different groups⁷⁸. Accordingly, children fed with the same human milk are regarded as siblings in *Islām*, therefore nuptial impediments affect the family members involved, and – if not known – incestuous unions might occur⁷⁹. To the puzzlement of some local healthcare professionals, the very same Islamic norm can thus prevent the use of donor breast milk supplement for infants, whilst at the same time fostering the utilisation of ART/MAP amongst Muslims.

Given the complexity of overlapping issues and the plurality of Islamic reasoning, adoption and foster care are socially perceived as being distinctly problematic and highly controversial matters amid Muslims. When embracing the viewpoint of local Muslim communities, uneasiness frequently

Islamic law of the Maliki school, in «Islamic Studies», 31, 3, 1992, pp. 319-337. The hypothesis that infants breastfed by the same woman may develop consanguinity has been addressed also by physicians, see H. Ozkan *et al.*, *Milk kinship hypothesis in light of epigenetic knowledge*, in «Clinical Epigenetics», 4, 14, 2012, pp. 1-3.

⁷⁷ It should be mentioned that Clarke clarifies that «milk kinship provides a way of thinking through and resolving the ethical dilemmas of the use of donor eggs and surrogacy arrangements». See Clarke, *The modernity of milk kinship*, cit., at p. 287. See also Clarke, *Islam, kinship and new reproductive technology*, cit.; Id., *Shiite perspectives on kinship and new reproductive technologies*, cit.

⁷⁸ See inter alia A. El-Khuffash, and S. Unger, *The Concept of Milk Kinship in Islam Issues Raised when Offering Preterm Infants of Muslim Families Donor Human Milk*, in «Journal of Human Lactation», 28, 2, May 2012, pp. 125-127; A. Karadag *et al.*, *Human milk banking and milk kinship: Perspectives of mothers in a Muslim country*, in «Journal of Tropical Pediatrics», 61, 3, 2015, pp. 188-196; R. Ozdemir *et al.*, *Human milk banking and milk kinship: Perspectives of religious officers in a Muslim country*, in «Journal of Perinatology», 35, 2015, pp. 137-141; Shah, *Fosterage as a Ground of Marital Prohibition in Islam and the Status of Human Milk Banks*, cit.; V. Thorley, *Milk siblingship, religious and secular: History, applications, and implications for practice*, in «Women and Birth», 27, 2014, pp. 16-19. However, using donors' milk is permitted according to a *fatwā* issued by the European Council for Fatwa and Research in 2004. Children feed with the same human milk are however regarded as siblings in *Islām*, therefore nuptial impediments affect the involved family members.

⁷⁹ The argument echoes the risk of incest between anonymous donors' half-sibling offspring. See *infra*, sections 6.1-6.2 emerged in addressing these traditional *sharī'ah* compliant remedies to childlessness; this attitude was also confirmed by Muslim patients undergoing fertility treatments locally⁸⁰. Accordingly, this topic is *de facto* briefly touched upon by medical staff, although physicians are legally required to explain to the couple asking for a fertility treatment that adoption and foster care are alternative parenthood methods on Italian soil⁸¹. Similarly, the manner in which multiple familial ties can be created in *Islām* is usually not disclosed to fertility clinic personnel by Muslim intended parents undergoing ART/MAP procedures.

It should however be stated that, despite the sensitivity of the topic, intended Muslim mothers undergoing ARTs frequently referred to kafalab when interviewed. Adoption cases were habitually reported by patients as grounds to further corroborate their preference for fertility procedures in the attempt to meet the couple's childbearing desire⁸².

5. Medically assisted conception and/or reproduction

In light of the discussion from the previous sections, medically assisted reproduction is generally perceived as a good (potentially) *sharī'ah* compliant formula meeting the Muslim spouses' desire for parenthood. This remedy allows childless contemporary Western (more individualised) Muslim married couples to stay together as a nuclear family, instead of opting for divorce or polygyny, or implying lineage confusion⁸³. Additionally, non-do-nor reproductive technologies make it possible to conceive legitimate off-spring while preserving the blood lineage (*nasab*) and contributing to the global growth of the *Ummah*.

From a historical viewpoint, the Muslim world originally approached ARTs with caution. Analysing the merits and the faults of assisted conception and/or reproduction, Islamic scholars at first voiced their scepticism and were critical of the potentially damaging effect to kinship order and family lineage. Nonetheless, the initial distrust was soon overcome, although a minority of Islamic scholars persist in prohibiting any type of artificial insemination

- ⁸¹ On this see *supra*, chapter II, section 2.
- ⁸² See *infra*, chapter IV, section 6.

⁸³ For a discussion on the individualisation process affecting Muslims settled in Europe, see for example K. Pędziwiatr, *How Progressive is «Progressive Islam»? The Limits of the Religious Individualization of the European Muslim Elites*, in «Social Compass», 58, 2, 2011, pp. 214-222. On migrant families' nuclearisation, see *inter alia* T. Parsons, and R.F. Bales, *Family socialization and interaction process*, London, Routledge, 2001 (1956); in addition to I. Ahmed, *Muslim Immigrants in Europe: The Changing Realities*, in «India Quarterly», 69, 3, pp. 265-282, and J.K. Baral, and A. Chowdhury (Eds.), *Family in Transition: Power and Development*, New Delhi, Northern Book Centre, 1999.

⁸⁰ These aspects are further elucidated in chapter IV, section 5.2.

for Muslims⁸⁴. When embracing this perspective, Muslim intended parents can only resort to the traditional *shari* ah compliant remedies to childlessness as examined in the previous sections; namely, acceptance of infertility, changes in the nuclear family through polygyny or divorce, or Islamic foster care (*kaf-alah*).

In real terms, already in the 1990s, it was underlined that Muslims (predominantly those living in developing countries) were more significantly affected by infertility problems during their lifetime, when compared to the world population⁸⁵. As highlighted by Atighetchi, the numerical dimension of the infertility/sterility phenomenon in the Muslim world soon required «methods of intervention beyond those traditionally considered»⁸⁶. Muslim families were indeed looking for remedy to childlessness beyond traditional *shari*^{*}*ah* compliant solutions; accordingly, reproductive tourism became a common phenomenon among prospective parents living in Muslim majority countries⁸⁷.

As time passed, Islamic scholars gradually began to encourage «the use of science and medicine as solutions to human suffering»; building upon Musallam, Inhorn indeed elucidated that this happens since *Islām* «is a religion that can be described as «pronatalist», encouraging the growth of an islamic «multitude»⁸⁸. The number of clinics offering assisted reproduction technologies and fertility treatments thus grew rapidly in Muslim majority countries. Fertility clinics were established in *Sunnī*-dominant Muslim ma-

⁸⁵ The rates of varicocele, gland infections and tubal occlusion and infections affecting Muslim men and women are indeed rather high. See Serour, Aboul-Ghar, and Mansour, Infertility: A health problem in the Muslim world, cit., and Id., Bioethics in medically assisted conception in The Muslim World, cit. See also G.I. Serour (Ed.), Proceedings of a Seminar on ethical implications of use of assisted reproductive technologies for treatment of human infertility. Rabei Akhar 21-23rd, 1418 August 25-27th, 1997, Cairo, al-Azhar University, 1997 and M.I. Burney, Health and medical profile of the Muslim world, Islamabad, Pakistan, COM-STECH Secretariat, 1993. On fertility amongst Moroccans see for instance C.L. Hughes, The «Amazing» Fertility Decline: Islam, Economics, and Reproductive Decision Making among Working-Class Moroccan Women, in «Medical Anthropology Quarterly», 25, 4, 2011, pp. 417-435.

⁸⁶ Atighetchi, Islamic Bioethics: Problems and Perspectives, cit., at p. 136.

⁸⁷ See for instance M.C. Inhorn, *Globalization and gametes: Reproductive «tourism», Islamic bioethics, and Middle Eastern modernity,* cit. On fertility tourism and religiously influenced bioethics, see *inter alia* Storrow, *Quests for Conception: Fertility Tourists, Globalization and Feminist Legal Theory,* cit.; Id., *Handmaid's Tale of Fertility Tourism: Passports and Third Parties in the Religious Regulation of Assisted Conception,* in «Texas Wesleyan Law Review», 12, 1, 2005, pp. 189-212; Id., *Marginalizing Adoption through the Regulation of Assisted Reproduction,* in «Capital University Law Review», 35, 2, 2006, pp. 479-516.

⁸⁸ See B.F. Musallam, Sex and Society in Islam: Birth Control Before the Nineteenth Century, Cambridge, CUP, 1986, at p. 126; and Inhorn, Globalization and gametes, cit., at pp. 126-128. See also M.C. Inhorn, Quest for Conception Gender, Infertility and Egyptian Medical Traditions, cit.

⁸⁴ Atighetchi, for instance, refers to the Libyan Penal Code of 1972 prohibiting homologous artificial insemination and to the *fatwā* of Abd al-Halim Mahmud; see Atighetchi, *Islamic Bioethics: Problems and Perspectives*, cit., at pp. 135-136.

jority countries as early as 1986. The first IVF centre was opened in Saudi Arabia, followed by Egypt and Jordan. During the next years, centres were established in Morocco Iraq, Kuwait and Tunisia. The first Lebanese, Sudanese and Turkish test-tube babies were born in 1989. Nowadays, Turkey counts the highest number of fertility clinics, whereas Lebanon shows one of the highest *pro capita* concentrations of fertility clinics. The ART sector is also flourishing in South Asia⁸⁹. In Iran, ART has been used since 1984 and fertility treatments involving third parties were eventually approved by part of the Muslim clergy⁹⁰; MAP techniques involving donors and gestational surrogacy were soon offered also by Lebanon⁹¹. Consequently, the awareness that ARTs are a *sharī'ah* compliant remedy to involuntary childlessness spread among Muslims⁹².

⁸⁹ For a comparative viewpoint, see *inter alia* Serour, Aboul-Ghar, and Mansour, *Infertility: A health problem in the Muslim world*, cit.; Clarke, *Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon*, cit., at pp. 37-38; Inhorn, and Gürtin, *Infertility and Assisted Reproduction in the Muslim Middle East: Social, Religious, and Resource Considerations*, cit.; Inhorn, and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., at p. 13. Regarding Saudi Arabia, see H.S. Abduljabbar, and R. Amin, *Assisted reproductive technology in Saudi Arabia*, in «Saudi Medical Journal», 30, 4, 2009, pp. 461-464. With respect to Turkey, see I. Turkmendag, *Home and Away: The Turkish Ban on Donor Conception*, in «Law, Innovation and Technology», 4, 2, 2012, pp. 144-164.

90 As far as Shī'i Iran is concerned, see for instance M.J. Abbasi-Shavazi et al., The «Iranian ART Revolution»: Infertility assisted reproductive technology, and third-party donation in the Islamic republic of Iran, in «Journal of Middle East Women's Studies», 4, 2, 2008, pp. 1-28; M. Abedini, A. Ghaheri, and R.O. Samani, Assisted Reproductive Technology in Iran: The First National Report on Centers, 2011, in «International Journal of Fertility & Sterility», 10, 3, October-December 2016, pp. 283-289; S. Bamdad, and A. Ahmad, Public perspective towards thirdparty reproduction in Iran, Paper EPC, Princeton University, 0601, 2014, pp. 1-5; E.S. Gooshki, and N. Allahbedashti, The process of justifying assisted reproductive technologies in Iran, in «Indian Journal of Medical Ethics», 12, 2, 2015, pp. 87-96; F. Parniyan, Iranian-Islamic culture and infertility treatments, in «Journal of Jahrom University of Medical Sciences», 11, 2014, p. 226; R.O. Samani et al., Access to Fertility Treatments for Homosexual and Unmarried Persons, through Iranian Law and Islamic Perspective, in «Royan Institute Iranian Journal of Fertility and Sterility», 1, 3, 2007, pp. 127-130; R. Tappan, More than Fatwas: Ethical Decision Making in Iranian Fertility Clinics, in Inhorn, and Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, cit., pp. 103-129; S. Tremayne, The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran, in Inhorn, and Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, cit., pp. 130-156.

⁹¹ On Lebanon, see Clarke, Closeness in the Age of Mechanical Reproduction: Debating Kinship and Biomedicine in Lebanon and the Middle East, cit.; Id., Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon, cit.; Inhorn, Patrizio, and Serour, Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon, cit.; Id., Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon, cit.; Concerning Syria, see O. Arbach, Ethical Considerations in Syria regarding Reproduction Techniques, in «Medicine and Law», 21, 2, 2002, pp. 395-402.

⁹² With regard to the perception of ART/MAP techniques by Muslim prospective parents undergoing fertility procedures in Italy, see *infra*, chapter IV, sections 5.1 and 6, and chapter V.

In fact, the empirical investigation confirmed both the Islamic pro-natalist attitude and the search for medical assistance with regard to fertility matters. The Islamic scholars and local religious figures voiced a sort of «call for action», whilst stressing the necessity to resort to physicians, as first choice. The head of a mosque in Torino clarified these points, while asserting:

Islām does not turn down medicine! You must look for [the reason of your infertility]. You must not stay there; hands clasped... waiting and doing nothing! You must know why you have no children. You can do that... You see, God gives male, to whom He wants; female, to whom He wants; and to whom He wants, nothing... However, we believe in that: if God hasn't given me a child, I'll try in spite of that! Then, I'll be happy anyway. If God doesn't give me any, all right: I'm happy as well. Thank you. Full stop.

(Temporary) infertility issues shall thus be primarily interpreted as a God's test. Muslim prospective parents are thought to pray⁹³, while actively investigating the reasons of their infertility/sterility in order to overcome this limit relying, first of all, upon medical science. The president of a national Islamic organisation similarly stated:

Islām persuades Muslims to marry and to have children. When the couple cannot conceive children, then *Islām* requires spouses to find solutions. *Islām* urges couples to «roll up their sleeves»! Therefore, there's medicine... There is this and that, there is a bit of everything, today. Then, if for natural causes this doesn't work, you can have what in *Islām* we call *kafālah*... [...] There are solutions [to childlessness] – we can say that⁹⁴.

In the opinion of this informant, although the nature of Islamic fostering is different from biological parenthood⁹⁵, this can be regarded as a secondbest option when medical fertility treatments are proven not to be successful in tackling the issues affecting Muslim couples' chances of conceiving. The key aspect is nonetheless the search for a *sharī'ah* compliant method for intervention. Similarly, local *a'immah* voiced a remarkably exhortative approach in urging Muslim spouses to cope with their procreative problems. By way of illustration, using an imperative tone, two local religious figures declared:

It's not like you sit back and wait for a child. No! You don't have any, all right: do something! Maybe God puts you to the test... to see if you are a good Muslim. So, I push them to do something,

⁹³ On worship and prayers in Islām in case of fertility/sterility, see supra, section 4.1.

⁹⁴ Literally the informant said: «Darsi da fare». On kafālah see supra, section 4.3.

⁹⁵ See *supra*, section 4.3.

and

When they come to me, I tell them: «Go to the doctor! Go to see what's going on, what to do...». Then, we'll pray.

Action is thus of pivotal importance. In this case, prayer is described as complementary to the necessary steps to be taken by pious Muslims wishing for offspring. As discussed above, acceptance of divine willingness – including potential infertility or sterility – is constantly stressed by religious figures⁹⁶; nonetheless, Muslims spouses are strongly invited to find a way to procreate.

It can thus be inferred that, within the main frame of reference of Islamic law, Muslim prospective parents are most warmly invited to benefit from «the contemporary context of space and time of XXI century» – echoing the words used by the head of a national Islamic organisation. Accordingly, God's plans are to be trustfully accepted and endorsed by pious Muslim spouses – and this clearly affects Muslim patients' conduct and expectations in MAP centres – but action must be taken to fulfil the human natural desire to bear children.

Based on fieldwork observation, if a hierarchal order were to be found amongst the solutions listed, this would be the following. First, faith in God (through prayer, acts of worship and acceptance of infertility/sterility) is a constant imperative for pious Muslim prospective parents, who are urged to faithfully embrace God's plans. Secondly, the issues affecting the married couples' chances of conceiving are to be investigated. Thirdly, the possibility of profiting from some Islamically compliant MAR treatments is to be explored by Muslim prospective parents. Traditional Islamic remedies to childlessness – such as divorce, polygyny, foster care, and child custody – are thus to be regarded as second best options. In some cases, however, these *sharī'ah* compliant remedies to childlessness are not alternative options concurrent to ARTs/MAPs, rather, they become tools to be skilfully combined with medically assisted conception or reproduction techniques in order to create *halāl* families.

Additionally, in real life situations, Muslim prospective parents might opt for borderline solutions, which might be regarded as being not Islamically compliant, or Islamically compliant by some Muslims only. Naturally, this internal plurality of religious approaches might confuse Muslim patients and their (non-Muslim) partners⁹⁷, and also bewilder local healthcare providers offering fertility treatments⁹⁸.

⁹⁶ See *supra*, section 4.1.

⁹⁷ On Muslim patients in endogamous and exogamous unions, see *infra*, chapter V, sections 3 and 6.

⁹⁸ As corroborated by fieldwork observations examined in chapters IV and V.

6. Modern shari'ah compliant formulae to bear children

In the search for *sharī'ah* compliant remedies to involuntary childlessness, medically assisted procreation gradually attracted more attention by Islamic scholars and infertile/sterile Muslim couples⁹⁹. When adopting the point of view of Islamic and Muslim sources, however, the spectrum of possible Islamically compliant interpretations significantly varies with respect to MAPs and ARTs¹⁰⁰.

At one end of the spectrum, we find Muslims according to whom assisted reproductive technologies are permitted, provided certain conditions are satisfied. First of all, $zin\bar{a}'$ (unlawful sexual intercourse, e.g. fornication and adultery) is to be avoided¹⁰¹. This means that the man and the woman are to be religiously (and, in some cases, also legally) married; in other words, the prospective parents undergoing fertility treatments are to be part of a valid *shari*^{*}ah compliant nuptial contract¹⁰². Therefore, no third party intrudes in the *halāl* matrimonial relationship of husband and wife; donor's female/male gametes and embryos as well as surrogacy are thus prohibited¹⁰³.

Further requirements specifically regard medical procedures and fertility treatments. A Muslim medical doctor – preferably a qualified female Muslim physician – should deal with the process. Woman's intimate parts are not to be (overly) touched and (too) exposed, and both husband and wife participate in the collection of male sperm¹⁰⁴. Additionally, some require that there

¹⁰¹ See inter alia Qur'ān (XVII: 32; XXIV: 2, 4-5). See also infra, section 6.2.

¹⁰² Accordingly, cohabitees and same-sex couples cannot validly procreate legitimate offspring. See also *infra*, sections 6.2 and 7.1.

¹⁰³ See *infra*, section 6.1. Actually, this creates lineage confusion similar to adoption, see *supra*, section 4.3 and *infra*, chapter IV, section 5.2. Cfr. chapter V, section 6.

¹⁰⁴ To some scholars, male masturbation carried out alone is forbidden. On sexuality in *Islām*, see the essays collection edited by Hunt, more specifically chapters 11-20, S. Hunt (Ed.), *Judaism and Islam*, Abingdon, Routledge, 2016. See also *infra*, sections under 7 and chapter IV, sections 4.2.1 and 4.2.2.

⁹⁹ See *supra*, section 3.

¹⁰⁰ For a discussion, see *inter alia* Al-Bar, and Chamsi-Pasha, *Contemporary Bioethics Islamic Perspective*, cit.; Atighetchi, *Islamic Bioethics: Problems and Perspectives*, cit.; M.Z. Ahmad *et al.*, *Is Assisted Reproductive Technique Shari'aa-compliant? A Case Study at a Fertility Centre in Malaysia*, in «The International Medical Journal Malaysia», 13, 2, 2014, pp. 21-27; N.H. Ahmad, *Assisted Reproduction. Islamic Views on the Science of Procreation*, in «Eubios Journal of Asian and International Bioethics», 13, 2003, pp. 59-60; M. Borrmans, *Fécondation artificielle et éthique musulmane*, in «Lateranum», LIII, 1, 1987, pp. 88-103; Inhorn and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit.; F. Griffel, *Introduction*, in Inhorn, and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., pp. 24-26; A.R. Omran, *Family planning in the legacy of Islam*, London, New York, Routledge, 1992; A. Shabana, *Foundations of the Consensus against Surrogacy Arrangements in Islamic Law*, in «Islamic Law & Society», 22, 1/2, 2015, pp. 82-113; R. Valli, *Islam's solution to abortion, contraception, organ transplants, test tube babies, gestation, surrogacy, prosthetic surgery*, Oshodi, Lagos, Al-Waseelat Publishers, 1993; A.S. Weber, *Bioethical Reasoning in Islam*, in «International Journal of Arts and Sciences», 3, 15, 2010, pp. 607-617.

is no interference in the creation of the embryo; in other words, the sperm is artificially injected into the wife's uterus by the husband¹⁰⁵.

Over time, the stricter views reported above were noticeably softened. As a result, both internal and external artificial insemination were gradually accepted, and male masturbation was also permitted for the collection of semen for in vitro fertilisation. In addition, Islamic scholars accepted that the qualified physician performing ART/MAP treatments could be a non-Muslim man, if no female Muslim doctors, no female non-Muslim doctors, and no Muslim male doctors were available locally¹⁰⁶.

Although Islamic scholars gradually endorsed a more relaxed approach, some local clerics and Muslim patients still voice these needs in Torino, as empirical evidence disclosed. In view of the interviews released by health-care practitioners, meeting (some of) these requirements might become rather problematic in local fertility clinics¹⁰⁷. On Italian soil, indeed, healthcare practitioners do not require evidence of marriage from their patients¹⁰⁸, and female Muslim nurses and physicians may not be available¹⁰⁹. Additionally, hospital facilities may not contemplate the possibility either for the couple to spend time together privately prior to the production of male gametes, or the fact that the husband is actively involved in the IVF procedure¹¹⁰.

6.1. ARTs and MAPs according to Sunnī Muslims

Until the late 1990s, the Muslim world broadly agreed in permitting ART (but not MAP)¹¹¹ provided the prospective father and mother were part of a valid *sharī'ah* compliant marriage contract and no donor or surrogate were to be involved in this reproductive process. Different viewpoints nonetheless emerged with respect to the idea of «pure» male lineage (*nasab*) and legitimate childhood/parenthood¹¹², as discussed below.

¹⁰⁵ See for instance Atighetchi, Islamic Bioethics: Problems and Perspectives, cit., at p. 149 and Houot, Islamic jurisprudence (Figh) and assisted reproduction: Establishing limits to avoid social disorders, cit., at p. 57. Despite being lawful, homologous in vitro fecundation might imply – to some Shī'ī Muslim clerics – that the conceived child has a father, who is the owner of the sperm, but has no mother (since the fertilisation did not happen in the woman's womb). See Atighetchi, Islamic Bioethics: Problems and Perspectives, cit., at p. 148.

¹⁰⁶ See *infra*, section 7.2.

¹⁰⁷ As discussed in detail *infra*, in chapter IV, sections under 3 and 4.

¹⁰⁸ In Italy, MAP treatments can be offered to stable married or cohabiting heterosexual couples. See *supra*, chapter II, sections 1 and 2.

¹⁰⁹ See *supra*, chapter IV, section 3.1.

¹¹⁰ See *supra*, chapter IV, sections under 4.2.

¹¹¹ The terminology adopted is clarified in chapter I, section 2.

¹¹² See for instance the points raised by Inhorn and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., at pp. 5 and 9.

The most problematic aspect concerns heterologous treatments, namely MAP techniques involving a third party in form of male/female gametes, uterus and/or embryos¹¹³. Third party donation is nowadays permitted only by some $Sh\bar{i}'\bar{i}$ clerics¹¹⁴. In real terms, *Sunnī* Muslims had originally acknowl-edged surrogacy as an Islamically compliant practice. Actually, the VII session of the Islamic Fiqh Council – while identifying seven methods of artificial insemination (two internal and five external) – admitted the possibility of surrogate motherhood in compliance with *sharī'ah*. The recourse to this MAP method was allowed within the framework of *balāl* matrimonial relationships, more specifically polygynous nuptial unions. In other words, it was conceded that embryos can be inserted in the uterus of another co-wife of the same husband. A traditional *sharī'ah* compliant remedy to childlessness such as polygyny was thus employed by Islamic scholars to tackle Muslim couples' procreative problems¹¹⁵.

The ways in which surrogacy can be permitted in *Islām* was clarified by Resolution No. 5 of the Islamic Fiqh Council, as it follows:

The external insemination takes place in the test-container between sperm and ovum of the couple then, the zygote is planted in the uterus of a woman who volunteers to bear it. [...] the woman who volunteers to be pregnant, is the second wife of the husband who owns the sperm and her co-wife volunteers to bear the zygote on her behalf. This method is not prevalent in the foreign countries whose laws do not allow polygamy, but in those countries where polygamy is allowed. [...] The seventh method (in which the sperm and ovum are taken from the couple, and after their insemination in the test-container, the zygote is planted in uterus of the other wife of same husband whereas she volunteers out of her own choice for this pregnancy on behalf of her cowife, whose uterus is surgically removed) seemed to be permissible to the Council, if it is really needed and the above – mentioned general conditions are met¹¹⁶.

It should be stressed that, when adopting the Islamic perspective, this heterologous MAP technique is considered a *de facto* homologous insemination since the parties are all legally married. In other words, two women must be married to the same polygynous husband for surrogacy to be *sharī'ah* compliant. Husband and wife providing the gametes are considered the child's biological parents, whereas the carrier is to be regarded as

¹¹⁶ Islamic Fiqh Council, Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from 1st to 18th Sessions, during 1398-1427H (1977-2006), cit., at pp. 192 and 194.

¹¹³ Similarly to the original prohibitions and restrictions to MAP procedures encompassed by Italian law on assisted reproduction. See *supra*, chapter I, section 1 and chapter II, section 4, also for a comparison of the moral justification employed by the Italian legislator echoing those used in *Sunnī* Muslim Egypt. For further discussion, see also *infra*, chapter VI, section 2.

¹¹⁴ As discussed *infra*, section 6.2.

¹¹⁵ On the skilful usage of traditional *shari* ah compliant remedies to involuntary childlessness, see *supra*, sections under 4.

the offspring's milk mother¹¹⁷. Actually, «this child has benefitted from her body and organism [that of the woman bearing the child on behalf of another woman] more than what a child of *Ridhaa* benefits from his mother of *Ridhaa*»¹¹⁸.

The possibility of surrogate motherhood within a polygynous *halāl* marriage described here was nevertheless revoked the following year by *Sunnā* Muslim scholars¹¹⁹. It appeared that issues and concerns were raised by some members of the Islamic Fiqh Council¹²⁰. Accordingly, in 1985, the VIII session of the Islamic Fiqh Council re-examined its previous resolution¹²¹. The observations made by some members regarded two possible scenarios linked to the former hypothesis of the second wife acting as a surrogate mother, and eventually stated that the embryo transfer between two cowives of the same husband is to be refused as this might lead to confusion and mixing of the lineage (*nasab*)¹²².

¹¹⁷ Breastfeeding and milk motherhood were addressed *supra*, in section 4.3 and *infra*, in section 6.2.

¹¹⁸ Islamic Fiqh Council, Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from 1st to 18th Sessions, during 1398-1427H (1977-2006), cit., at p. 195. For further analysis, see inter alia Sachedina, Islamic Biomedical Ethics: Principles and Application, cit., at p. 117; Al-Bar and Chamsi-Pasha, Contemporary Bioethics Islamic Perspective, cit., p. 177. The same resolution was then endorsed by both the III session of the Fiqh (Muslim Law) Academy of Jeddah in 1986 (Resolution No. 5: 4-3), and the First International Conference on Bioethics in Human Reproduction Research in the Muslim World (Cairo) in 1991. Surrogate mothering was also condemned by a number of fatāwā. See also Atighetchi, Islamic Bioethics: Problems and Perspectives, cit., pp. 145-146, Serour, Aboul-Ghar, and Mansour, Infertility: A health problem in the Muslim world, cit.; Serour, Omran, and Barzelatto (Eds.), International Conference on «Bioethics in Human Reproduction Research in the Muslim World» (1st 1991 Cairo Egypt) Markaz al-Dawlī al-Islāmī lil-Dirāsāt wa-al-Buļūth al-Sukkānīyah. Ethical guidelines for human reproduction research in the Muslim world: based on highlights, papers, discussions, and recommendations of the the [sic] First International Conference on Bioethics in Human Reproduction Research in the Muslim World, Cairo, 10th-13th December 1991, cit.

¹¹⁹ Restated in 1990 by the XII session of the Islamic Fiqh Council, *Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from* 1st to 18th Sessions, during 1398-1427H (1977-2006), cit., at pp. 343-344.

¹²⁰ *Ibidem*, at p. 203.

¹²¹ The VII session took place on 11-16 Rabi Al-Aakhir 1404H, whereas the VIII session was held from 28 Rabi Al-Aakhir 1405H to 7 Jumad Al-Oula 1405H.

¹²² Islamic Fiqh Council, *Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from* 1st to 18th Sessions, during 1398-1427H (1977-2006), cit., at pp. 203-204. As clarified by Atighetchi, the hypotheses concerned two hypothetical situations. The first regarded the case of a child conceived by the polygynous husband and his second wife (the one who was impregnated with the embryo of the first wife and her husband), while also carrying the implanted foetus. The second case concerned the abortion of one of two foetuses. To the Islamic scholars, this practice is to be condemned since it is impossible to determine which is the natural and which is the implanted foetus/child. It is not clear why DNA testing was not considered as an option to determine the biological mother of the child/ren eventually born. See Atighetchi, *Islamic Bioethics: Problems and Perspectives*, cit., at p. 144; Id., *Islam e bioetica*, cit.; Id., *L'inizio della vita nel diritto islamico*, in A. Rabello, D. Milani, and D. Atighetchi, The above-mentioned Resolution No. 2, as issued by the Islamic Fiqh Council in 1985, was indirectly endorsed also by the III session of the Council of the Islamic Fiqh Academy in 1986¹²³, when it stated as follows:

[...] It became evident to the Council that there are seven (7) known methods, used nowadays for artificial insemination:

(A) The first five methods are all forbidden and absolutely prohibited for its own sake or due to ensuing consequences manifested in confusion about parenthood and loss of motherhood and other *Shari'a* prohibited matters. These methods are:

(1) The fertilization taking place in vitro between the semen taken from the husband and the ovum taken from a woman who is not his wife, and the fertilized ovum is then planted in the womb of his wife.

(2) The fertilization taking place in vitro between the semen taken from a man who is not the husband and the ovum taken from the wife of another man, and the fertilized ovum is then planted in the womb of his woman.

(3) The fertilization taking place in vitro between the semen and the ovum taken from spouses, and the fertilized ovum is then planted in the womb of a volunteer woman.

(4) The fertilization taking place in vitro between male semen and female ovum taken from two strangers and the fertilized ovum is then planted in the womb of another man's wife.

(5) The fertilization taking place in vitro between the semen and the ovum taken from spouses, and the fertilized ovum is then planted in the womb of the husband's other spouse.

(B) However, in the Council's opinion, there is no objection if one resorts to the sixth or sevenths method, in case of necessity, provided all required precautions are taken. These two methods are:

(6) Fertilization in vitro of a woman's ovum by her husband's semen and implantation of the fertilized ovum in the womb of this same woman.

(7) External insemination, by taking the semen of a husband and injecting it in the appropriate place in the womb or uterus of his wife, for in - vivo fertilization. [...]¹²⁴.

Since then, *Sunnī* Muslim religious authorities have not allowed recourse to third party reproductive assistance in form of gestational surrogates, donors of female/male gametes and embryos. On the contrary, so-called testtube babies are regarded as a lawful practice in *Islām* provided the fertility

Intorno alla vita che nasce: diritto ebraico, canonico e islamico a confronto, Torino, Giappichelli, 2013, pp. 195-303, at pp. 252-253.

¹²³ See Resolution No. 16 (4-3), 8-13 Safar 1407H. Fiqh Academy, *Resolution and Recommendations of the Council of the Islamic Fiqh Academy (1985-2000)*, Jeddah, Islamic Research and Training Institute, Islamic Development Bank, 2001.

¹²⁴ *Ibidem*, at pp. 28-29. Translation into Italian language is provided by Atighetchi, *L'inizio della vita nel diritto islamico*, cit., at p. 250.

treatment «involves a married couple while the marriage is valid and sufficient and meticulous care is taken to avoid lineage confusion»¹²⁵.

As identified by Atighetchi, the reasons justifying the refusal of surrogate motherhood amongst $Sunn\bar{\iota}$ Muslims can also be found in the prohibition to see and touch intimate female bodily parts as well as the possible «mercification» of these (i.e. the uterus)¹²⁶. In real terms, the reasons put forward by Islamic scholars predominantly revolve around concerns over adultery or fornication (*zinā*'), purity of lineage (*nasab*), genealogical confusion, possibility of incest between anonymous donors' half-sibling offspring, and child's right to know their parentage¹²⁷.

As discussed above, some of these arguments echo the reasoning voiced against adoption¹²⁸. In fact, in the opinion of Islam, the spectrum of Islamic bioethics is wider than that of Western bioethics, «because Islamic bioethics is concerned not only with the identity of the child, but also with the chastity of the woman concerned»¹²⁹. This approach might also explain why some MAP-related matters – such as abortion, eugenics and cryopreservation of embryos – were raised and addressed by the research informants, when discussing medically assisted procreation¹³⁰.

¹²⁵ See, for instance, the recommendations of Abd Al-Aziz Kamel (1984), more specifically, Recommendation No. 5 that deals with «Test Tube Babies (and the Surrogate Motherhood)». The seminar concluded that such a practice is lawful if it only involves a married couple while the marriage is valid, and sufficient and meticulous care is taken to avoid lineage confusion; although even here there is some reservation under the pretext of pre-emptive (anticipatory) prohibition. It was also agreed that the practice is unlawful if it involves an alien party, whether in the form of semen, an ovum, an embryo, or a womb; in A.R. al-Gindi (Ed.), *Islam and Current Medical Concerns*, vol. I, *The Full Minutes of the Seminar on Human Reproduction in Islam, Held on May 24, 1983 A.D. (Sha'aban 11, 1403 H)*, Supervised and with an Introduction by Dr. Abd EI-Rahman Abdulla Al-Awadhi, Minister of Public Health and of Planning Chairman of the Islamic Organization for Medical Sciences, Translated by M. Muneer S. Asbahi, Kuwait, Islamic Organisation for Medical Science, 1984.

¹²⁶ Atighetchi, L'inizio della vita nel diritto islamico, cit., at pp. 253-254.

¹²⁷ As pinpointed by Inhorn, (Islamic) ART Journeys and moral pioneers. New reproductive technologies in Islamic local moral worlds, cit., p. 23. See also Inhorn, Local Babies, Global Science: Gender, Religion and In Vitro Fertilization in Egypt, cit.; Id., Fatwas and ARTs: IVF and Gamete Donation in Sunni v. Shi'a Islam, cit.; S. Tremayne, Law, Ethics, and Donor Technologies in Shia Iran, in D. Birenbaum-Carmeli, and M.C. Inhorn (Eds.), Assisting Reproduction, Testing Genes: Global Encounters with the New Biotechnologies, NY, Oxford, Berghahn, 2009, pp. 144-163; Id., The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran, cit., pp. 130-156; Clarke, Closeness in the Age of Mechanical Reproduction: Debating Kinship and Biomedicine in Lebanon and the Middle East, cit.; Id., Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon, cit.; Z.B. Ahmed, The concept «in-vitro fertilization and egg donation»: An Islamic point of view, in «Journal of Education, Arts and Humanities», 2, 4, 2014, pp. 54-58.

¹²⁸ See *supra*, section 4.3 and *infra*, chapter IV, section 5.2.

¹²⁹ Islam, Ethics of Assisted Reproductive Medicine. A Comparative Study of Western Secular and Islamic Bioethics, cit., at pp. 115-116.

¹³⁰ On these matters see *infra*, sections 7.3.2-7.3.4; chapter IV, section 3.3 and chapter V, sections 5 and 8.

6.2. ARTs and MAPs according to Shī'ī Muslims

With respect to the $Sh\bar{i}'\bar{i}$ Muslim word, various MAP methods – including the contribution of donors in terms of eggs, sperm, embryos and uteruses – have been legitimised, at least to some extent.

As emphasised by Tremayne, this happens mostly by virtue of the key role played by official clerics of the Iranian $Sh\bar{i}'\bar{i}$ theocracy, who «find solutions to legitimize third-party donation without breaking any of the Islamic rules concerning adultery and incest»¹³¹. Unlike *Sunnī* interpretative collective efforts¹³², amongst Islamic *Shī'ī* denominations, individual *iğtihād*¹³³ is indeed widely practised and, as a result, a plurality of equally authoritative religious rulings (*fatāwā*) exist¹³⁴.

The distinction between the interpretative approaches of the two main Islamic denominations is however not so strict. On the one hand, in *Sunnī Islām* there is no supreme juridical authority and therefore no hierarchy; whereas $Sh\bar{i}'\bar{i}$ Muslims recognise a more formal structure of religious authority¹³⁵. On the other hand, in both interpretations, a released *fatwā* is always regarded as being context- and situation-specific. As a result, the flexibility of *sharī'ah* can be used to accommodate Muslim prospective partners' daily needs also with respect to assisted conception and/or procreation¹³⁶.

¹³¹ Tremayne, *The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran*, cit., at p. 131. See also Tremayne, *Law, Ethics, and Donor Technologies in Shia Iran*, cit.

¹³² Some examples were reported *supra*, in the previous section 6.1.

¹³³ Literally, this word means «effort» and it is usually translated as «independent legal reasoning». See for instance B.G. Weiss, *Interpretation in Islamic law: The theory of ijtihad*, in «American Journal of Comparative Law», 26, 2, 1978, pp. 199-212.

¹³⁴ As explained by Gleave, the dominant school of *Shī'ī* jurisprudence maintained that this legal system has continued to develop because of the use of *ijtihād*, although the support for independent legal reasoning was not unanimous. See R. Gleave, *Akhbari Shī'i usul al-fiqh and the juristic theory of Yusuf al-Bahrani*, in R. Gleave, and E. Kermeli (Eds.), *Islamic law. Theory and practice*, London, I.B. Tauris, 1997, pp. 24-45.

¹³⁵ For instance, according to Twelver $Sh\bar{i}'\bar{i}$ Muslims, once scholarly peers have recognised the ability of a religious figure, then he is qualified to exercise his own independent reasoning ($i\bar{g}tih\bar{a}d$) in matters of religious law. If the scholar is acclaimed as a «source of imitation», he is also entitled to provide moral guidance for unqualified persons. In addition to these Islamic scholars, the political system of a Muslim majority country can appoint a religious specialist (*faqib*), as it happened in Iran. For further discussion on these matters, see Clarke, *Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon*, cit., at p. 28. On the pluralisation of authoritative voices in the Muslim world, see also P. Mandaville, *Globalization and the Politics of Religious Knowledge. Pluralizing Authority in the Muslim World*, in «Theory, Culture & Society», 24, 2, 2007, pp. 101-115.

¹³⁶ And this becomes more relevant in Muslim majority countries where *shari'ah* is asked to fill the legal vacuum on these matters. Inhorn, *Fatwas and ARTs: IVF and Gamete Donation in Sunni v. Shi'a Islam*, cit.; Id., *Making Muslim babies: IVF and gamete donation in sunni versus shi'a islam*, cit.; Id., *Reproduction: New Technologies*, cit.; Id., (*Islamic) ART Journeys and moral pioneers. New reproductive technologies in Islamic local moral worlds*, cit.; Gürtin, Inhorn, and Tremayn, *Islam and Assisted Reproduction in the Middle East: Comparing the Sunni Arab World, Shia Iran and Secular Turkey*, cit. See also *infra*, chapter VI, section 4. The distinction between the permitted *sharī*'ah compliant ART or MAP solutions to childlessness among *Sunnī* and *Shī'ī* Muslims is thus to be found in the different approaches of *Sunnī* and *Shī'ī* Muslims with respect to some topics, specifically *zinā*' and *nasab*¹³⁷.

As far as the second issue is concerned, the Arabic word *nasab* is conventionally used to address the paternal bloodline. This identifies the lineage and it can be easily determined by looking at the (list of) patronymics of a Muslim person. As clarified by Garmaroudi Naef, the *Sunnī* notion of *nasab* take a male agnatic form, whilst Shī'ī Muslims recognise a sort of bilateral filiation from both maternal and paternal sides. This implies that a (more) symmetrical role is recognised to both biological parents in the creation of the child's *nasab*; therefore, heterologous MAR treatments may be permitted¹³⁸.

Atighetchi further explains that, in $Sh\bar{i}'\bar{i}$ Islām, heterologous artificial fertilisation and insemination are both regarded as unlawful acts. Nonetheless, the child conceived remains legally related to the owner of the sperm, therefore all the rules concerning ascendance and inheritance are to be applied¹³⁹. On the other hand, *Sunnī Islām* regards as illegitimate any fertility treatment involving a donor. A child conceived through a natural or artificial «heterologous procreative sexual intercourse», both *in vivo* and *in vitro*, therefore cannot belong to any (biological or social) father's *nasab*. The patrilineality is thus interrupted¹⁴⁰.

The second reason supporting the $Sh\bar{i}'\bar{i}$ Muslims' (limited) approval of MAPs is to be found in the interpretation of $zin\bar{a}'$. As briefly mentioned above, this Arabic word indicates unlawful sexual intercourse and encom-

¹³⁷ For a comparison between Sunnī and Shī'ī viewpoints, see inter alia A. Büchler, and E.S. Kayasseh, Medically Assisted Reproduction in Egypt, Iran, Saudi Arabia and the United Arab Emirates. Sunni and Shia Legal Debates, in «European Journal of Law Reform», 16, 2, 2014, pp. 430-464; Griffel, Introduction, cit.; Gürtin, Inhorn, and Tremayne, Islam and Assisted Reproduction in the Middle East: Comparing the Sunni Arab World, Shia Iran and Secular Turkey, cit.; C. Harrison, Who is your Mother? Who is your Father? Assisted Reproductive Technologies in the Light of Sunni and Shi'a Law, in «Journal of Shi'a Islamic Studies», 7, 1, 2014, pp. 23-37; Inhorn, Fatwas and ARTs: IVF and Gamete Donation in Sunni v. Shi'a Islam, cit.; Id., Making Muslim babies: IVF and gamete donation in sunni versus shi'a islam, cit.; Inhorn, and Gürtin, Infertility and Assisted Reproduction in the Muslim Middle East: Social, Religious, and Resource Considerations, cit.; Inhorn, and Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, cit.

¹³⁸ See S. Garmaroudi Naef, *Gestational Surrogacy in Iran: Uterine Kinship in Shia Thought and Practice*, in Inhorn and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., at p. 158 and pp. 166-170, respectively.

¹³⁹ This happens provided «the man does not play a direct part in the sexual-procreation act», as clarified by the author quoted. On the contrary, if a child is conceived through direct adulterous sexual intercourse, then s/he has a juridical relationship (and related inheritance rights) with his/her own mother only. Atighetchi, *Islamic Bioethics: Problems and Perspectives*, cit., at pp. 148-149.

¹⁴⁰ For a comparison with the status of offspring conceived through MAP techniques on Italian soil, see *supra*, chapter II, section 1 and *infra*, chapter VI, section 2.

passes both unmarried partners' fornication and married partners' adulterv¹⁴¹. Illicit sexual intercourse between a man and a woman who are not (Islamically) married to each other is a crime explicitly sanctioned by the Our'an¹⁴². According to the Sunni Muslims' point of view, male/female gamete donation and surrogacy implies zinā'; consequently, any MAP methods for procreation involving a third party entails illicit sexual intercourse and leads to illegitimate children¹⁴³. Nonetheless, a child born out of a legal wedlock is regarded as legitimate in two cases: defective marriage and intercourse in doubt¹⁴⁴. Accordingly, in the case of incorrect nuptial procedure, or heterosexual sexual intercourse in what the parties assumed was a legitimising religious framework, then this is not considered $zin\bar{a}'$ and the child will be treated as «licitly conceived». The extent to which these Islamic law rules are actually used by Sunni Muslims to undergo heterologous MAR practices remains however unknown. Field-collected data nevertheless indicate that some Sunni Muslim intended parents opt for fertility treatments involving third parties¹⁴⁵.

Adopting the $Sh\bar{i}'\bar{i}$ perspective, on the other hand, $zin\bar{a}'$ does not depend upon the contact and transfer of bodily substances, but rather on social and physical contacts between unmarried sexual partners. Accordingly, donor's sperm insemination implying no penetration cannot be classified as unlawful sexual intercourse, as pinpointed by Mahmoud¹⁴⁶. Similarly, embryo donation and surrogacy between male/female siblings is allowed and does not constitute incest¹⁴⁷. As a result, «brothers and sisters can make embryos together, some to help their siblings, but many for the purpose of making money»; men indeed tend to donate their sperm either to their infertile brothers or to their sisters, when married to infertile husbands¹⁴⁸.

¹⁴¹ See also E. Semerdjian, Zinah, in J.L. Esposito (Ed.), The Oxford Encyclopedia of the Islamic World, Oxford, OUP, 2009.

¹⁴² See *supra*, section 6.

¹⁴³ See *supra*, section 6.1.

¹⁴⁴ See T. Eich, *Constructing kinship in Sunni Islamic legal texts*, in Inhorn and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., pp. 27-52, at pp. 29-30.

¹⁴⁵ As unveiled by the data examined *infra*, in chapter V, section 6.

¹⁴⁶ F. Mahmoud, *Controversies in Islamic evaluation of assisted reproductive technologies*, cit., at pp. 80-81.

¹⁴⁷ As discussed *infra*, in chapter IV, sections under 4.2, this might actually happen even in local fertility clinics, although being against Italian law (see chapter II, section 1). From a medical viewpoint, this practice implies serious risk congenital malformations and recessive disorders, potentially leading to higher miscarriage and abortion rates.

¹⁴⁸ Tremayne, *The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran*, cit., at p. 139. See also Tremayne, who points out that in some Iranian IVF clinics Muslim men may actually use their brothers' sperm to impregnate their own wives without them knowing; see S. Tremayne, *Whitherkinship? Assisted reproductive technologies and relatedness in Islamic Republic of Iran*, in Hampshire, and Simpson (Eds.), *Assisted* Third party donation of female/male gametes may nonetheless be opposed on the ground that the egg or sperm of «another» person «enters a place to which it does not belong to»¹⁴⁹. Within the framework of polygynous nuptial unions, however, surrogacy and eggs/embryo donation is approved by $Sh\bar{i}'\bar{i}$ scholars¹⁵⁰. A traditional Islamic remedy to childlessness such as polygyny is therefore used to legitimise the recourse to MAP techniques¹⁵¹.

Additionally, when no forbidden act – such as gaze, touch, or illicit sexual intercourse – is taking place between the involved parties, donation of male gametes can also be legitimised. Accordingly, a woman's egg can be fertilised with the sperm of a «stranger» and then implanted into the married woman's uterus, as elucidated by Garmaroudi Naef¹⁵². There are two possible *sharī'ah* compliant accommodations of heterologous treatments through male donor amid *Shī'ī* Muslims. In the first scenario, the woman can divorce her husband and, once the Islamic waiting period expires¹⁵³, she can marry the sperm donor. When the woman delivers the baby conceived with her second husband, she can divorce him and remarry her first husband¹⁵⁴. Following a path encompassing multiple changes in the intended parents' nuclear family – namely, divorce-marriage-divorce-marriage – a *halāl* family can be created when relying upon donation of male gametes¹⁵⁵.

reproductive technologies in the third phase. Global encounters and emerging moral worlds, cit., pp. 69-82.

¹⁴⁹ For further details, see *inter alia* Garmaroudi Naef, *Gestational Surrogacy in Iran: Uterine Kinship in Shia Thought and Practice*, cit., at pp. 158, 175, and 169; and Sachedina, *Islamic Biomedical Ethics: Principles and Application*, cit., at p. 117. See also Abbasi-Shavazi *et al.*, *The «Iranian ART Revolution»: Infertility assisted reproductive technology, and third-party donation in the Islamic republic of Iran*, cit.; and Atighetchi, *Islamic Bioethics: Problems and Perspectives*, cit., at pp. 148-151.

¹⁵⁰ Mahmoud, *Controversies in Islamic evaluation of assisted reproductive technologies*, cit., at p. 79.

¹⁵¹ See *supra*, section 4.2

¹⁵² Garmaroudi Naef, Gestational Surrogacy in Iran: Uterine Kinship in Shia Thought and Practice, cit., at pp. 158, 164-165. To some, however, the implantation of sperm into the uterus of another men's wife is not allowed. In other words, gestational surrogacy is regarded as permissible, but the traditional one is forbidden. See *Ibidem*, at pp. 165-166. See also Inhorn, *Local Babies, Global Science: Gender, Religion and In Vitro Fertilization in Egypt*, cit.; Id., *Making Muslim babies: IVF and gamete donation in sunni versus shi'a islam*, cit.

¹⁵³ In Arabic language, this is called *al-'iddah*. The waiting period lasts three lunar months for a divorced woman or a widow; if the woman is pregnant the *'iddah* lasts until she delivers the baby. See also $Qur'\bar{a}n$ (II: 228, 234-235).

¹⁵⁴ For further details regarding this complex procedure, see Garmaroudi Naef, *Gestational Surrogacy in Iran: Uterine Kinship in Shia Thought and Practice*, cit. For in-depth discussion on these fertility treatments on Italian soil and in Torino, see *supra*, chapter II, sections 5 and 6.

¹⁵⁵ On changes in prospective parents' nuclear family in compliance with *sharī'ab*, see *supra*, section 4.2.

The second accommodation is to be found in some specific MAP techniques. In fact, the problematic passage of donor's semen or sperm via the vagina of a woman married to another man may be circumvented by gamete intra-fallopian transfer (GIFT) and zygote intra-fallopian transfer (ZIFT). These techniques avoid any passage through the vagina, therefore illicit touch between the donor's male gamete and the woman's intimate parts is avoided; nonetheless, the fertility treatment becomes more complicated, invasive and expensive¹⁵⁶. The science of assisted reproductive techniques can thus accommodate some very specific Muslim needs and find *sharī'ah* compliant solution to Muslim couples' procreative problems.

With respect to surrogacy, the implantation of embryos into the uterus of another man's wife (or another woman – to some clerics) is religiously permissible¹⁵⁷. However, Mahmoud clarifies that, in case the donor is a co-wife, then «the child's lineage is maintained and confusion in lineage and mixing of genealogy is minimal, being restricted only to the contribution by the co-wife, who, after all, is "family"»¹⁵⁸.

Additionally, fertilised egg(s) of a married couple can be implanted into another's woman uterus. Two interpretations can be identified. Some scholars require the man to enter into a valid temporary $Sh\bar{i}'\bar{i}$ Islamic marriage – called *nikāḥ al-mut'ah* – with the prospective surrogate mother: a sort of «temporary polygynous matrimonial union» shall exist for the *ḥalāl* surrogacy to happen. Other Islamic scholars do not deem the temporary marriage to be necessary since the procedure does not imply any sexual intercourse between the married man and the prospective surrogate mother. Indeed, the gestational surrogate can be either a married or an unmarried woman, either a marriageable or unmarriageable (*mahram*) woman, and she can also be one of the prospective parents' sister¹⁵⁹.

In these cases, the born offspring's maternal relatedness is nonetheless disputed. To some scholars, the owner of the fertilised ovum is the new-

¹⁵⁶ For further details see Mahmoud, *Controversies in Islamic evaluation of assisted reproductive technologies*, cit. See also Id., *Practitioner perspective: Practising ARTs in Islamic context*, in Hampshire, and Simpson (Eds.), *Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds*, cit., pp. 83-91. The fertility treatment types offered by assessed medically assisted procreation centres in Italy and Torino are listed *supra*, in chapter II, sections 5 and 6. Quantitative data on homologous and heterologous procedures are provided *infra*, in chapter V, sections 5 and 6.

¹⁵⁷ In other words, gestational surrogacy is regarded as permissible, but the traditional one (involving the insertion of sperm from a man other than the woman's husband into her uterus) is forbidden. See Garmaroudi Naef, *Gestational Surrogacy in Iran: Uterine Kinship in Shia Thought and Practice*, cit., at pp. 165-166.

¹⁵⁸ Mahmoud, *Controversies in Islamic evaluation of assisted reproductive technologies*, cit., at p. 79.

¹⁵⁹ See Garmaroudi Naef, *Gestational Surrogacy in Iran: Uterine Kinship in Shia Thought and Practice*, cit., at pp. 166-175 and Sachedina, *Islamic Biomedical Ethics: Principles and Application*, cit., at pp. 117-118.

born child's mother; to others, the woman carrying the pregnancy and giving birth to the child is to be considered as his/her mother, based on Qur'an (LVIII: 2) which states «[...] Their mothers are none but those who gave birth to them [...]»¹⁶⁰. To some interpretations, the gestational surrogate mother is to be regarded as the child's milk mother¹⁶¹.

It should be emphasised that the arguments briefly discussed above summarise the reasoning put forward by clerics and Islamic scholars, Muslim infertile partners may nonetheless adopt different viewpoints. For instance, research indicates that both *Sunnī* and *Shī'ī* Muslim prospective parents resisted donation of male gametes in Lebanon; similarly, another study shows that 60% of Iranian infertile couples vetoed temporary marriages as *sharī'ah* compliant formulae permitting heterologous MAP treatments¹⁶².

Conversely, the creative ways to legitimise MAP treatments through a combination of traditional *sharī'ah* compliant remedies to childlessness and medical techniques analysed here might be relied upon by more individualised (*Sunnī*) Muslim intended partners settled in European countries. As disclosed by examined quantitative data, Muslim patients are in fact currently undergoing heterologous fertility procedures in Torino¹⁶³.

7. (Potentially) problematic aspects of shari'ah compliant ARTs/MAPs

As analysed in the previous sections, some matters deserve specific attention in the practical implementation of Islamic provisions on ARTs/ MAPs.

During interviews, the local religious figures did not discuss scholarly positions on permitted and unlawful assisted reproductive techniques at length; rather they preferred to focus on pragmatic issues. As disclosed by ethnographic investigations, Muslim prospective parents looking for guidance on bioethics, may indeed refer to local *a'immah*, or simply surf the web, where some Islamic provisions on ART can be found. In real terms, guidelines on *sharī'ah* compliant procreation methods are predominantly provided by recommendations and resolutions released by pan-Muslim organisations, or legal reasoning and opinions issued by (Muslim majority

¹⁶⁰ Maternity could then be established through judicial Islamic reasoning instead of biological definitions.

¹⁶¹ On milk mothers see *supra*, sections 4.3 and 6.1.

¹⁶² Inter alia, see respectively Mahmoud, Controversies in Islamic evaluation of assisted reproductive technologies, cit.; and Inhorn, Making Muslim babies: IVF and gamete donation in sunni versus shi'a islam, cit. For a comparison amongst different Muslim majority countries, see T.H. Hull, Reproductive health trends in Islamic countries, in W.J. Gavin, and M.S. Karim (Eds.), Islam, the state and population policy, London, Hurst & Co, 2005, pp. 56-80.

¹⁶³ See *infra*, section 7.1. and chapter V, section 6.

country based) Islamic scholars, when specifically requested to do so by pious Muslim prospective parents.

Building upon practical rather than theoretical considerations, the heads of Islamic bodies and local worship centres drew attention to some (potentially) problematic aspects of MAR techniques and fertility related matters. The prohibition of fertility treatments for unmarried couples and the ban on heterologous MAP procedures were amongst those most often referred to¹⁶⁴. Ad boc Muslim needs were also strongly emphasised; the ones reported predominantly concern the necessity of a (Muslim) female medical doctor in addition to distinct demands to be met during the month of *ramadhān*. Furthermore, field-collected data indicated that peculiar attention is to be paid to some MAP-related procedures; in particular, pre-implant diagnosis, eugenics, pre-natal diagnosis, therapeutic abortion and cryopreservation of gametes and embryos. The subsections below examine these (potentially) problematic aspects emerging at the crossroads between Western and Islamic bioethics.

7.1. Muslim married partners only

In compliance with Italian law, healthcare professionals offering fertility treatments require patients to declare that they are part of a stable heterosexual relationship; no marriage document or any other evidence is or can be requested to begin any MAP procedure in a local fertility clinic¹⁶⁵. Adopting the perspective of *Islām*, Muslim prospective partners willing to undergo a *sharī'ah* compliant fertility treatment must be regularly married; no exception can be made on this matter. The pivotal importance of this essential aspect was clarified by the declarations released by local religious figures. One local *imām* stated, for instance:

Ah, that [unmarried patients] ...forget it! No way! Marriage is the key... if one [a man] has a child from a woman before being married, that son... is another thing! That's no... that isn't legitimate [offspring]! *Islām* is clear on this. Look, marriage is very very very important to us – this isn't a game! People, today, take it as a game, you know... [...] but, if one's married, then no problem, one could easily do that [medical fertility treatments].

¹⁶⁴ Whereas the former restriction cannot be enacted on Italian soil (since physicians are not entitled to ascertain whether the cohabiting stable couple asking for MAP treatments are actually married), the former was in line with the original Italian prohibition of donor's MAR procedures. See *supra*, chapter I, section 1; chapter II, sections 1 and 4.

¹⁶⁵ See *supra*, chapter II, sections 1 and 2.

This interpretation implies that third parties cannot be involved in MAP procedures, either as donors or surrogates¹⁶⁶. On the contrary, serious implications arise with respect to the status of the new-born child, who is not regarded as legitimate offspring in compliance with *sharī'ah*, although this is in contrast with Italian laws¹⁶⁷.

The head of a local worship centre raised analogous issues with respect to the pivotal importance of marriage, whilst also pinpointing an additional condition: the wife's health cannot be threatened by any fertility treatments the married couple decides to undergo. In his words,

In our religion, everything shall be within the family... if everything is inside the family, then you can do anything, then you can use any available method. You can't use donors, though! Another point. Anything you're doing shouldn't harm the woman, I mean invasive methods – for examples, hormones, etc. ... if treatment doesn't cause lasting damage [to the married woman], then that's all right.

Woman's health is therefore to be regarded as the second *sharī'ah* compliant benchmark when childless partners opt for ART procedures. Despite this teaching, Muslim prospective mothers' well-being can be severely challenged by a number of Muslim practices, as disclosed by empirical investigations¹⁶⁸.

With respect to the imperative necessity of marriage, opinions differ. To some religious figures, an Islamic/Muslim marriage is enough to satisfy the Islamic requirements; to others, a marriage with civil effects is also necessary. To the president of a national Islamic organisation, for instance, «the [Muslim] couple must be married with a marriage granting all rights, not only the religious ones», this implies that Muslim patients are required to enter into a religious and a civil marriage before undergoing any fertility treatments in a *sharī'ah* compliant way. On the contrary, an *imām* in Torino clarified that «if they [i.e. the Muslim patients] are married in the mosque, then this is all right... but everyone shall be aware that they are married! No secret allowed.» From this viewpoint, a religious Islamic marriage is thus regarded as being a valid compromise for Muslim pattners wishing to undergo ART procedures¹⁶⁹.

¹⁶⁸ These challenges range from uninformed consent to enter into fertility procedures, misunderstandings on fertility therapies, traditional remedies to childlessness, not well-performed gynaecological surgeries or previous miscarriages or induced abortions. See *infra*, chapter IV, sections 2.3, 4.1-4.1.3, 4.2.2 and 4.3; chapter V, sections 4 and 5.

¹⁶⁹ In this case, the child born to non-married cohabiting partners undergoing fertility treatments does not automatically acquire the status of legitimate or recognised child, in compliance with Italian laws. See *supra*, chapter II, section 2.

¹⁶⁶ See *supra*, sections under 6.

¹⁶⁷ A child born out of a *sharī'ah* compliant wedlock is indeed considered a *walad al-zinā'*. See for instance J. Teichman, *Illegitimacy: An Examination of Bastardy*, Ithaca, Cornell University Press, 1982. See also *supra*, sections under 6.

As far as MAR methods involving third parties are concerned, the positions within the Islamic framework of reference differ widely, as discussed above in sections under 6. Whereas some local *Sunnī a'immah* criticised the *escamotages* enacted by $Sh\bar{i}'\bar{i}$ Muslims in order to rely upon heterologous *sharī'ah* compliant treatments (e.g. temporary polygynous nuptial unions), they conceded that *Sunnī* Muslim prospective parents may, in effect, undergo MAP treatments involving donors¹⁷⁰. Additionally, Muslims can rely upon procedures that are condemned as not being *sharī'ah* compliant also when adopting the more liberal Muslim perspectives. The additional facts reported below clarify some thorny situations faced by local religious figures.

The limit to the idea of family can be a problem... Temporary marriage – the *mut'ab*, you know (it means pleasure) – does not exist in $Isl\bar{a}m$ – to me. This gives value only to sexual intercourse... If a child is conceived in this way, that's a real problem to us! [...] Of course, they [the child's parents] may not say this, but God knows...

and

Artificial procreation is legitimate only if homologous; if the gametes belong to the married couple. [...] This is it, but... human beings are free. In this sense [undergoing heterologous fertility procedures], he doesn't respect his own faith. He wanted his own ego, his own personal decision... but he acted against his own religion! The right line is the married couple. Then, Muslims are human beings and, to use Christian language, they sin. *Islām* gives human consciousness the [possibility to] decide... It's true: Muslims go to somebody to ask for advice, maybe... but he's the one who decides! It's his own consciousness that shall decide which path is to be followed... the *imām* never forces the believer's choice; he suggests, he doesn't force.

In the reported statements, the two research subjects voiced a sense of powerlessness in the actual implementation of Islamic principles in this matter. Whereas they lecture local communities on *harām* and *halāl* conduct and behaviour, they admitted that Muslim intended parents may not follow their recommendations. In fact, MAP procedures are easily accessible in both European and Muslim majority countries. Although being aware that some fertility methods (such as heterologous donor's procedures) are non-*sharī'ah* compliant, *Sunnī* Muslim prospective parents may nonetheless undergo these treatments whilst not disclosing their parenthood choice both to the local community and to their extended family, similarly to those opting for non-Islamic adoption¹⁷¹. As part of the broad narrative on family

¹⁷⁰ See *supra*, section 6.2 and *infra*, chapter V, section 6.

¹⁷¹ See *supra*, section 4.3 and *infra*, chapter IV, section 5.2.

nuclearisation, the issue of secrecy indeed emerged as a key argument also amongst the interviewed patients of fertility clinics: the reproductive choices of Muslim couples settled in Italy are increasingly protected from religious and/or social interference.

7.2. Shari'ah-trained Muslim female healthcare professionals

The second most frequently voiced Islamically compliant requirement specifically concerns healthcare professionals. As briefly mentioned above, ideally, Muslim female physicians, biologists and nurses should be involved in performing MAP procedures in the case of Muslim patients¹⁷². Building upon Islamic rules preserving Muslim women's modesty and prohibiting the exposure of bodily parts to *mahram* (marriageable) people, female healthcare practitioners are therefore to be favoured by Muslim patients. Additionally, being familiar with *shari'ah*, Muslim physicians are to be preferred to non-Muslim ones.

Resolution and recommendations adopted by pan-Muslim organisations specifically addressed these pragmatic aspects of ARTs and MAPs, whilst providing clear guidelines to be adopted worldwide by Muslim prospective parents. The Islamic Fiqh Academy, for instance, clarified the rules of conducts to be adopted with respect to the gender of healthcare professionals involved in medical examination of Muslim patients.

As a general rule, if a female specialist doctor is available, then she should be one to examine the female patient. In the absence of such a specialist, the patient may be examined by a trustworthy non-Muslim female doctor, if not then by a Muslim male doctor, and if not, then by a non-Muslim male doctor; on the understanding that in diagnosing and treating the ailment, the doctor should see only the minimum necessary of the patient's body and to the extent possible divert his look, and that the doctor's treatment of the female patient should be in the presence of a *Mahram* (blood relation and certain other persons who, in the eyes of Shari'a are ineligible for marriages with the patient, such as brother and uncle...) or a husband or a trusted woman, to avoid *Khalwa* (two persons of opposite sex being together in a remote place). The Council recommends that, due to insufficient number of specialized female doctors in these fields, and in order to avoid having to resort to rules of exception, health authorities should do their level best in encouraging women to register in medical science studies, in the various branches of specialty, in particular gynaecology and obstetrics. Allah knows Best¹⁷³.

¹⁷² See *supra*, section 6.

¹⁷³ Resolution No. 81/12/8 in Fiqh Academy, *Resolution and Recommendations of the Council of the Islamic Fiqh Academy* (1985-2000), cit., at p. 176. For a comment, see also Atighetchi, *Human rights and bioethics, an Islamic overview*, cit., at pp. 237-238.

Muslim women are therefore to be warmly encouraged to pursue medical studies. Facing present contingencies, however, a compromise must be found between practical everyday needs and the ideal implementation of *shari'ah*. In particular, the need to cope with the insufficient number of Muslim female medical doctors was similarly voiced by local religious figures. The head of a worship centre in Torino, for instance, explained what follows:

I am aware of this problem. Well, there's a savant in *al-Qur'ān*, a scholar of *al-'Islām...* during the seventies, he's a Moroccan man... you know, during the seventies, few women were attending [courses at] universities. Anyway, said man asked a question and he said: «You didn't let you daughters study – medicine, engineering, and so on – and now you want that your own woman goes to a medical doctor – said doctor, where did she come from!?». He really said so ...and he was right.

In light of this, he further elaborated that, when adopting an Islamic perspective, a Muslim woman shall be examined by another woman by preference. To some religious figures, although rules of opposite genders' proximity are rather strict in *Islām*, it is mostly customs that require female medical staff dealing with modest Muslim female patients. Some released declarations elucidate these points.

A woman usually favours a woman... she wants a female gynaecologist. You see, this isn't a religious factor at 100%, rather it's a human factor!

More than religions... it's the woman who's ashamed! That's it. Muslim women are shyer... At a religious level, if a person is a doctor, then he's a doctor – full stop. But she can't feel comfortable...

and

That's mostly because of husbands... they're jealous! They don't want anyone to see their wives...

As a result, all religious informants who were interviewed conceded that, although a female Muslim doctor is preferable, exceptions can be made, particularly in urgent situations. In line with the Islamic sources on ARTs/MAPs examined in the former sections, medical examination of patients of the opposite sex is regarded as being *sharī'ah* compliant provided some requirements are satisfied. By way of illustration, echoing the resolution formerly adopted by the Islamic Fiqh Academy, the recommendations of the Seminar on Human Reproduction in Islam stated what follows: It is lawful for a medical member of one sex to look at the '*awra*¹⁷⁴ of a member of the other sex for purposes of medical examination, treatment, and medical education. Exposition, however, should be limited to what the need calls for¹⁷⁵.

In addition to the protection of patient's modesty and honour during medical examinations, Islamic clerics require Muslim physicians to be conversant with Islamic law «related to health, disease, and treatment»¹⁷⁶. The *curricula* of medical sciences in Muslim majority countries shall thus encompass «an orientation to the Sharia and Law provisions for their rights, duties, competence and responsibilities in regard to the practice of the health professions»¹⁷⁷.

Similar competence in *sharī'ah* compliant treatments is advocated on Italian soil. More specifically, the head of a nationally relevant Islamic organisation clarified that, in Italy, the healthcare personnel – independently from its religious belonging – should be conversant with some basic principles of Islamic law in order to deal more efficiently with Muslim patients. His words were the following:

The doctor should possibly attend a course and be familiar with, at least, general Islamic principles... to transfer the idea of acceptance (for instance, in *Islām* this means acceptance of God's will) of his/her own situation [...] Acting in this way, the doctor knows that there is only one option – that is to say homologous, and not heterologous, fertility treatments – therefore the doctor shall not offer to the [Muslim] patient the possibility of this treatment. ...to put it differently, not to provide prospects against the patient's religious belonging.

Delving further into this matter, the informant clarified that «the doctor should be familiar with the guidelines of Islamic way of thinking», accordingly s/he can more easily accept the Muslim patient's refusal to undergo some fertility treatments or MAP-related practices such as abortion or embryos' cryopreservation. In his opinion, problematic issues arise when physicians and nurses are not well versed in dealing with multicultural and multireligious scenarios. As a result, «the medical personnel causes problems, if they think they can supply treatments without being aware of (the patient's) religious belief». Indigenous non-Muslim medical staff members are thus expected to familiarise themselves with Islamic law in order to offer and pro-

¹⁷⁴ The Arabic word 'awrah is used to indicate body intimate parts.

¹⁷⁵ See, for instance, the recommendation No. 8 of the Session chaired by Abd Al-Aziz Kamel (Session Chairman), in al-Gindi, *Islam and Current Medical Concerns*, vol. I, cit.

¹⁷⁶ See the footnote above.

¹⁷⁷ In Al-Mazkur *et al.* (Ed.), *Recommendations of the Third Symposium on «The Islamic Vision of Some Medical Practices»*, 18-21 April 1987 A.D., Kuwait, Islamic Organisation for Medical Science, 1988.

vide only *shari'ah* compliant fertility procedures to Muslim prospective parents.

Instead of familiarity with *sharī'ah*, an Arabic-speaking *imām*, emphasised the medical doctor's religious belonging as the ideal primary requisite for clinical staff. He declared:

Even if a doctor is non-Muslim, male or female, that's fine to treat patients – you see – if there is urgency and so on... It [the medical doctor] had better be a Muslim than a woman, though. [...] A Muslim doctor is better – you see – he knows about our rules... but it's difficult to find [someone] here.

From the viewpoint of this informant, knowledge of *sharī'ah* is an aspect of crucial importance when dealing with Muslim patients, and this provision occupies highest-ranking position when compared to Islamic gender seclusions rules. In compliance with some pan-Muslim sources on MAR, actually, a «Muslim doctor must be, committed to the upright *Sharia*»¹⁷⁸. Accordingly, «[a]dhering to Islamic *Sharia* is a general duty on all Muslims whether members of the health professions or not. Therefore, if the positive law is in conflict with the *Sharia*, then Law must be amended in accordance with the *Sharia*»¹⁷⁹.

Although familiarity with Islam and religious belonging were emphasised by the majority of religious figures, the head of a nationally – and locally – active Islamic organisation highlighted different aspects. More specifically, four elements are to be primarily addressed by local clinical staff in order to comply with *sharī'ah*.

In the doctor-patient relationship, you need:

1. Trust. If the doctor builds trusts, and he's also kind... then, he's already treated the patient at 30%.

2. Female doctor. If possible, if there's no urgency.

3. Cultural mediator. For linguistic matters.

4. Privacy. In the Muslim sense... but also in our country.

You see, no particular things.

¹⁷⁸ The translation in English language is reported in Al-Mazkur *et al.* (Ed.), *Recommendations of the Third Symposium on «The Islamic Vision of Some Medical Practices», 18-21 April* 1987 A.D., cit.

¹⁷⁹ It should be stressed that the *Recommendations of the Third Symposium on «The Islamic Vision of Some Medical Practices»* also clarified that «[t]he symposium discussed the "Difference between Law and *Sharia*", and from the presented examples of medical practice in the Islamic countries, it was clear that generally speaking there is hardly any situation that would be embarrassing to the doctor in practice by divergence of law and *sharia»*. See Al-Mazkur *et al.* (Ed.), *Recommendations of the Third Symposium on «The Islamic Vision of Some Medical Practices»*, 18-21 April 1987 A.D., cit.

According to the above-reported minoritarian and dissenting opinion, apart from Muslim patients' modesty and seclusion, the voiced needs are not culturally, or religiously specific. Accordingly, a Muslim patient is no different from a non-Muslim one. A Muslim patient is rather to be treated as a foreign patient, being less conversant with the local (medical) language. In real terms, during the interviews carried out by the author, the necessity to cater for the needs of Muslim patients who are not fluent in – or even familiar with – the Italian language frequently surfaced¹⁸⁰. At any rate, a number of religious and cultural specificities characterise Muslim patients' behaviours and reproductive choices, whilst also affecting the outcome of fertility treatments¹⁸¹.

7.3. MAP-related medical procedures and Muslim patients

When approaching ARTs and MAPs from the perspective of Islamic provisions, some rules of conduct affect the performance and the outcome of fertility treatments in a *sharī'ah* compliant way. Ethics and morals linked to religious affiliation indeed greatly impact on some MAP-related medical procedures.

As clearly noted by fieldwork informants, specific attention is therefore to be paid to pre-implant diagnosis, eugenics, (therapeutic) induced abortion, gametes and cryopreservation of embryos, as well as to some religious ritual practices such as ritual fasting.

7.3.1. Islamic fasting

As far as the latter is concerned, one of the five pillars of *Islām* requires Muslims to ritually fast during the daylight of the ninth month of the Islamic calendar that is called *ramadhān*¹⁸². In compliance with Islamic law, Muslims who have reached puberty are therefore compelled to abstain from drink, food and sexual intercourse from dawn to dusk. Strict observance of fasting implies abstention from liquid and solid food as well as medicines and injections¹⁸³; similarly, sexual intercourse and masturbation are forbidden.

¹⁸⁰ As discussed *infra*, in chapter IV, sections 2.3 and under 4.1.

¹⁸³ See for instance Issues Nos. 760, 772, 776, 781 in Far, A Selection of Islamic Laws Based on the verdicts of Grand Ayatollah Yousof Saanei, cit. For a compendium of Sunnī Muslim provisions, see for instance L. Bakhtiar, Encyclopedia of Islamic law: A Compendium of the views of the major schools, Chicago, IL, Kazi Publications, 1996, at pp. 133-150.

¹⁸¹ These are pinpointed and analysed *infra*, in chapter IV, sections under 3, 4 and 6.

¹⁸² In *Islām*, some actions are compulsory since these are the foundation of Muslim way of life; these are called *arkān al-Islām*. Some differences exist among various Islamic sects and denominations.

Abiding by these mandatory actions might be complicated for Muslim patients undergoing medical fertility treatments. On the one hand, the post-ponement of fasting is acceptable in case of persons who are ill or travelling; in addition, some people are exempted from refraining from drink and food – such as persons affected by medical conditions (e.g. diabetes), and women who are menstruating, pregnant or breastfeeding. On the other hand, Muslims are required to make every effort to abide by the five pillars of *Islām*.

Accordingly, Muslim partners should (preferably) avoid fertility treatments during *ramadhān*. Local religious figures indeed highly recommended the postponement of any non-urgent medical treatments. An *imām* in Torino, for instance, declared:

You see... it's up to the therapy. Ramadhān lasts one month... if one manages to put off [the medical appointment], that's better; isn't it!? As far as I know... if one is ill, then no. If one is travelling, he eats. If a woman «has her own things», she eats¹⁸⁴; then she'll fast later. If this thing is... if one cannot help but... then, one can – I believe so. One has to push, though! It's not like they [the fertility clinic] call you, and you go as if it were OK – right!? No. And people at the hospital must consider this too... They can't say: «We can't wait for you 'cos you're Mus-lim!». It doesn't matter very much if they move one or another back or forth for few weeks... This isn't the end of the world... So, you have to ask for that.

In the opinion of this informant, the Muslim patients' need to defer any non-urgent medical procedure does not impose an excessive burden on either the Muslim prospective parents and the medical fertility centres, therefore this request could easily be accommodated by local clinics. In real terms, as highlighted further in the volume, the long waiting lists of public MAP centres might imply that Muslim patients are forced to choose between missing their turn, interrupting the religious ritual fasting, or to undergo a MAR procedure while fasting¹⁸⁵.

As mentioned at the beginning of the section, additional rules of conducts affect the performance and the outcome of *sharī'ah* compliant fertility treatments. In the broad field of ART and MAP, pre-implant diagnosis, eugenics, therapeutic abortions, gametes and embryos cryopreservation deserve specific attention¹⁸⁶.

¹⁸⁴ This Italian idiom (*avere le sue cose*) means that a woman is menstruating.

¹⁸⁵ As discussed *infra*, in chapter IV, section 3.2. See also *supra*, chapter II on the typologies of medical centres and *infra*, chapters IV and V, sections 5 and 8.

¹⁸⁶ When interviewing research subjects, complications related to traditional rituals and issues linked to migratory attitudes of Muslim patients also emerged amongst the rules of conduct affecting the outcome of *sharī ab* compliant fertility treatments. See *infra*, chapter IV, sections 4.2. and 4.3.

7.3.2. Pre-implantation diagnosis and eugenics

In order to avoid illnesses and genetic diseases in the new-born child, Islamic scholars exhort prospective spouses to undertake medical tests before marrying¹⁸⁷. The pivotal importance of premarital counselling and examination specifically intended to avoid genetic diseases was voiced by the Islamic Fiqh Council as illustrated below.

The Council recommends that Muslim governments and institutions should create awareness among the general public about the importance of medical test before marriage, and encourage the people for such tests, which should be made easily available to them and should remain a secret among those who are directly involved¹⁸⁸.

The head of a nationally relevant Islamic organisation similarly explained to favour prevention of induced therapeutic abortion of impaired foetuses and therefore to strongly support pre-marital genetic counselling, when declaring:

In some countries, in Jordan, for instance, you do this prior to the wedding... Before completing the marriage act, one has to do a DNA test. If they [the intended spouses] are not compatible, then they don't marry... it's fine like that. Better safe than sorry!

In the scenario described, if the DNA testing is not positive, then the couple should refrain from marrying. Adopting an Islamic perspective, this choice can be described as a *sharīʿah* compliant remedy for involuntary childlessness. Instead of marrying and eventually resorting to divorce or polygyny, genetically incompatible Muslim partners can simply faithfully accept God's plans and decide not to be joined in marriage¹⁸⁹.

If the partners marry nonetheless, or without undergoing any medical examination, and eventually opt for fertility treatments, pre-implant genetic diagnosis (PGD) is permitted. In *Islām*, PGD is considered preferable to pre-natal diagnosis since the latter may lead to induced thera-

¹⁸⁷ On *shari*^{*}*ah* compliant genetic counselling, see *inter alia* A.I. Al-Aqeel, *Genetic Counseling in the Muslim World: The Challenges*, in *Second Pan Arab Human Genetics Conferences Proceedings*, Ed. by PAHGC, Dubai, PAHGC, 2012, pp. 32-61; A.E. Swinford, and M.H. el-Fouly, *Islamic religion and culture: Principles and implications for genetic counselling*, in «Birth defects original article series», 23, 6, 1987, pp. 253-257.

¹⁸⁸ See the Fifth Resolution on Hereditary Blood Diseases. Resolution No. 5, XVII Session, 19-23 *Shawwal* 1424H (13th-17th December 2003), in Islamic Fiqh Council, *Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from* 1st to 18th Sessions, during 1398-1427H (1977-2006), cit., at pp. 459-460.

¹⁸⁹ See *supra*, section 4.1.

peutic abortion¹⁹⁰. If one of the prospective parents carries a genetic disease and/or congenital disorder, (some) Islamic clerics also allow genetic engineering and embryonic selection, including foetal sex selection¹⁹¹. Al-Bar and Chamsi-Pasha clarify that, in compliance with Islamic bioethical principles, gender selection is permitted if and when a particular sex predisposes to a serious genetic condition. Building upon the Prophet saying – «Choose for your offspring the suitable woman for hereditary plays a role» – the quoted authors elucidate that embryos showing serious chromosomal or genetic anomalies can be replaced, so that embryonic sex selection can make possible the weeding of some serious genetic disorders¹⁹².

It should however be stressed that, with respect to pre-implant genetic diagnosis (PGD) and eugenics, a clear-cut opinion does not exist in the Islamic world. By way of illustration, in 1983, prospective parents' foetal sex selection was regarded as being *shari'ah* compliant. Actually, it was held that:

There was an agreement that the Islamic legal viewpoint is that fetal [foetal] sex selection is unlawful when it is practiced at a national level, while on an individual basis, some of the scholars participating in the seminar, believe there is nothing legally wrong with the attempt to fulfil the wish of a married couple to have a boy or a girl through available medical means, while other scholars believe it is unlawful for fear that one sex might outnumber the other¹⁹³.

¹⁹⁰ It should also be mentioned that, from this perspective, the Islamic point of view is closer to the position adopted by the European Court of Human Rights in favouring the lesser of two evils. Actually, as highlighted by Zagrebelsky, allowing abortion and instead prohibiting medical insemination with only healthy embryos, Italian law was unreasonably authorising the most (and the most painful) solution, while denying the less (and less serious) remedy. See Zagrebelsky, *La irragionevolezza della legge italiana sulla procreazione assistita nel giudizio della Corte europea dei diritti umani*, cit. On the Italian framework of medically assisted procreation, see *supra*, chapter II, sections 1-4; on PGD and induced therapeutic abortion see also see *infra*, section 7.3.3.

¹⁹¹ On human cloning, see Islam *et al.*, *Ethics of Human Cloning: A Comparative Study* of Western Secular and Islamic Bioethics Perspectives, cit.; and S.J. Werber, *Cloning: A Jewish* Law Perspective with a Comparative Study of Other Abrahamic Traditions, in «Seton Hall Law Review», 30, 4, 2000, pp. 1114-1181.

¹⁹² Al-Bar and Chamsi-Pasha, *Contemporary Bioethics Islamic Perspective*, cit., at pp. 175 and 187-206. See also H. Chamsi-Pasha, and M.A. Al-Bar, *Assisted reproductive technology: Islamic Sunni perspective*, in «Human Fertility, an international, multidisciplinary journal dedicated to furthering research and promoting good practice», 18, 2, 2015, pp. 107-112.

¹⁹³ See, for instance, the recommendation No. 2 of the Session chaired by Abd Al-Aziz Kamel (Session Chairman), in Full Minutes of the Seminar on Human Reproduction in Islam, Held on 24th May 1983 A.D. (*Sha'aban* 11, 1403 H), in al-Gindi (Ed.), *Islam and Current Medical Concerns*, vol. I, cit.

Accordingly, the wish for female or male offspring of a married Muslim couple can be met in compliance with *sharī'ah*. Academia similarly clarified that

Sex ratio balancing in the family is considered acceptable, for instance, where a wife has delivered three or four daughters or sons and it is in her and her family's best interest that another pregnancy should be her last. Employing sex selection techniques to ensure the birth of a son or a daughter might then be approved to satisfy a sense of religious or family obligation and to save the woman from increasingly risk-laden pregnancies¹⁹⁴.

As a result, selecting the offspring's sex for non-medical purposes can be regarded as being Islamically compliant if it is done to protect the woman's well-being, when adopting an Islamic viewpoint. The Islamic Fiqh Council, nevertheless, did not articulate its thoughts on eugenics and foetal sex selection. In 2006, the aforementioned Islamic body declared that «the Council had decided to postpone the adoption of any resolution in order to give more time for study and submit the finding in the next session», and no resolution has been published on this matter ever since¹⁹⁵.

During interviews, the local religious figures did not feel comfortable in addressing eugenics-related issues, unlike local Muslim patients and the personnel of local MAP clinics. More specifically, the case of a foreign Muslim couple who entered into a fertility procedure in a public hospital in Torino with the specific purpose of gender selection is examined in the next chapter¹⁹⁶.

7.3.3. Pre-natal diagnosis and induced abortions

Whereas pre-marital genetic counselling, pre-implant diagnosis, and embryonic selection are permitted¹⁹⁷, *Islām* condemns induced abortion

¹⁹⁴ See Serour, Islamic laws and reproduction, cit., at pp. 336-337.

¹⁹⁶ See *infra*, chapter IV, section 3.3. In a nutshell, the example indicates that Muslim partners may regard embryo sex-selection as an Islamically compliant method for family planning intended to foster women's well-being, and thus be highly disappointed in discovering that this procedure is not legally permitted on Italian soil.

¹⁹⁷ For a comparative study of pre-natal diagnosis and PGD in different religious traditions, see R.R. Anderson, *Religious traditions*, in J.P. Galst, and M.S. Verp (Eds.), *Prenatal* and Preimplantation Diagnosis: The Burden of Choice, Dordrecht, Springer, 2015, pp. 195-227. For a Muslim perspective, see S. Ahmed, J.M. Green, and J. Hewison, *Attitudes towards* prenatal diagnosis and termination of pregnancy for thalassemia in pregnant Pakistani women in the North of England, in «Prenatal Diagnosis», 26, 3, 2006, pp. 248-257; J.T. Gitsels-van der Wal et al., The role of religion in decision-making on antenatal screening of congenital

¹⁹⁵ Resolution No. 6, XVIII Session, 10-14/3/1427H (8-12/4/2006), in Islamic Fiqh Council, *Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from* 1st to 18th Sessions, during 1398-1427H (1977-2006), cit., at pp. 495-496.

as a form of family planning¹⁹⁸. Abortion may also be regarded as a sin and therefore leading to the payment of blood money in addition to social stigmatisation¹⁹⁹. Muslim women undergoing fertility treatments may nonetheless face voluntary or involuntary pregnancy loss, as examined data indicate.

In compliance with Islamic provisions, the termination of pregnancy is permitted under some circumstances and within a certain time limit that is calculated from the date of conception, similarly to Italian law. Although the seven stages of embryonic development are described in the $Qur'\bar{a}n^{200}$, Islamic jurists' opinions on abortion are variegated and diversified. By way of illustration, the Seminar on Human Reproduction in Islam concluded that:

[...] an embryo is a living organism from the moment of conception, and its life is to be respected in all its stages, especially after spirit is breathed in. Aggression against it, in the form of abortion, is unlawful except in cases of maximum necessity. Some participants, however, disagreed and believe abortion before the fortieth day, particularly when there is justification, is lawful²⁰¹.

A few years later, the Islamic Fiqh Academy adopted a divergent and more detailed position whilst describing in detail permitted/non-permitted and lawful/unlawful induced abortions.

After discussion by the Council members as well as the concerned medical scientists who attended the session especially for this purpose, the Council with majority decided the following:

When the foetus completes 120 days, then it is not permissible to abort it, even though the medical diagnosis shows that it is physically deformed. However, if it was proved by the report of a medical panel of the trusted and specialized medical

anomalies: A qualitative study amongst Muslim Turkish origin immigrants, in «Midwifery», 30, 3, 2014, pp. 297-302.

¹⁹⁸ The condemnation of pre-Islamic infanticide is usually relied upon to indicate «a near absolute prohibition on abortion after 120 days of gestation», as stressed by Kelsay; see Kelsay, *Islam and medical ethics*, cit., at p. 98. On Islamically compliant family planning see *inter alia* Omran, *Family planning in the legacy of Islam*, cit.; and International Islamic Center for Population Studies and Research, *Islamic Manual of Family Planning*, cit.

¹⁹⁹ In the opinion of the *banbalī* school of judicial thought. For in-depth studies, see for instance F. el-Kak, *Reproduction: Abortion. Arab States*, in S. Joseph, and A. Nămābādī (Eds.), *Encyclopedia of Women & Islamic Cultures*, vol. III, *Family, Body, Sexuality, and Health*, Leiden, Brill, 2005, pp. 303-305; A.F. Mohsin Ebrahim, *Abortion, birth control and surrogate parenting: An Islamic perspective*, Indianapolis, American Trust Publications, 1989.

²⁰⁰ See XXIII: 12-14; XXXII: 8; LXXV: 37; LXXVI: 2.

²⁰¹ See, for instance, the recommendation No. 7 of the Session chaired by Abd Al-Aziz Kamel (Session Chairman), in Full Minutes of the Seminar on Human Reproduction in Islam, Held on 24 May 1983 A.D. (*Sha'aban* 11, 1403 H), in al-Gindi (Ed.), *Islam and Current Medical Concerns*, vol. I, cit.

scientists that there is a sure danger to life of the mother, then only it is permissible to abort it whether it is physically deformed or not, in order to avoid the worst of the two harms.

Before the foetus' completion of 120 days, if it was proved by a report of the trusted and specialized medical scientists' panel and by a medical check – up based on technical investigation through laboratory instruments that the foetus is seriously deformed and it cannot be treated, and if it remained and was delivered on its due date then its life will be bad and would continue to be an agony for itself as well as for the entire family, then it is permissible to abort it on request of the parents. The Council, while it decides this, recommends to the medical practitioners and parents to be fearful of Almighty $All\bar{a}h$ and ascertain this matter²⁰².

According to the guidelines reported above, therapeutic abortion is not Islamically permitted once the soul has been breathed by God into a physically deformed embryo or foetus; the time limit from the date of conception ranges from forty to one hundred and twenty days, depending upon the time of ensoulment²⁰³. These terms do not conform to the ninety days limit for voluntary termination of pregnancy as stated by Italian law; therefore, problems can arise in case of Muslim patients, although the Italian limit for therapeutic abortion can be extended²⁰⁴. In Italian law, similarly to Islamic law, the focus is thus placed on the woman's well-being, although the abortion of seriously deformed foetuses can be regarded as being *sharīʿah* compliant according to some Islamic interpretations. Different Islamic opinions can nevertheless coexist. An *imām* clarified:

On abortion, one has to be careful... to see when this is fair and lawful. There are many schools [of Islamic judicial thought]: there are those who say one day, there are those who say forty days, there are those who say four months... and so on... However, during early days the sin is minor.

²⁰³ For further details see Houot, *Islamic jurisprudence (Fiqh) and assisted reproduction: Establishing limits to avoid social disorders*, cit., at pp. 59-60. See also Atighetchi, *Islamic Bioethics: Problems and Perspectives*, cit., at pp. 111-133. After 120 days, the aborted foetus should be buried in an Islamic cemetery, according to some interpretations. See A. Shaw, *Rituals of infant death: Defining life and Islamic personhood*, in «Bioethics», 28, 2, 2014, pp. 84-95.

²⁰⁴ On Italian soil, after the first ninety days, voluntary termination of pregnancy can indeed be performed only when continuing the pregnancy or childbearing involves a serious danger to the woman's life, or when the unborn child's significant abnormalities or malformations determine a serious danger to the woman's physical or psychological health (art. 6, Law 22 May 1978, 194, in «Gazzetta Ufficiale», 140, 22 May 1978). Usually, the limit is twentytwo weeks after the beginning of the pregnancy. See *supra*, chapter II, section 4, and *infra*, chapter IV, section 3.3 where the dilemma faced by a Muslim couple who conceived through ARTs is analysed.

²⁰² The Fourth Resolution on Abortion of Physically-Deformed Foetus, Resolution No. 4, XII Session, 15-22 *Rajab* 1410H (10-17 February 1990), in Islamic Fiqh Council, *Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from* 1st to 18th Sessions, during 1398-1427H (1977-2006), cit., at pp. 345-346.

In addition to the time limit, in the case of therapeutic abortion, the pre-natal deformity diagnosis shall be preferably made by a team of trusted (Muslim) specialised healthcare professionals. This aspect should be linked with the voiced demands for suitable healthcare personnel in Western fertility clinics²⁰⁵. Local clerics similarly emphasised the necessity to rely upon some sort of «religiously-conscious medical staff» when recommending therapeutic abortion to Muslim women. A local *imām* for instance asserted that «If the doctor is a religious person, then he can understand, so that's better. If he's Muslim, then that's even better, of course!». The head of a local worship centre, similarly, stated:

[...] abortion is not permitted as a choice, but, if the foetus has many flaws, then there're things to consider... You have to talk to a trusted doctor. I mean – not to an overly permissive one; a radical one, for example, who's in favour of abortion.

These words indeed echo the need of local ART/MAP providers who are conversant with Islamic law, or who are at least familiar with religions perspectives, as voiced by some interviewed research subjects, as discussed in the sections above.

Independently from the appropriate clinical staff entitled to deliver the diagnosis, local *a'immah* concurred that, although being a sin, a Muslim woman shall abort a foetus when continuing the pregnancy can threaten her life. In compliance with *Islām*, indeed, there are two main principles: «life is sacred» and «existing life prevails over future ones», as elucidated by the religious figures interviewed. Induced abortion is therefore permitted in *Islām* in case of multi-foetal pregnancies associated to foetal and maternal complications. Since multiple pregnancies significantly increase in the case of ART/MAP procedures, this permission become particularly relevant for Muslim prospective parents undergoing fertility treatments²⁰⁶.

An additional issue should also be stressed: spontaneous abortions (i.e. miscarriages) might occur. Scientific studies indeed suggest that spontaneous abortions might increase in ART/MAP pregnancies also due to some fertility treatment related factors. The most important factor predicting the risk of spontaneous abortion seems however to be previous spontaneous abortions²⁰⁷. Muslim prospective mothers could potentially be significantly af-

²⁰⁷ See J.X. Wang, R.J. Norman, and A.J. Wilcox, *Incidence of spontaneous abortion among pregnancies produced by assisted reproductive technology*, in «Human Reproduction», 19, 2, 2004, pp. 272-277; and A.J. Wilcox, A.E. Treloar, and D.P. Sandler, *Spontaneous abortion over time: Comparing occurrence in two cohorts of women a generation apart*, in «American Journal of Epidemiology», 114, 1981, pp. 548-553.

²⁰⁵ See *supra*, section 7.2.

²⁰⁶ A case is examined *infra*, in chapter IV, section 3.3.

fected by this complication since quantitative data revealed that prospective Muslim parents undergoing ART procedures showed high percentages of previous problematic pregnancies, such as ectopic or pathologic pregnancies and miscarriages²⁰⁸.

7.3.4. Gametes and embryos

When analysing the broad field of ARTs/MAPs and bioethics from an Islamic perspective, attention should also be paid to the cryopreserved fertilised ova and frozen embryos, as well as to the banks of female/male gametes and embryos²⁰⁹. Italian fertility clinics offering homologous or heterologous MAP treatments can indeed use fresh or cryopreserved female/male gametes and embryos²¹⁰.

With respect to the fate of surplus fertilised ova, Islamic scholars were proven to be rather cautious. In 1987, the Third Symposium on the Islamic Vision of Some Medical Practices resolved as follows:

The ideal situation is to have no surplus of fertilized ova. This can achieved if scientists continue research to find a way to preserve unfertilized ova capable of normal fertilization when required. The Symposium recommends that scientists expose to fertilization only the number of ova that will be introduced. If that was [were] followed we would not be left with surplus fertilized ova. Nevertheless, if there is a surplus, the majority hold the opinion that fertilized ova are not made inviolable by the *Sharia* at all, and are not respected until they are embedded in the uterine wall, and therefore, it is not prohibited to destroy them. Some, however, hold the opinion that a fertilized ovum is the first phase of the human being honoured by *Allah*. When choosing between destroying fertilized ova, using them for purposes of scientific research or leaving them to die naturally, the last option seems to be the least prohibited since it does not involve positive aggression on life²¹¹.

²⁰⁸ See *infra*, chapter V, section 5.

²⁰⁹ See for instance S. Garmaroudi Naef, *The Iranian Embryo Donation Law and Surro*gacy Regulations: *The Intersection of Religion, Law and Ethics*, in «Welt des Islams», 55, 3/4, 2015, pp. 348-377; I. Ghanem, *The Response of Islamic Jurisprudence to Ectopic Pregnancies, Frozen Embryo Implantation and Euthanasia*, in «Medicine, Science and the Law», 3, 1987, pp. 187-190; J.U. Klein, *Religious views: The impact of traditional Theological opinion on the Practice of third-party reproduction, Case study: DIVF and Islam - 389*, in M.V. Sauer (Ed.), *Principles of Oocyte and Embryo Donation*, II ed., London, Springer, 2013, pp. 383-394; M.H. Nateghi, and F. Golestan, *The study of legal challenges of gamete and embryo donation in Iranian comprehensive health system*, in «Journal of Jahrom University of Medical Sciences», 11, 94, 2014.

²¹⁰ Fresh cycles include IVF and ICSI, thawed cycles encompass FER and FOR. Donor's female gametes can be used in thawing or fresh cycles, whilst male gametes can only be cryopreserved. See *supra*, chapter II, section 5.

²¹¹ No. 13 in Al-Mazkur et al. (Ed.), Recommendations of the Third Symposium on «The Islamic Vision of Some Medical Practices», 18-21 April 1987 A.D., cit.

Three years later, the resolution of the Council of the Islamic Fiqh Academy echoed these arguments, whilst reporting the reasoning illustrated below.

First: In the light of the scientifically established possibility of preserving non-fertilized ovules for future use, only the number of ovules required each time for insemination must be fertilized to avoid the existence of surplus fertilized ovules.

Second: If a surplus of fertilized ovules exists in any way, it shall be left without medical care until the life of this surplus ends naturally.

Third: If is prohibited to inseminate fertilized ovules into another woman, precaution must be made to prevent the use of the fertilized ovules in an unlawful pregnancy.

Verily, Allah is All-Knowing.

As formerly discussed, the wording chosen by the Islamic Symposium and by the Islamic Fiqh Academy interestingly recalls the provision originally encompassed by the Italian legislation requesting one single and simultaneous implantation of all three produced embryos²¹².

Additionally, in compliance with *Islām* non-fertilised ova can be cryopreserved, provided both fertilised and unfertilised ova are used only by the two married persons who had produced the gametes, and no surrogacy or gamete's donation occurs as well as posthumous implantation²¹³. Frozen gametes and embryos remain the couple's exclusive property and can be used only when the partners had previously entered into a valid Islamic marriage. These provisions are intended predominately to safeguard the lineage (*nasab*) of the involved parties and to prevent (potential) social and familiar disorder. As pinpointed by a local *imām*:

This topic is a bit... a lot... This is very complicated! It depends... Artificial insemination isn't bad by all means, but it shall be protected by the law. Maybe someone leaves all his own «male things» there ...these must be protected, let's say.

 $^{^{212}}$ This provision was declared unconstitutional by the Constitutional Court in 2009. See supra, chapter II, sections 1, 2 and 4.

²¹³ The Third Symposium on The Islamic Vision of Some Medical Practices resolved what follows: «It was unanimously approved to emphasize the fifth recommendation of the symposium on "Reproduction in Islam" regarding the prohibition of implanting a woman's fertilized ova into another woman's uterus. Adequate precautions must be taken to prevent the use of fertilized ova in such an illegitimate pregnancy. And also to emphasize the fourth recommendation of the same symposium regarding warning against experiments aiming at changing the normal creation of *Allah* or using science for purposes of evil, wickedness or sabotage, and the symposium recommends that controls of the *Sharia* be made as a guarantee against such practices». See No. 14 in Al-Mazkur *et al.* (Ed.), *Recommendations of the Third Symposium on «The Islamic Vision of Some Medical Practices», 18-21 April 1987 A.D.*, cit. On posthumous conception, see also Serour, *Islamic perspectives in human reproduction,* cit., pp. 34-38; Omani *et al., Posthumous assisted reproduction from Islamic perspective,* in «International Journal of Fertility & Sterility», 2, 2, 2008, pp. 96-99.

There should be trust that they won't be used by others... Otherwise, it could be a mess!

As far as the surplus of fertilised ova is concerned, IVF physicians and biologists are asked to let these die naturally and then to dispose of them, analogously to what was also confirmed in 2002 by a *fatwā* issued by the European Council for Fatwa and Research²¹⁴. In compliance with this interpretation of *sharīʿah*, if the couple undergoes a MAP procedure in one country and then relocates somewhere else, the remaining embryos must be destroyed if and when the Muslim partners' marriage is dissolved. As explained by Houot, the practice of freezing embryos is perceived as being analogous to adoption²¹⁵; therefore, this is a legally forbidden practice in *Islām*²¹⁶.

²¹⁴ For a summary in English language, see Houot, *Islamic jurisprudence (Fiqh) and assist-ed reproduction: Establishing limits to avoid social disorders*, cit., p. 62. The criterion of the infusion of the soul is indeed used to justify the destruction of supernumerary embryos. See *inter alia* Atighetchi, *Islamic perspectives on vulnerable groups*, cit., at pp. 178-179.

²¹⁵ Houot, Islamic jurisprudence (Fiqh) and assisted reproduction: Establishing limits to avoid social disorders, cit., at p. 63.

²¹⁶ As discussed *supra*, in section 4.3. See also *infra*, chapter IV, section 5.2.

Chapter four

Muslim patients and Italian healthcare professionals

1. Ethnography in local fertility clinics

The present chapter builds upon ethnographic observations and interviews carried out by the author in the ISS-assessed and registered fertility clinics that agreed to take part in this LDF/MPI study. In particular, the analysis intends to explore the interactions between fertility clinics personnel and Muslim patients in the MAP centres established in Torino, as previously listed and described¹.

The chapter encompasses six main sections intending to bring together and relate informants' released statements. The first part of the chapter focuses upon the healthcare professional's perceptions of Muslim patients, whilst exploring the (im)possibility of actual accommodation of *Islām* by offering *sharī'ah* compliant MAR procedures in local fertility clinics. The second part of the chapter reveals emerging needs and issues as well as unspoken secrets characterising Muslim married partners searching for fertility treatments in Torino.

Before delving into these subjects, it should be emphasised that, in order to better understand the statements reported and the dynamics discussed, the former chapters II and III are to be borne in mind as the ultimate frames of reference of the interlocutors, that is to say Muslim prospective parents and local administrative/medical staff of clinics providing MAP procedures.

2. Healthcare professionals' perceptions

In contemporary realities, local healthcare providers are embedded in a broader discourse on European *Islām* and domestic Muslim communities. Healthcare professionals' perceptions and understanding of Muslim prospec-

¹ For details, see *supra*, chapter I, sections 6.1-6.3; chapter II, section 6.

tive parents undergoing fertility treatments thus become crucial in understanding current social dynamics.

Accordingly, the following subsections aim to investigate the «detected prototype» of local Muslim patients and prospective parents – provided it existed – and to unravel the complex scenarios clinic staff members cope with on a daily basis, as described by these informants. Building upon ethnographic observations, and analysing the declarations released by Muslim informants, this section aims also to ascertain whether a happy medium is and can be found between medical protocols and patients' necessities.

2.1. Muslim patients

The perceived characteristics of Muslim prospective parents approaching local fertility clinics were described in various ways by the interviewed healthcare professionals, who detected dissimilar aspects². If a distinction were to be made, two main groups could be identified.

At one end of the spectrum, some healthcare practitioners did not identify and report any atypical characteristic specifically concerning Muslim patients. One medical doctor, for instance, declared that «at the end of the day, Islamic couples are like the other ones: they just want to have a child!». Similarly, another explained: «they want to have a child ... and they usually want children so much!». He further elaborated, adding:

Then, they are ready to compromise, to adapt. You see – they become more flexible when they aren't in their own countries... You see – when in Rome, do as the Romans do... In my opinion – as I have worked and travelled in Islamic countries – this depends on the country where they live. Here, they behave as we do.

An IVF physician analogously asserted: «Let's say Muslims are different when they are in Europe... That's natural; people always change when you aren't looking». To these informants, Muslim patients are similar to any other patients in terms of needs and specificities, and this is mainly due to the Muslim patients' relocation or migratory project in European countries.

Few atypical features were instead identified by some healthcare providers, and these specificities were predominantly linked to three different aspects; namely, rules of gender seclusion, the couples' history and dynamics, and the patients' clinical picture. In the opinion of one IVF physician, who is the head of a private MAP clinic, for instance:

 $^{^2}$ For a discussion on the manner in which local clinic staff identifies Muslim patients see *infra*, chapter V, section 3.

Well, these [Muslim] couples have a way of introducing themselves that is fairly uniform [to other patients]... perhaps, the main difference is that men are always with the women, attending every medical appointment. In a nutshell, they don't want their wives to be alone with the doctor.

Other informants discerned a singular characteristic in the history of Muslim couples. They elucidated that indigenous Italian or foreign non-Muslim patients approaching fertility centres are frequently members of formerly separated/divorced/widowed couples who are manifesting their desire for offspring with a new partner. On the contrary, Muslim couples are usually younger spouses with no children previously conceived with another partner. Additionally, the clinical picture of Muslim patients tends to differ with respect to common male/female infertility factors and the prospective parents' age range³.

Religious and/or customary necessities – such as those explored in the previous chapter – were rarely voiced by the medical staff members who were interviewed. The head of a private MAP centre explained this on the grounds of what can be called «reasonable and reciprocal accommodation» as enacted by both healthcare personnel and Muslim patients⁴. In his words,

Muslims who come here are usually open-minded and well-integrated... And I have being working here for more than ten years, I've seen that. [...] There's a compromise. We are dealing with patients' requests; Muslims don't present a rigid interpretation of *Islām*. So... this works well.

To some physicians, Islamic bioethics is similar to other religiously influenced interpretations of MAR techniques, therefore Muslim patients «are similar to pious [Roman] Catholics... but when they come here, they are ready to compromise... at least, most of the time». In fact, several informants alluded to what they called a «pre-existing filter context»; in other words, on the basis of their experience, inflexible and highly demanding Muslim patients would not approach local fertility clinics. The wording chosen by a nurse can clarify this point:

You see... I don't know whether they are «good Muslims», if they pray, if they ask someone what to do, etc. [...] The point is: they have no problem with this [assisted reproduction], or they wouldn't come here!

Dissimilar explanations for the attitude of Muslim patients were however given by healthcare personnel in public and private MAR centres. The head of a private fertility clinic, for instance, affirmed:

³ As discussed *infra*, in chapter V, section 4.

⁴ For further discussion on the happy medium to be found in accommodating Muslims in the European legal systems, see *infra*.

If they can afford a private centre, then... this means they are well-integrated: they work, they are no longer migrants or foreigners. [...] Couples coming here are more similar to Italians, where... the economic factor is the key.

In this informant's experience, well-educated upper middle-class Muslim migrants, who can be counted amongst the private centre's patients, would not put forward any specific *sharī'ah* compliant demands. In fact, these patients tend to manifest a more individualised and spiritualised religious belonging⁵. An IVF physician, who is active in a centre providing heterologous MAR treatments, similarly pinpointed that «lay Muslims only» approached the fertility clinic, whilst further explaining that they «had Muslims undergoing both homologous and heterologous [treatments], but veiled women... there are none!»⁶.

Divergent reasoning was presented by the administrative personnel of a public MAP centre. In this case, the lack of *ad hoc* claims and specific requests presented by Muslim patients was linked to practical reasons: the service provided by the fertility clinic was indeed SSN-funded. In the interviewee's words: «At the end of the day this is a public hospital: if you come here, you have to adapt! Religion or no religion, this is what you have. And this is for free, so...».

As a result, in the encounter between Muslim patients and local healthcare providers, a compromise is to be found between reasonable and feasible accommodation of Muslim patients' specific needs and actual resources in publicly funded healthcare facilities. This echoes the need for positive and constructive accommodation strategies, as discussed by academia⁷. Accommodation is however a double-edged sword. On the one hand, mainstream rules are to be adjusted to minorities' demands, in line with the human rights requirement of appropriate healthcare services. On the other hand, human rights cannot be violated in the attempt to meet every cultural

⁵ On this aspect, see *supra*, chapter III, section 4.1. As highlighted by Césari, at one end of the spectrum there are Muslims who can be called «sociologically Muslims»; at the opposite end of the spectrum, there are Muslims who strictly observe Islamic precepts. See J. Césari, *Introduction*, in Id. (Ed.), *The Oxford Handbook of European Islam*, Oxford, OUP, pp. 9-11.

⁶ Quantitative data regarding heterologous MAR procedures undergone by Muslim patients are analysed *infra*, in chapter V, section 6.

⁷ The reasonable accommodation of Muslims and Islamically compliant principles in Western countries has been discussed *inter alia* by D. McGoldrick, *Accommodating Muslims in Europe: From Adopting Sharia Law to Religiously Based Opt Outs from Generally Applicable Laws*, in «Human Rights Law Review», 9, 4, 2009, pp. 603-645; J. Waldron, *Questions about the reasonable accommodation of minorities*, in R. Ahdar, and N. Aroney (Eds.), *Shari'a in the West*, New York, Oxford University Press, 2010, pp. 103-113; P. Cumper, *Multiculturalism, Human Rights and the Accommodation of Sharia Law*, in «Human Rights Law Review», 14, 2014, pp. 31-57. For a broader introduction on the topic, see for instance, L.G. Beaman (Ed.), *Reasonable Accommodation: Managing Religious Diversity*, Vancouver, UBC Press, 2012.

and/or religious need as voiced by patients⁸. Accommodation should thus encompass a reasonable and appropriate reciprocal adaptation process.

2.2. Muslim couples

When enquired about Muslim couples approaching local fertility centres, clinic staff usually adopted a gender-conscious perspective. A number of reasons might explain this choice. Female patients are *de facto* more affected by ART/MAR clinical procedures and a number of studies indicate that, when compared to intended fathers, prospective mothers' lives are more disrupted by infertility/sterility issues⁹. It is also well known that infertility and sterility are traditionally linked to women in *Islām*¹⁰.

During interviews, the clinic personnel tended to focus on women, whilst singling out a peculiar feature of Muslim couples. Actually, a consistent number of female administrative and clinic staff members perceived imbalance in Muslim patients' couple dynamics¹¹. Building upon patients' declarations and body language, the informants detected and reported widespread submissiveness amongst Muslim female patients, when compared to non-Muslim ones. The narrative of the present and the following section thus gives an account of the described scenarios. It should be emphasised that the reported statements do not rely upon stereotypical assumptions on Muslim male hegemony, rather on experiences disclosed by the interviewed clinic staff members¹².

⁹ See for instance, A. Abbey, F.M. Andrews, and L.J. Halman, *Gender's Role in Responses to Infertility*, in «Psychology of Women Quarterly», 15, 2, 1991, pp. 295-316; K. Lykeridou, *et al.*, *The impact of infertility diagnosis on psychological status of women undergoing fertility treatment*, in «Journal of Reproductive and Infant Psychology», 27, 3, 2009, pp. 223-237. Men and women are indeed assigned different rights and responsibilities when undergoing MAR procedures as highlighted by R.M. Limiñana-Gras, *Health and gender perspective in infertility*, in M.P. Sánchez-López, and R.M. Limiñana-Gras (Eds.), *The Psychology of Gender and Health: Conceptual and Applied Global Concerns*, Amsterdam, Elsevier, 2017, pp. 364-400. Cfr. M. Dooley *et al.*, *The psychological impact of infertility and fertility treatment on the male partner*, in «Human Fertility», 17, 3, 2014, pp. 203-209.

¹⁰ See inter alia A. Abu-Rabia, Infertility and Surrogacy in Islamic Society: Socio-Cultural, Psychological, Ethical, and Religious Dilemmas, in «The Open Psychology Journal», 6, 2013, pp. 54-60. See also supra, chapter III and infra, chapter V.

¹¹ A psychological study of Italian couples' dynamics can be found in S. Cipolletta, and E. Faccio, *Time experience during the assisted reproductive journey: A phenomenological analy*sis of Italian couples' narratives, in «Journal of Reproductive and Infant Psychology», 31, 3, 2013, pp. 285-298.

¹² For a critique of oversimplified *clichés* of oppression and submission attached to Muslim women in Western countries, see for instance W. Ali, *Muslim Women: Between Cliché*

⁸ As highlighted by O.M. Arnardóttir, *Cultural Accommodation in Health Services and European Human Rights*, in E. Rynning, and M. Hartlev (Eds.), *Nordic Health Law in a European Context: Welfare State Perspectives on Patients' Rights and Biomedicine*, Koninklijke, Brill, 2011, pp. 181-200.

As far as body language is concerned, some IVF physicians, biologists, and embryologists reported similar experiences mainly related to the use of space in the room allocated for medical examination. Accordingly, the majority of Muslim women tended to enter the clinic facilities following their husbands and staying behind them. Whilst avoiding eye contact with non-Muslim male doctors, Muslim female patients usually sit in the second best seat (usually the one behind the computer screen). In compliance with the interviews released, a consistent number of fertility clinic personnel declared that Muslim prospective mothers show the tendency to leave the best seat in front of the member of the clinic personnel to their husbands.

The behaviour described was also confirmed by the ethnographic investigations: when interviewed, Muslim men were the partner who habitually sat in front of the author and who routinely took the floor first. Additionally, a significant percentage of Muslim male patients were inclined to use the first-person singular pronoun – e.g. «I want», «I understand», «I see», «I will do» – even when asserting the couple's willingness to conceive a child by undergoing fertility treatments¹³. In fact, as highlighted by Serour «[i]n family affairs, particularly reproduction, decisions are usually taken by the couple, but the husband's decision is usually the dominant decision»¹⁴.

The experience reported by an andrologist is relevant with respect to this matter and may elucidate further dynamics. When a Muslim man is undergoing a medical examination to ascertain whether he is affected by a sterility/infertility problem or a dysfunction issue, «the woman [i.e. the wife] rarely accompanies her husband. And, if present, she usually waits for him in the corridor». Even in the case of what the informant called «liberated couples», when the Muslim woman enters into the room allocated for male medical examination, she «talks very very rarely» and «she never expresses her own opinion, even when a problem exists (e.g. impotence)». In his opinion, a Muslim wife «is controlled for cultural reasons and/or because she doesn't know the local language»¹⁵.

When interviewed, the medical doctors identified further behaviour enacted by Muslim men in order to manifest what healthcare providers perceive as assertiveness and a dominant family role. By way of illustration, telephone numbers and conversations with key male interlocutors were frequently mentioned by the informants to describe unbalanced dynamics within the couple undergoing the fertility treatments. Muslim men, for in-

and Reality, in «Diogenes», 50, 3, 2003, pp. 77-87; and D.D. Zimmerman, Young Arab Muslim Women's Agency Challenging Western Feminism, in «Affilia: Journal of Women and Social Work», 30, 2, 2015, pp. 145-157.

¹³ On this aspect, see also *infra*, section 6.

¹⁴ G.I. Serour *Islamic laws and reproduction*, in J.G. Schenker (Ed.), *Ethical Dilemmas in Assisted Reproductive Technologies*, Berlin, DEG, 2011, pp. 333-342 at p. 334.

¹⁵ With regard to ART/MAP patients' language abilities, see *infra*, sections 2.3 and 4.1.

stance, frequently leave only their own telephone numbers (instead of their wives') to the administrative staff in local fertility clinics. This happens despite the fact that it is usually women who need to communicate regularly with the MAR centre when undergoing hormonal stimulation cycles. In several cases, the healthcare professionals tended to interpret this behaviour of Muslim men as a way of gaining power and exercising control over their wives. By way of illustration, one medical doctor asserted:

These men have a lot of control over the women's life! That's pretty evident. We can say: he's the one in charge. He's giving us only his own telephone number, for example. He does that so that he filters all the phone calls. So, he knows what's happening.

In real terms, language issues may also affect this choice. Muslim (im) migrant women, in particular, are greatly affected by the fact that they can rarely understand, read and speak the Italian language¹⁶. Muslim patients' widespread linguistic inability was indeed largely reported by administrative and medical staff members, predominantly in public and SSN-funded MAP clinics¹⁷. With respect to this matter, further light can be shed relying upon field-collected data such as the description of women's behaviour quoted below, as provided by a medical doctor.

Usually, the women sit quietly. They are silent. Sometimes they stare down at the floor, sometimes they look around... They don't talk, the husband talks. They wait for his translation, and reply when asked to do so – mostly by ourselves. [...] Honestly, when I see that she doesn't interact... or I think she doesn't understand, I stop and I ask for the [cultural] mediator. But that's a problem. First, you need to re-book a visit. Secondly, the husband complains. Normally, he would say: «Why? There's no need. I translate! What do we need the [cultural] mediator for?!». So, he makes a stand.

Additional extracts from the interviews released by healthcare professionals pinpointed similar gender-based dynamics between foreign Muslim partners undergoing MAR procedures. The interviewees perceived and reported what follows:

Often, they come together, but it's only the husband talking... The man usually talks with us doctors and the women... they do what they are told to do. That's what I feel

¹⁶ For further discussion on language issues, see *infra*, sections 4.1.1-4.1.2.

¹⁷ For a distinction and a list of local public and private fertility centres, see *supra*, chapter II, section 6.

and

If she can't understand what's happening, the therapy, the treatments... that's fine, as long as they have a child! [...] Sometimes, I felt the woman is perceived as a pregnancy tool, in *Islām*. That's sad.

Naturally, the dynamics described raise concerns about the woman's informed consent to undergo ART/MAR cycles¹⁸. On the one hand, health-care providers do not want to encourage unbalanced relationships between their patients. On the other hand, a cultural mediator is not always available and, sometimes, it is preferable not to postpone the medical appointment while searching for a suitable interpreter.

2.3. Muslim intended mothers

Although characterising only some amongst the Muslim married couples undergoing fertility treatments in local MAR clinics, ethnographic observations of doctor-patient relationships conducted by the author did not contradict the scheme described above. Actually, pious Muslim women may want to abide by *sharīʿah* compliant rules regarding obedience to their husbands, as well as sex seclusion and modest behaviour (particularly in case of male physicians). It should nonetheless be mentioned that the scenarios described generally identify recently settled foreign Muslim immigrant prospective parents accessing fertility treatments in public centres.

When the couple is attending a medical appointment together, Muslim women can in fact decide to abide by customary norms, they thus manifest their respect and submission by choosing not to talk to the physician, thus leaving the leading role to their husbands¹⁹. Nonetheless, «once alone, these women can understand what you're saying» and «sometimes, you are surprised: [they] can even talk!» – as disclosed by a biologist and a nurse. Actually, these informants agreed in emphasising that, whereas a significant number of Muslim female patients is not familiar with the Italian language, some Muslim women may pretend not to know the local language to fulfil the duties of a good Muslim wife «who knows her own place». *Sharīʿah* compliant female docility and timidity are therefore demonstrated by acting in this way, according to some Italian medical doctors.

¹⁸ See *supra*, chapter II, section 2, and also *infra*, section 4.1.3.

¹⁹ As highlighted by Tremayne, Muslim women's submission and silent cooperation during MAR treatments is also driven by «the sense of belonging and identity». See S. Tremayne, *The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran*, in M.C. Inhorn, and S. Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, New York, Oxford, Berghahn, 2012, pp. 130-156, at p. 136.

In real terms, both the focus groups and the patient interviews conducted by the author confirmed that some Muslim women are actually more familiar with Italian language than usually declared. As disclosed by some cultural mediators, various reasons support this choice. Sometimes Arabicspeaking Muslim women «are just too shy to speak» or «do not feel comfortable in speaking Italian, although they can»; in other cases,

[...] these women are always alone... you see. So, here they ask for some specific attention: they think you are a friend of theirs, they want to see you when they are here in the hospital, so they say [to the clinic personnel that] they cannot understand, and [that] they need a cultural mediator. So, they call us and we came here.

A significant percentage of Muslim female patients, nevertheless, cannot understand the Italian language and some immigrant women cannot even read classical Arabic being *de facto* illiterate²⁰. In these cases, the reason for women's silence is thus to be found in their linguistic inability along with shyness and lack of self-confidence²¹.

A number of additional reasons further explain the fact that Muslim female patients are not conversant with the Italian language, as voiced by cultural mediators, *a'immab*, and patients. First, the family's migratory project to Italy might be only a temporary one, therefore the spouses might not deem it essential to be familiar with the Italian language. For instance, some Muslim migrant informants declared: «We're leaving soon, we won't stay here. I want to go to England... We don't really need Italian», and «I am not fluent, I should but... my family is in France, I'll go there too. My French is better».

Secondly, learning a new language can be demanding and time consuming: good Muslim wives are customarily busy with housekeeping and childbearing related issues, therefore they might not have the time to attend language courses and to study²². Similarly, husbands undergoing fertility treatments often revealed that their own wives can rarely understand and speak the local language, despite the fact that they have been living in Italy for some time²³. MAP patients' narratives predominantly sketched out the following scenario: once reunited, their wives do not go to work, therefore the women spend most of their time alone, at home. These women might look for some company watching Arabic-speaking TV programmes and run-

²⁰ As also confirmed by some local religious figures.

²¹ On communication difficulties in patient-doctor relations and its implications in fertility treatments, see *infra*, sections under 4.1.

 $^{^{22}}$ One *imām* stated: «That's true: women don't talk... Well, my wife is like that... she's a good example. She came here years ago, we had a child straightaway, and then another one, and then another one... She has no time to go to school».

²³ In the cases examined, the number of years ranged from two to eight.

ning errands locally, with the help of some friends or in an Arabic-speaking neighbourhood²⁴.

Muslim cultural mediators provided similar explanations: to them, some migrant Muslim women «are happy to be taken good care of» by their own husbands. To put it differently, «They obey their husbands. They [the wives] have followed them here. Now, they [the husbands] have to do everything for them [the wives]», as reported by a female cultural mediator. Another stressed the fact that since local facilities, such as public hospitals, are required to provide someone acting as an interpreter, foreign-speaking (im)migrants may not feel compelled to learn the local language.

Linguistic inability and migration-related problems however should not be confused with family roles and gender dynamics grounded on cultures and traditions. Furthermore, recently settled Muslim men can face analogous language issues, as pinpointed by an *imām* who asserted:

Older generations were different... they were students. Newcomers, they are all workers: they don't have time to go to school. They speak a little... They will wait for their children to translate things for them.

Adopting this viewpoint, prospective parents undergoing fertility treatments may already have clear expectations for their not-yet-conceived offspring, more specifically they can project onto the still-to-be-conceived/born child their need to bridge the linguistic and cultural gap with local indigenous people²⁵.

As highlighted above, Muslim – men and women – can also voluntarily decide not to learn the local language of their settlement country, and/or to avoid personal interaction with clinic staff members. The reasons justifying this course of action are numerous. Nonetheless, the comportment reinforcing the stereotypical perception of the submissive Muslim wife is clearly perceived by local clinic staff members, as field-collected data indicated. An obstetrician, for instance, stated: «with these women, you clearly see this: they trust you and they rely on men, completely... He's the one who drives the action». A nurse similarly reported: «these women are not aware, not as [much as] the others... usually. They are obedient and submissive». Another one stated: «They're used to suffering in silence... They rarely complain about pain, even when the treatment hurts. They know they have to do that [i.e. MAR procedures]. Full stop». An embryologist further corroborated: «There's a sense of duty, a sense of obligation. To me, they say: "This is

²⁴ The head of a worship centre, for instance, declared: «To be honest with you, you don't really need it [i.e. to be fluent in the local language]. Look – you go shop[ping] at the supermarket: you just take things... Or you go to Porta Palazzo: everybody speaks Arabic there».

²⁵ As also underlined by an interviewed psychologist.

something that had happened to me. I lower my head and obey". It's like they have to do this»²⁶.

In point of fact, the reality is more fluid, variegated and complicated. In a migratory context, in particular, new vulnerabilities may indeed emerge beyond the stereotyped gendered oppression and inequality of Muslim women²⁷. A description of Muslim couples' power dynamics was provided by a biologist working in a public hospital when stating what follows:

To me, there are three types of Muslim women. 1% is in control; they gained the upper hand. In 10% of cases, you see a good chemistry; the couple is in sync. For the remainder of the patients... the husband controls both her and the situation.

According to this informant, when compared to non-Muslim patients, 89% of Muslim prospective partners referring to this publicly funded MAR clinic are part of an unbalanced relationship in terms of power and traditional patterns of *sharīʿah* compliant gender roles.

On the contrary, some medical doctors gave a detailed account of empowered Muslim women, who challenge traditional and stereotypical descriptions of «timid», «submissive», and «veiled» Muslim wives. Some women, whose country of origin is a Muslim majority country, may indeed opt for a less conservative, or even lay, lifestyle when settled in European countries. As a result, they can enter into sexual relationships, also with non-Muslim men, without being Islamically and/or legally married, and nonetheless manifesting their wish for offspring. Both public and private fertility clinics established in Torino are nowadays approached by these Muslim women, who are described by clinic staff as «independent and self-determining». When interviewed, the local healthcare providers outlined this phenomenon as a surprising experience, at least at the beginning of their career. By way of illustration, a gynaecologist recalled emancipated Muslim female patients as follows:

Upper middle-class Muslim women, maybe students, or daughters/wives of wealthy men, sometimes looked for fertility treatments. [...] To tell the truth, they were sexually active and free... They might have said they were virgins, but it wasn't true... sometimes they already terminated one or more unwanted pregnancies in Morocco or somewhere else... so, then they were having problems conceiving because of that. [...] You don't expect this, but it happened.

 $^{^{26}}$ Indeed, motherhood is a relevant stepping stone in the life of a Muslim woman. See infra, section 6.

²⁷ In real terms, recent studies also confirmed that masculinity can be problematized and denigrated in the case of Muslim migrant men. See for example K. Charsley, and A. Liversage, *Silenced Husbands: Muslim Marriage, Migration and Masculinity*, in «Men and Masculinities», 18, 4, 2015, pp. 489-508.

IVF physicians of local private clinics described analogous experiences with respect to the changes of intimate partners by Muslim prospective mothers approaching MAP centres. The extras reported below illustrate this point.

Muslim women are not all timid as we might think! That's just a stereotype – you see. For example, I saw the change of the husband three times for two of them... I mean, my patients. In said cases, one woman was Moroccan and the other one... was Egyptian,

I had few cases, two or three actually... where the [expected] role is flipped over. A woman came to us with a different man. To put it differently, the woman manifested her desire for motherhood with a different partner at different times. She was an Arab woman and it was out of the ordinary to us...

and

Any peculiarities? Yes: Muslim women change sexual partners more often than Europeans... In my experience, Muslim women change their partner frequently... more frequently, yes.

Building upon empirical evidence, it seems that the so-called «Muslim emancipated women» tended to approach private fertility clinics more than public ones; nonetheless, a similar episode was reported by some astonished nurses in a public hospital. They narrated:

There're women who change their own man in the meantime [while waiting to be called for SSN-funded fertility treatments]²⁸ ...and Muslims as well! That's how it works. They are put on the list; then, time to [get to the] visit and... they come with another one [partner]! So, we have to say: «Look, madam, this is not possible. You have to go back to the bottom [of the waiting list]... you have to do it all over again because the treatment is for the couple and, now, it had changed!». Of course, they moan; but that's the rule. [...] When it's Muslims, it's more frequent... and you don't expect that. Isn't it?

Remarkably, the sexual freedom of Muslim women was commonly perceived as signal of empowered status by clinic staff members. In real terms, local healthcare providers variously perceived and interacted with prospective Muslim parents undergoing fertility procedures. Ethnographic observations also indicated that local healthcare professionals gradually rethought their experiences with Muslim patients to eventually concur that «the» stereotypical Muslim patient does not exist.

On the contrary, specificities and needs of Muslim prospective parents are articulated in a variety of ways encompassing more complex dynam-

²⁸ For further clarification on the patients' waiting list, see *infra*, chapter V, section 8.

ics, which are linked not only to Islamic religious teaching and Muslim traditional customs, but also to partners' migratory projects and extended kindred's expectations. Accordingly, the next sections intend to explore whether *sharī'ah* compliant ARTs and MAPs can be actually offered locally.

3. Offering shariʿah compliant ARTs/MAPs

When adopting the perspective of Islamic law, some (potentially) problematic aspects emerged in the performance of *sharīʿah* compliant fertility treatments, as previously elucidated²⁹.

In particular, in local fertility clinics, the communication between staff members and Muslim patients can be greatly affected by certain factors. Muslims are indeed interdicted from regarding adoption as an alternative parenthood method, although this aspect should be mentioned by IVF physicians operating on Italian soil³⁰. Similarly, Muslim patients are variously affected by two Islamic prohibitions, namely the ban of heterologous MAR procedures amongst *Sunnī* Muslims, and the interdiction to undergo homologous fertility treatments for all unmarried Muslim couples³¹.

Additionally, the preference for a female (Muslim) medical doctor, and the need to postpone any non-urgent medical treatments scheduled during the month of ritual fasting can have an effect on the outcome of MAR therapies³². Furthermore, some MAP-related procedures – such as eugenics, pre-implantation diagnosis, pre-natal testing and cryopreservation of embryos – can be questioned by Muslim prospective parents³³.

Mirroring the expositive structure adopted in the previous chapter (sections under 3), (potentially) problematic aspects of medically assisted procreation and reproduction techniques are addressed in the following sections. The issues raised by religious figures during interviews are investigated here from the viewpoints of fertility clinic personnel and Muslim prospective parents undergoing ART/MAR treatments. The discussion thus unveils creative ways of coping with religious/customary needs, as skilfully elaborated by healthcare practitioners and Muslim patients.

- ²⁹ See *supra*, chapter III, sections 5-7.3.
- ³⁰ See *supra*, chapter II, section 2.
- ³¹ See *supra*, chapter III, sections 6.1-6.2 and 7.1.
- ³² See *supra*, chapter III, sections 7.2 and 7.3.1.
- ³³ See *supra*, chapter III, sections 7.3.2-7.3.4.

3.1. Muslim patient-doctor relationships

In the opinion of Islamic scholars, Muslim women should preferably approach female Muslim nurses and physicians³⁴. In real terms, the health-care professionals described this *sharīʿah* compliant necessity as being almost non-existent in the field of medically assisted procreation³⁵.

In order to disentangle and understand Muslims' conduct, a distinction should be made between public and private fertility clinics. In compliance with the data reported by the informants, Muslim prospective parents approaching private MAR centres embraced a sort of individualised, spiritualised or lay version of *Islām*, therefore a visit performed by a non-Muslim male physician is not perceived as problematic³⁶. As elucidated by a male physician: «Here it's only me who does the IVF procedure ...you can read it on the website. If you come here, you know».

Secondly, if issues are raised with respect to gender seclusion and female modesty, a medical appointment can be specifically scheduled with a female doctor. The head of a private MAP clinic explained:

Among specific requests put forward by Muslim patients, it's is increasingly rare that they ask for a female doctor. If they ask for that, and no female doctors are here during that day, then the appointment is rescheduled, as requested by the patients.

When the fertility centre is publicly funded, this issue is similarly not raised, or better not always voiced, in MAR clinics. As stated by one medical doctor: «They've waited so long that, once they're here, anything goes!»³⁷. In real terms, in some hospital units the majority of healthcare professionals are women, therefore «there's no issue».

Considering the Muslim patients' point of view, Muslim men frequently asserted that Islamic rules concerning separation of sexes become less stringent in Western environments; two patients for instance declared: «If he [male physician] is helping her, then that's fine», and «We are in a public hospital: what can we do here?». Nonetheless, when specifically asked about this matter, some Muslim prospective fathers expressed annoyance and dissatisfaction.

By way of illustration, a 28-year-old Moroccan man was deeply disappointed to the point of even doubting his willingness to proceed with the recently started ART therapy when he discovered the potential absence of female doctors in the clinic. In his words, «If there are only men [i.e. male doctors], then I don't know if we'll do this [fertility treatment]... that isn't right!». When

³⁴ See *supra*, chapter III, section 7.2.

³⁵ On the contrary, this happens in accident and emergency, as also confirmed by ethnographic observations.

³⁶ See *supra*, section 2.1; see also chapter III, section 4.1.

³⁷ On the length of patients' waiting list see *infra*, chapter V, section 8.

enquired whether his 21-year-old wife was similarly reluctant to be examined by a male physician to the point that she would have also abandoned the fertility procedure; without letting her reply, the prospective father declared: «Yes, yes... she agrees. Of course, she agrees!». A comparable case was reported by a young male physician, who asserted that, over a period of three years, only one Muslim pious patient (who formerly began an ART procedure) refused to undergo an ultrasound because no female medical doctors were available.

Muslim women's independence and autonomy can actually be limited by this course of action. Nonetheless, as pinpointed by Atighetchi, Muslim patients frequently require either verbal mediation or the presence of a (male) relative before a male (Muslim) medical doctor³⁸. From a Western perspective, this mediation may appear to be an offence against women's equality and dignity; however, Muslim families do not judge male mediation as an abuse of women's rights and independence. On the contrary, the intervention of (male) tutors protects female patients when adopting the Islamic viewpoint³⁹.

Apart from Islamic provisions and *de facto* isolated cases, it seems that one of the most critical elements in building a rapport with healthcare professionals is linked not only to gender dynamics and sex seclusion rules, but also to linguistic, cultural and religious matters. As an illustration, some cultural mediators highlighted that Muslim female patients «just trust you more because you're veiled», and «if they see you wearing the headscarf and they are veiled, then they think: "If that's what a veiled woman is telling me, that's true!". This happens a lot». Religious belonging therefore plays a key role in building a trust relationship between Muslim patients and healthcare professionals⁴⁰. To put it differently, language is only one of the barriers to be overcome, the others being religious and cultural. A cultural mediator further elaborated:

Sometimes, I just walk in the corridors [of the hospital], and Muslim women call me [...] They approach me and ask me some questions, where to go, and so on... sometimes, even to check their therapy. You see – you are veiled, you speak their language... you are a friend straightaway. As simple as that.

As voiced by female cultural mediators, although the ideal medical doctor is a female Muslim physician, when adopting the viewpoint of *sharīʿah*, a good patient-doctor relationship relies upon other elements. Independently from Islamic rulings and religiously-influenced bioethics, healthcare professionals

³⁸ D. Atighetchi, *Islamic perspectives on vulnerable groups*, in J. Tham, A. Garcia, and G. Miranda, *Religious Perspectives on Human Vulnerability in Bioethics*, Dordrecht, Springer, 2014, pp. 175-191, at pp. 179-180.

³⁹ See *supra*, sections 2.2 and 2.3.

⁴⁰ As corroborated by the declarations released by local religious figures and heads of worships centres, see *supra*, chapter III, section 7.2.

indeed identified a peculiar need and a constant behaviour amongst Muslim prospective parents approaching public or private fertility clinics in Torino.

As far as the specific need is concerned, although not always voiced, it appears that Muslim patients value healthcare continuity highly. In other words, an enduring and unchanging doctor-patient relationship is of pivotal importance, as illustrated by the head of an SSN-funded clinic:

To them – unlike Italian couples – to Muslims, fidelity is particularly important. [...] To be followed by the same doctor from the start to the end [of the MAR treatment], that's an emotive issue... That's also a matter of empathy and a language issue.

In real terms, linguistic (and sometimes also cultural) barriers exist between local medical staff and Muslim patients. As a result, the invariability of the healthcare provider would be preferable in order to improve the communication and reciprocal understanding between doctors and foreign patients. Nonetheless, this goal of continuity cannot be achieved in public centres where a high number of medical staff members rotate through different healthcare units. Cultural mediators can thus facilitate the communication process between different physicians and Muslim spouses undergoing MAP procedures⁴¹.

It should also be mentioned that the preference for avoiding healthcare discontinuity was regularly expressed by the Muslim patients when interviewed. Rather than asking for clinical continuity with the same physicians, Muslim women frequently lamented changes in the clinical staff appointed to provide their medical treatments. A Muslim woman for instance declared: «They [physicians] always change... they're always different people, here! And they don't explain [to] you what's going on». Her husband added: «You see, she is like that: she needs to know, she needs to understand why this isn't working... They aren't telling her – she said – so she's very disappointed with the service here provided».

In addition to the above-mentioned specific need, local healthcare professionals described a recurrent behaviour amid their Muslim patients; unlike other prospective parents, Muslims showed the tendency to completely trust IVF physicians. When asked about Muslim patients, for instance, a young member of the fertility clinical staff stated: «Oh... they completely rely on you!». One medical doctor asserted: «One [Muslim patient] told me once: "God does the miracle, but a good doctor helps!"». The head of a private fertility clinic further elaborated:

I helped a Muslim woman to have a child, she had a daughter actually... It happened many years ago, it was [during] the 1980s. [...] Anyway, she still feels she owes me a debt of gratitude – a special debt of gratitude, actually. She has brought me young patients, mostly from Morocco and Libya. [...] She has been helping me with translations... and so on.

⁴¹ See *infra*, section. 4.1.1.

This characteristic in the interpersonal patient-doctor relations was explained differently by research informants. To some, the complete trust that is placed in the medical doctor by Muslim patients is determined by the idea of medicine and science in the Islamic world. As asserted by the head of a fertility clinic,

The general attitude is to trust the [medical] doctor. They do what the medical doctor tells them to do. Doctors represent science also in *Islām*, so they... So, Muslims, who are willing to have children, they trust you. We can say that they are very pragmatic in their simplicity.

Other fertility clinic staff members suggested a different rationale. According to them, the fact that Muslim patients depend on local healthcare providers with full trust is to be explained as a lack of knowledge and familiarity with (*sharīʿah* compliant) MAR methods. One biologist stated: «They don't ask many questions... they haven't surfed the web and don't have many objections... They raise less or even no questions at all». Analogously, one clinician asserted: «They read less than Italians. They are less well informed – we can say that. So they don't question you and what you do, usually».

According to this viewpoint, Muslim patients do not access many lay and/or religious sources dealing with ART treatments, therefore almost no concerns are voiced with respect to fertility methods, and MAP procedures are less questioned as well as the medical doctors' expertise. As a result, echoing the words chosen by an interviewee, it can be inferred that Muslim prospective parents undergoing fertility treatments in local MAR centres place full trust and completely rely upon healthcare professionals⁴².

When adopting the perspective of local religious figures, however, the perceived Muslim patients' absolute trust in ART procedures is to be placed not in the fertility clinic staff, but rather in God⁴³. Muslims are indeed thought to faithfully embrace divine planning whatever this might imply. From this pre-deterministic viewpoint, the decisive importance of personal fate in moulding individual destiny is thus to be read as the reason supporting the clearly perceived, and almost unanimously reported, identity marker characterising Muslim patients undergoing fertility procedures.

Notwithstanding this widespread (and trustful) acceptance of medical competence, Muslim patient-doctor relationships might be affected by unease or awkwardness. In particular, some physicians expressed discomfort and uneasiness when dealing with some conservative Muslim patients. Mistrust and suspicion towards stereotyped Muslim prospective parents were reported by some healthcare providers as an old phenomenon, a local attitude that had

⁴² In Italian language, she declared: «I musulmani si fidano e si affidano completamente».

⁴³ See *supra*, chapter III, section 4.1.

characterised some doctor-patient relations in the past, but that soon became locally anachronistic. Although times have changed, some sort of religious/ cultural prejudice is nonetheless felt and openly voiced by some members of MAR clinics in Torino. By way of illustration, a physician stated:

When I heard about this and that... I listen to the news... you know, sometimes, I think: but, do I have to help those [Muslim patients] in conceiving children and then... to know the world will be theirs!? They say that with the wombs of their women they'll conquer the entire world, isn't it?! And yet, I do this. I'm a doctor, at the end of the day. [...] Do you know what's worse? If the procedure goes wrong, they say it's my fault; if it goes well, it's God who intended this to be done...

This interviewee expressed his frustration and fear when facing the growth of local Muslim population as well as the exponential increase of Muslim patients. Although, the doctor's duty of care was never questioned, this statement disclosed uneasiness in coping with an increasingly culturally and religiously diverse population receiving medical treatments locally.

Paraphrasing Allievi, whereas plurality was regarded as a pathology, now it is becoming physiology in the European social landscape⁴⁴. The increasing presence of Muslim population might nonetheless lead to Islamophobic attitudes, including the so-called «racialisation» of Muslims⁴⁵. Accordingly, mentioned issues are to be tackled as a matter of urgency as quantitative data analysis indicate a constant and incessant growth of Muslim patients accessing fertility centres in Torino⁴⁶.

3.2. Specific demands during ramadhān

As far Muslim patients' distinct demands to be met during *ramadhān*, two main issues emerged. The first one regards fertility treatments during the month of ritual fasting, the second one concerns pregnant (to be) women.

Ethnographic observations conducted during *ramadhān* and clinical staff's interviews disclosed that Muslim patients tend not to raise this issue: either

⁴⁵ See for instance C. Ogan et al., The rise of anti-Muslim prejudice: Media and Islamophobia in Europe and the United States, in «International Communication Gazette», 76, 1, 2014, pp. 27-46; S. Garner, and S. Selod, The Racialization of Muslims: Empirical Studies of Islamophobia, in «Critical Sociology», 41, 1, 2015, pp. 9-19.

⁴⁶ On this, see *supra*, chapter I, section 5. See also *infra*, chapter V, sections 2 and 8 with respect to the figure of Muslim patients undergoing fertility treatments in clinics established in Torino.

⁴⁴ S. Allievi, *Reactive identities and Islamophobia: Muslim minorities and the challenge of religious pluralism in Europe*, in «Philosophy and Social Criticism», 38, 4-5, 2012, pp. 379-387.

they ask to reschedule the medical appointment⁴⁷, or they attend the medical appointment and proceed with the MAR therapy nonetheless. A patient, for instance, declared: «We cannot eat during *ramadhān*, so we interrupted the hormonal stimulation and started again later. No problem with that». Local healthcare providers however agreed in reporting that the appointment postponement is very rarely requested. A physician, for instance, asserted:

It's not a problem: either the issue is not raised, or we change plans to agree with them another suitable date. We have a very short waiting list, so we can easily do that.

In real terms, relying upon field-collected data, a pattern can be identified in the conduct of Muslim patients. When undergoing a fertility procedure in private clinics, then the medical appointment is already booked during a time of the year that does not coincide with the Islamic holy month of fasting. In the case of SSN-funded or public MAP centres, the patients' waiting list is usually longer therefore, once called, Muslim prospective parents can decide whether to attend the medical examination and start the procedure nonetheless, or they can ask to reschedule their doctor's appointment⁴⁸.

With regard to the latter, an interesting fact surfaced. Muslim patients rarely mention *ramadhān* as the reason for the postponement of their formerly scheduled medical appointment. When discussing this matter with administrative and clinic staff, a problem emerged: if the appointment postponement is actually not justified by the patient, then the medical examination may be affected by a significant delay. A nurse, for instance, declared:

Actually, now that you mention and think about it... Today, I called a few [prospective patients] and both told me to postpone [the appointment] because of a trip... Want to see that this is the reason why [the asked to postpone]? They didn't mention *ramadhān* though... Well, now that I know, I'll call them back and I'll tell them that – if this is the true reason for the delay – then I'll give them an appointment without putting them at the bottom of the list, again...

As a result of this study, indeed, some healthcare professionals decided to verify whether the patients' request of appointment postponement was due to religious reasons, in order to better accommodate Muslim prospective parents.

The second problematic aspect specifically linked to *ramadhān* concerns women who fast, despite undergoing a MAR therapy or being already preg-

⁴⁷ As recommended by local *a'immab*. See *supra*, chapter III, section 7.3.1 and *infra*, chapter V, section 8.

⁴⁸ For further discussion on patients' waiting list in fertility clinics, see *infra*, chapter V, section 8.

nant⁴⁹. In real terms, Islamic law prescribes exemption from fasting in these specific situations⁵⁰; nonetheless, local Muslims communities might not be aware of these provisions. As stated by the head of a local worship centre:

This happens because they don't know the religion... They try to do right, but they do wrong. Diabetics say that they're well and they do that [the ritual fasting]. It happens in our own countries too... you see elderly who can't walk straight... 'cos, to them, if they don't do it, then, it's a sin; instead it's a sin if they do it! A pregnant woman can't do it... The mosque has to explain this, not the Italian doctor! That's also the problem: they don't believe the Italian doctor; they trust a Muslim more...

In order to solve this issue, given the lack of Muslim medical doctors in Italian hospitals and to avoid failing to cater for the needs of Muslim patients, some religious figures recommended local hospitals to employ an *imām*. The head of a worship centre in Torino, for instance, declared:

It's needed, it's needed, it's definitely needed. It's needed also to guide... many people. For example, a guy told me: «There's no female nurse!». So, you need an *imām* who takes responsibility 'cos people [who] go there [to the hospital] are uneducated... maybe they heard someone saying: «A man can't touch a woman!». And so, they don't want to be examined... but they don't know *Islām* cares for human life. ...it's time hospitals have someone!

On the contrary, another local *imām* firmly asserted that there is no need for local hospitals to appoint Muslim representatives or religious figures since «there are plenty of them in the city, people just don't come to the mosque very often, so they don't know what to do». In other words, local Muslim prospective patients undergoing ART/MAR cycles might not be familiar with Islamic law and *sharī'ah* compliant conduct, but this matter is not to be addressed by healthcare centres. Muslim women's well-being, or the positive outcome of a fertility treatment, may however be endangered by some traditional practices and rituals the patients undertook believing that they were abiding by Islamic teaching⁵¹.

3.3. Cryopreservation of embryos, eugenics, and pre-natal testing

As formerly elucidated, some potential MAP-related procedures and pregnancy complications can give rise to controversy in case of Muslim pa-

⁴⁹ This conduct was indeed lamented a by a consistent number of physicians in public hospitals.

⁵⁰ See *supra*, chapter III, section 7.3.1.

⁵¹ See *infra*, sections 4.2.2 and 6.

tients⁵². When enquired about ART/MAR treatments undergone by prospective Muslim parents, the clinic staff usually referred to eugenics, therapeutic abortion, and embryos' cryopreservation. Whereas the former two are contentious topics, the cryopreservation of female/male gametes and embryos was presented as non-problematic matter by local healthcare providers offering ART and MAP. By way of illustration, a biologist eloquently explained:

The point is that the embryos are the couple's life plan, whereas these are just embryos to us. So, these are the problematic aspects [...] At any rate, they [the patients] usually sign all the paperwork. [...] About 90% of the time, no issue is raised as far as the cryopreservation of embryos is concerned... by any patients, whatever their religion. The number of people objecting to this is very very low... about two a year. And the percentage for Muslims and non-Muslims is the same.

From this perspective, then, Muslim patients undergoing fertility procedures locally do not raise any specific issues linked to religious ethics and morals. As previously clarified, however, Islamic law carefully regulates cryopreserved fertilised ova and frozen embryos on the ground that their usage might imply social and familial disorder⁵³. It can thus be inferred that, in real life situations, Muslim intended parents undergoing ART/MAR procedures do not declare that they are willing to be abide by Islamic provisions on cryopreserved gametes and embryos once the ART procedure has started⁵⁴.

On the contrary, abortion usually raises contentious issues⁵⁵. Problematic situations can however be prevented through pre-implantation diagnosis, an Islamically compliant practice that is now permitted on Italian soil⁵⁶. Regret-tably, however, pre-implantation diagnosis and screening techniques (PGD and PGS) are not available in Torino. The fertility clinics taking part in this study might thus refer patients pursuing ART/MAP procedures to other clinics located in different Italian regions⁵⁷. As a result, patients may mistake pre-implantation diagnosis for eugenics, and couples undergoing ART/MAR procedures in Torino can then make recourse to pre-natal genetic testing, although this might entail therapeutic abortions.

⁵² See *supra*, chapter III, sections 7.3.2-7.3.4.

⁵³ See *supra*, chapter III, section 7.3.4.

⁵⁴ For quantitative data on MAR procedures locally undergone by Muslim patients, see *infra*, chapter V, section 5. A broader analysis on Italian data can be found in chapter II, section 5.

⁵⁵ First of all, induced abortion must be performed within the ninety day limit stated by Italian law, attention cannot be paid to Islamic guidelines on the breathing of the soul in the embryo/foetus. The Italian limit for therapeutic abortion can however be extended, as clarified *supra*, in chapter III, section 7.3.3.

⁵⁶ See *supra*, chapter II, sections 2 and 4; chapter III, sections 7.3.2 and 7.3.3.

⁵⁷ Details on local MAP centres can be found *supra*, in chapter II, section 6.

With respect to the former issue, some interviewees elucidated that preimplantation diagnosis is frequently mistaken for eugenics by both Muslim and non-Muslim patients. A medical doctor clarified that

[...] sometimes patients ask for sex selection, yes. This usually happens when they are affected by genetic diseases in the family – such as haemophilia. There's nothing wrong, in my opinion. [...] And that would be very easy to do: you do the biopsy of a blastomere and decide what to do... After all, who'll find that out?!

To the heads of two private MAP clinics, nonetheless, «this is a blameworthy falsification» or «sex selection is mostly a joke». In real terms, ethnographic investigations disclose that at least one Muslim couple underwent ART procedures in a fertility clinic established in a public hospital with the declared purpose of conceiving male offspring⁵⁸. The case reported involved a Muslim endogamous Egyptian couple. When attending medical examinations, the partners explained to the IVF physician that they were not affected by infertility; on the contrary, they had previously conceived three daughters naturally, therefore they were now looking for medical assistance in conceiving a male heir. As formerly discussed, some Islamic clerics do not prohibit sex selection; nonetheless, this practice is not permitted on Italian soil⁵⁹. Through the assistance of a cultural mediator, IVF physicians explained these rules to the Muslim couple who was described as being severely disappointed for having waited eleven months to get an appointment and eventually being denied help in conceiving a son60. In Islām, indeed, embryo/foetal sex selection can be approved to protect women's well-being particularly when it is in the family's best interest to avoid several subsequent pregnancies caused by the couple's desire for male or female offspring.

When investigating locally offered potential *shari* ah compliant fertility treatments, ethnographic observations disclose the importance of pre-natal genetic testing, more specifically in the lack of locally offered pre-implantation diagnosis (PGD) and pre-implantation genetic screening (PGS). Nonetheless, the outcome of this examination might imply that physicians recommend therapeutic abortions, for instance, in case of multi-foetal pregnancies or sex-chromosome abnormalities⁶¹. Examining some real-life situations faced by Muslim prospective parents undergoing fertility treatments in Torino, the following

⁵⁸ The case was reported by numerous members of administrative and clinic staff of mentioned clinic as well as cultural mediators. Additionally, the couple's data were reported amid the quantitative information collected and examined by the author. See also chapter I and V.

⁵⁹ See *supra*, chapter III, section 7.3.2.

⁶⁰ With regard to the length of waiting list in public hospitals see *infra*, chapter V, section 8.

⁶¹ On MAR and multi-foetal pregnancies see *supra*, chapter III, section 7.3.3, on sex chromosome anomalies among pregnancies resulting from ICSI, see for instance V.A. Kushnir, and J.L. Frattarelli, *Aneuploidy in abortuses following IVF and ICSI*, in «Journal of Assisted Reproduction and Genetics», 26, 2-3, March 2009, pp. 93-97.

paragraphs intend to unveil the mind-sets of Muslim patients and clinic staff when coping with potential induced abortions and pregnancy complications.

The first case concerns a multi-foetal pregnancy. A Moroccan Muslim woman successfully underwent a MAR procedure and two embryos were implanted into her uterus. One of the implanted embryos split into twins and, as a result, she was expecting triplets. When undergoing pre-natal genetic testing, one of the monozygotic twins was regrettably diagnosed with Down syndrome. Therefore, the couple faced a difficult decision: either to abort both monozygotic twins, or to undergo amniocentesis although risking triplets' miscarriage. The husband favoured the first option, whereas the wife was reticent in undertaking both induced abortion and any other medical examinations⁶². Similar diagnoses, in effect, force couples to confront difficult and emotional decisions affecting the personal and familiar spheres⁶³.

Adopting an Islamic viewpoint, some unspoken issues can further explain the reasons supporting and surrounding the reactions of the intended father and mother. First of all, pious Muslims are required to pray for intercession and faithfully embrace their own destiny⁶⁴. Secondly, therapeutic abortion is not permitted once the soul has been breathed by God into a physically deformed embryo or foetus; however, the limit ranges from forty to one hundred and twenty days⁶⁵. The prospective mother was indeed keen to wait longer, although Italian law prescribes ninety days as the maximum limit for voluntary termination of pregnancy, unless a therapeutic abortion becomes necessary. On the contrary, her husband was probably relying upon the fact that in *Islām* abortion is permitted in multi-foetal pregnancies in case of maternal complications⁶⁶.

In the second case, a pre-natal genetic test revealed foetal chromosome abnormalities. Originally diagnosed as a foetus affected by chromosomal abnormality (i.e. an extra copy of chromosome 21), the unborn female child of a Muslim prospective mother was eventually diagnosed with a less severe genetic condition.

⁶² As reported by the obstetrician: «Honestly, it was heart-breaking! He was saying: "Abort the twins so that we have at least one [child]!". And she was replying: "But they're all mine! What if they're wrong? I can't just throw them away...". Very sad, indeed».

⁶³ With regard to psychological issues linked to entering MAR procedures, see *inter alia* M. Bydlowski, *Les enfants du désir*, Paris, Editions Odile Jacob, 2008; E. Quagliata (Ed.), *Essere genitori*, Roma, Astrolabio, 2010; P.L. Righetti (Ed.), *Gravidanza e contesti psicopatologici. Dalla teoria agli strumenti di intervento*, Milano, Franco Angeli, 2010; M. Vigneri, *I bambini che vengono dal freddo. Sulla donna infertile e le nuove frontiere procreative*, in «Rivista di Psicoanalisi», LVII, January-March 2011, pp. 655-670; as recommended by a psychologist working in a fertility clinic.

⁶⁴ See *supra*, chapter III, section 4.1.

⁶⁵ See *supra*, chapter III, section 7.3.3.

⁶⁶ Ibidem.

The woman was civilly and religiously married to a Muslim man⁶⁷, who was not attending the medical appointments with her; she was however benefitting from the support of a cultural mediator⁶⁸. The author was allowed to attend the pre-natal screening examination with the two women. Once completed, this Arabic-only speaking prospective mother explained to the doctor that, she agreed not to proceed with induced abortion. Provided her daughter will «not look different», and therefore be bullied or ostracised by other children, then she would be fine with her genetic condition and her husband would also accept that.

As far as the medically prospected infertility of the conceived daughter, the Muslim mother asserted that «it means she will marry and then she will divorce. Now, we already know that. So that's fine». An Islamically compliant acceptance of God's plans was therefore immediately voiced by the prospective Muslim mother, whilst already foreseeing for her unborn daughter the potential recourse to a *sharīʿah* compliant formula to involuntary child-lessness (namely divorce)⁶⁹. To put it differently, although currently undergoing fertility procedures to conceive a child, the intended mother regarded as favourable an Islamically compliant remedy to infertility for her unborn potentially sterile daughter. In point of fact, in the case of sterility, her genetically affected daughter would need to pursue heterologous fertility treatments involving donors and/or surrogacy, and this alternative route to parenting is problematic for *Sunnī* Muslims.

Paraphrasing Galst and Verp⁷⁰, it can thus be said that in both cases Muslim intended mothers and fathers were balancing Italian and Islamic provisions whilst coping with the difficult burden of choice resulting from the outcome of pre-natal testing.

4. Emerging needs and issues

In addition to the expected difficulties in accommodating some *shari'ah* compliant ARTs and MAPs, the empirical investigations and ethnographic observations conducted by the author revealed unexpected scenarios with regard to Muslim prospective parents undergoing fertility treatments. In particular, three main aspects surfaced.

First of all, the social and legal necessity to cater for the needs of Muslim patients who are not fluent in, or familiar with, Italian language emerged. Ad-

⁶⁷ See *supra*, chapter III, section 7.1.

⁶⁸ On cultural and linguist barriers see *supra*, sections 2.3 and *infra*, section 4.1.

⁶⁹ For further details, see *supra*, chapter III, sections 4.1 and 4.2.

⁷⁰ See J.P. Galst, and M.S. Verp (Eds.), *Prenatal and Preimplantation Diagnosis: The Burden of Choice*, Dordrecht, Springer, 2015.

ditionally, MAR treatment-related issues came into view; some of these regard customary habits, such as traditional remedies to childlessness and consanguineous spouses. Additional emerging issues were linked to the predominantly migratory attitude of local Muslim patients. The following subsections specifically address these emerging Muslim patients' needs and issues.

4.1. Communication difficulties

Doctor-patient communication difficulties emerged during the interviewees carried out by the author, predominantly as voiced by healthcare personnel, cultural mediators, Muslim patients, and religious figures⁷¹. In real terms, lack of linguistic skills and conversational fluency in Italian language greatly affects the MAR treatments provided in local fertility clinics. Migrant Muslim women, in particular, are affected by linguistic difficulties and this *de facto* implies poor interaction with physicians. A considerable number of clinic staff members, actually, lamented arduous communication with recently settled migrant patients, independently from their religious belonging. In the case of Muslim women, however, the linguistic barrier adds up to a potentially severe social distance and very poor patient-doctor relationships. The greater part of the interviewed healthcare providers stated that, with regard to Muslim patients, the language barrier imposes a «constant challenge to the therapy», therefore «it is a major obstacle in fertility treatments», in addition to culturally and religiously specific matters⁷².

A basic distinction should nevertheless be drawn between private and public MAP clinics. As elucidated by the heads of some fertility centres, the patients' subset tends to be dissimilar⁷³. Accordingly, prospective parents approaching private clinics are normally fluent in the local language or another European language (such as French or English). If the patients do not have sufficient linguistic skills, they habitually attend their medical appointments with an interpreter who may be a family member, a friend, or a professional translator formerly appointed by the couple. In a few cases, IVF physicians reported that they had relied upon friends or employees to provide a translation for foreign Arabic-speaking patients⁷⁴. As time passed, the patient's inability to understand and/or communicate gradually become less evident in local private clinics.

 74 This was corroborated also by the statements released by the head of some local worship centres.

⁷¹ On Muslim patient-doctor relationships, see *supra*, section 3.1.

⁷² On these aspects, see *supra*, sections 2.2, 2.3 and 3.1.

⁷³ See *supra*, sections under 2.

The reported narrative is different with respect to public and SSNfunded fertility clinics whose (foreign) patients are seldom fluent in Italian language. It should be mentioned that cultural mediators are to be named amongst fertility clinic staff members in public healthcare facilities, and they are expected to cater for the needs of foreign patients. The number of hours they provide nonetheless appears to be insufficient when compared to the figure of patients actually needing this translation and mediation service. A broad range of remedies has thus been elaborated by both patients and clinic staff, as disclosed by empirical investigations.

4.1.1. Creative communication channels

On the one hand, healthcare professionals habitually try to find a channel of communication with their (foreign) Muslim patients. As confirmed by ethnographic observations, when the patients were not fluent in Italian language, at first medical doctors relied upon other European languages to communicate with their patients (e.g. Pakistani patients may favour English, Moroccan patients may be fluent in French). The head of an SSN-funded clinic for instance explained:

If Italian does not work, then... our physicians can speak English and French. Muslims from Maghreb usually speak French. People from Central Africa are fine with English, so... it's all right. Of course, it's up to [the patients'] social and cultural status...

When other European languages were not a feasible solution, then healthcare professionals tried to communicate with hand gestures and drawings. Naturally, communication over the phone became impossible with these patients, as clarified by the extras reported below.

What can I tell you? I'll try everything! I'll use my hands to talk, I make diagrams and drawings, I write using capital block letters... When I see that there's no way, then I call the office to book the [cultural] mediator... the point is... I'm a specialist in men's sexual diseases and the Arabic-speaking [cultural] mediator in the hospital is a woman, so...

I use simple words... When compared to other patients – those who do not have the same problem in taking and understanding – I spend a longer amount of time with them. That's all I can do...

and

In a nutshell, we try to work something out... the worst? The worst is over the phone, though. That can be a nightmare. How am I supposed to get it over... and to understand them?

In some cases, if the parties agree, another Arabic-speaking patient can provide translations; this practice was nonetheless strongly disapproved and indicated as faulty by a significant number of Arabic/Urdu/Bengali-speaking Muslim informants. As reported by a cultural mediator

You won't believe this. Once, I was at the hospital, I was working... and I saw this happening. The doctor, he couldn't talk to a patient. They couldn't understand each other. So, he asked the husband of another patient [the Muslim female patient was sharing the room, in the hospital, with another woman] to translate for them... Can you imagine? To our religion, having another man knowing about your intimate body parts is... that is not acceptable!

To avoid infringing patients' privacy and to avoid culturally and religiously insensitive approaches, an appointment with the cultural mediator is generally booked by the clinic staff when a fruitful doctor-patient communication and dialogue cannot be established. In the absence of an immediately available cultural mediator, when present, the husband usually acts as an interpreter. Although widely reported by clinic staff members and approved by local religious figures⁷⁵; this practice was nevertheless highly criticised by cultural mediators. A young female Muslim cultural mediator, for instance, clarified what follows:

To me, if the woman does not understand, I cannot go on... The greater part of men – provided they understand – either don't tell everything [to their wives] because they have their own ideas... and that's fine by them; or they... sometimes, they say: «Yes, yes: I understood». But – as happened to me, several times – once I tell them: «You understood, right?! So, please tell me what you understood». Then, they tell you something quite far form that... And that only means that they did not understand! In respect of the woman, in this case, she has the right to comprehend and understand – to me.

The female cultural mediators highlighted that some Muslim women actually undergo fertility procedures with no understanding of the therapy and the (potential) risks of MAR treatments. This violates not only Italian provisions on ART patients' informed consent⁷⁶, but also their rights and dignity as human beings. Additionally, this approach reinforces the power imbalance within the couple⁷⁷.

In real terms, fieldwork observations confirmed that the translation offered by the husband is generally far from simultaneous interpreting and, at best, it offers a brief summary of the main topics. As a result, prospective Muslim mothers may not comprehend the phases of MAP methods and

⁷⁵ See *supra*, sections 2.2, 2.3 and 3.1.

⁷⁶ See *supra*, chapter II, section 2.

⁷⁷ See *supra*, sections 2.2 and 2.3.

thus not give a full informed consent when entering into fertility procedure. Additionally, dosing of medicines and drug administration can be mistaken, and this considerably affects both woman's health and the positive outcome of fertility treatments. Some physicians stated:

It's a pity because the therapy is expensive and if they do it wrong it's wasted!

and

Sometimes, you see that they don't know what they're doing. So, maybe she missed a dose of drugs or she took more. [...] Well, she risks a bit if she's injecting the whole hormone shot. They better get it right!

When adopting the Muslims' viewpoint, these dynamics can be further clarified by the personal experience of two patients undergoing fertility procedures in a public fertility clinic. Mentioned Muslim prospective parents were both fluent in the Italian language having studied another Romance language (French) up to bachelor degree at university; nonetheless, they did not understand the drug administration procedure at first. As a result, when the woman began the hormone-stimulation cycle, the treatment did not produce the expected results. Eventually, physicians discovered that the husband had injected the right hormonal dose into the wrong part of his wife's body⁷⁸; accordingly, the couple's medical treatment was temporarily interrupted and restarted soon after.

In order to cope with complications associated to poor patient-doctor communication, six years ago, a fertility clinic established in a public hospital began to provide informed consent forms in Arabic language. Despite being a very laudable initiative, this proved not to be enough to deal effectively with language barriers in the case of Arabic-speaking Muslim patients. In real terms, prospective patients may sign the forms without reading the documents provided. In the words of the head of the centre: «Even if the form is in Arabic, they hardly ever read what they are about to sign – at least, that's my impression».

Additionally, some patients – more specifically recently settled Muslim women – are illiterate; they can speak dialects, but they cannot read classical Arabic. In these scenarios, the patients' consent to undergo any MAR procedure is not «informed» and therefore vitiated. In other situations, the Muslim couple is ready to subscribe to any conditions, provided they can conceive a child⁷⁹. By way of illustration, a well-educated Tunisian man de-

 $^{^{78}}$ The woman explained: «He did it in my leg instead of my belly. Now we know what to do!».

⁷⁹ On this see *infra*, section 6.

clared: «To be honest with you, I signed without reading it [the consent form], and I think she did the same... After all, it's a child we are looking for, now! So...».

4.1.2. Within the community, for the community

Facing the poor doctor-patient communication and linguistic barriers described above, the research subjects suggested various countermeasures and remedies. Religious figures for instance advised Muslim women to ask for cultural mediators. When cultural mediators are unavailable in the fertility centre, or this professional figure does not represent the partners' first choice, then Muslim women should refer to local worship centres in order to «look for a sister, who could help them to get through the process». The head of a local worship centre asserted:

[...] some mosques offer this [service]: they assist women... when a woman is in need, she finds a sister – a Muslim woman – who accompanies her, who helps her. They do that, yes. [...] But these are intimate subjects and we don't want that, we don't want anyone to know... So, someone is happy to go and see someone in the community; someone favours an outsider.

After a conversation with the author, an *imām* in Torino declared that he would take action with respect to this problem in order to provide assistance in healthcare matters to the local Muslim community. In his words,

I didn't know this need existed [...]. I'll see what we can do, what our young people can do... I'd recommend setting up a group of volunteers in the mosque. If anyone needs them, then they're there to assist and help.

Naturally, this process of providing help *within* the community *for* the community can be complex. In fact, another local *imām* explained the difficulties he had faced in creating a functioning support group for female patients.

We tried: we set up a group, but it didn't work, to be honest with you... You see – women are lazy; they are very busy with families, children, housekeeping... and they forget. If you ask them, then they go... and they are happy to do that; but they have to get them involved.

Apart from practical difficulties, language assistance offered by the local community is opposed by Muslim women; for the most part by cultural mediators and Muslim female patients, as field-collected data disclosed. The cultural mediators interviewed routinely expressed relatively unfavourable opinions of translations provided by family members and friends of patients. Having no expertise in simultaneous translation and specific language knowledge, numerous mistakes were indeed to be found. Cultural mediators emphasised that «sometimes, the doctor said something and the friend said something else»; accordingly, «the risk of providing incorrect information is high because they don't understand». The main reason for this miscommunication is to be found in translations provided by untrained people⁸⁰; to put it differently, «sometimes they don't understand that it isn't simply Italian language, it's Italian *medical* language – and it's quite different! – so they don't do it properly».

Additionally, some Muslim women do not feel comfortable when relying upon the translation provided by members of the local community. Some prospective mothers may also be afraid that their friends might disclose their secret or even influence the couple's regarding the undergone MAR procedures⁸¹. The experience narrated by a young Moroccan Muslim woman elucidated these dynamics.

The first time, I came with a friend... to help me with Italian – as I don't speak much. [...] Then, she told me she heard that somewhere they [i.e. the IVF physicians] made a mistake, so she was yelling at me: «You have to tell this to your husband! You must tell him!». She didn't want me to go ahead with this [fertility treatment] because they [i.e. the IVF physicians] had used some «stuff of another man» – she heard that. [...] So, I decided now I come by myself. Now, I am not coming with anyone telling me what to do and what not to do.

Undergoing a fertility treatment can thus be also perceived as a sort of «empowerment exercise» by some migrant Muslim women. Not only they will change their social status when becoming mothers, but they will familiarise themselves with a different language and a new environment to which they are not yet accustomed. The journey towards motherhood is thus transformed into a tool used by some Muslim patients in becoming more confident and in controlling their life in their new settlement country.

With regard to Arabic-Italian translations provided by local community's members, cultural mediators recalled episodes similar to the one reported above. To them, involving Muslim women as interpreters in local clinics offering ART/MAP might even lead to rumours that could potentially damage the intended Muslim mother. This happens since foreign Muslim women are «quite confused on these [fertility] techniques» and «do not really understand what the fertility treatment is about» A cultural mediator further corroborated:

⁸⁰ For further discussion, see *inter alia* I.E.T. de Souza, *Intercultural Mediation in Healthcare: From the Professional Medical Interpreters' Perspective*, Bloomington, Xilibris, 2016; H. Tonkin, and F.M. Esposito (Eds.), *The Translator as Mediator of Cultures*, Amsterdam, John Benjamins Publishing Company, 2010.

⁸¹ See *infra*, section 5.2.

Muslim patients and Italian healthcare professionals

Some of them were raised in rather traditional families, so – you know – they don't know much about human reproduction. [...] They want a child and are ready to do whatever it takes but, in most of the cases, they don't know what they are doing, how it works, etc. ... and men too, they're even worse! They might speak the [Italian] language, but these [ART] procedures are a mystery to them.

Miscommunications, misunderstandings and on-going cultural adjustments are thus to be named amid the most recurrent hardships faced by recently settled (im)migrant Muslim prospective parents undergoing fertility procedures.

4.1.3. Fertility treatment suspension

Being familiar with unpleasant situations and also with clinical emergencies, some healthcare providers embrace a more rigid approach. Amongst healthcare professionals, in effect, there were those who recommended suspending fertility procedures when the doctor-patient relationship is affected by high language barriers. One physician, for instance, asserted:

Due to patient's protection, I cannot prescribe a therapy that they can't master... even if there is the [cultural] mediator, she's attending the medical appointment, but she isn't at home with the patient. ...what if she hasn't understood?... if she doesn't remember the therapy? What if she injects the whole hormonal dose (900 mg) at once?! Therefore, to protect a patient who hasn't enough knowledge of the [local] language, then we say that we cannot proceed if there are language issues. At any rate, this hardly ever happens as they usually come with someone who is fluent in Italian and accompanies them during all medical appointments.

Some local healthcare professionals were thus inclined to offer the requested fertility treatment provided a person close to the foreign patients can cater for their linguistic needs. If no person – apart from a hospital cultural mediator – can facilitate the patients' communications with the clinic staff, then medical doctors should refrain from providing any MAR procedures. When reported to heads of Islamic associations and local worship centres, this position was strongly criticised. Some of the released statements deserve specific attention and are therefore reported below.

There must be patience... patience of the doctor. If there's no [cultural] mediator or anyone accompanying, then, he [the physician] should be «human»... and there are many doctors who find a cultural mediator themselves... even via telephone!

I understand his [the doctor's] responsibility, but - for God's sake! - I don't believe that the one in front of him - if he cannot read or write - it's not like he

can't understand what [e.g. medications] to take or not to take... a doctor shall do his own duty: to treat those in front of him...

and

It would be an incomprehensible attitude from the perspective of integration and inconceivable in compliance with the rules of medical ethics.

On that account, religious figures openly disapproved this approach voiced by some healthcare providers, whilst describing it as highly undesirable.

In the attempt to overcome numerous obstacles, a compromise is thus to be found in order to accommodate Muslim religiously and culturally specific needs and, at the same time, cope with clinic protocols and medical responsibilities. In everyday practice, a solution was suggested by the head of a national Islamic association as illustrated below.

Parties shall enter into a process of knowledge acquisition, a reciprocal learning process... Knowledge is to be gained by Western institutions, but the process of knowledge acquisition is also to be made by the Islamic community, within the Islamic community. [...] They [the Muslim patients] must know their origins and true identities and learn how to attune these to the Western context in which they live!

On the one hand, local clinics should therefore offer religious- and culture-sensitive fertility treatments; on the other hand, Muslim communities are required to re-adjust their practices to European standards and state provisions. Most of all, both clinic staff and Muslim patients are asked to foster their mutual knowledge. This need has also been corroborated by recent studies confirming that the inability to acknowledge religious heterogeneity and variability can lead to inadequate health-care provision and insufficient outcomes in sexual and reproductive health care, specifically with regard to Muslims⁸². A sort of compelling reciprocal accommodation was therefore called for by the informants interviewed.

4.2. Customs and traditions

Although medicine is highly valued by Islamic scholars and Muslim patients alike, local customs and communities' traditions play a key role amid Muslim prospective parents. With regard to MAR methods, some practices may effectively affect the results of the fertility treatment(s) undergone by

⁸² See J. Arousell, and A. Carlbom, *Culture and religious beliefs in relation to reproductive health*, in «Best Practice & Research Clinical Obstetrics & Gynaecology», 32, 2016, pp. 77-87.

prospective parents. Consanguineous parents, traditional remedies to infertility/sterility and male semen collection are to be named amongst the most frequent potential obstacles to the positive outcome of fertility procedures undergone by Muslim prospective parents.

4.2.1. Blood relatedness

As far as blood-related Muslim prospective parents are concerned, two are the most common scenarios. First, consanguineous marriages (in case of homologous treatments); secondly, female/male gametes donated by family members (in case of heterologous MAR procedures).

With respect to the former, cousins' nuptial unions are a customary habit in the Muslim world⁸³. By way of illustration, it has been highlighted that intra-familial unions collectively account for more than 20-50% of all marriages in North Africa, Middle East, and West Asia⁸⁴. The empirical investigation conducted by the author confirmed not only a high rate of endogamous marriages⁸⁵, but also a significant percentage of consanguineous nuptial unions amongst Muslim patients.

When interviewed, several couples, who were undergoing MAP procedures in a public hospital, reported some sort of blood-relationship. By way of illustration, a 40-year-old Moroccan man married a 26-year-old woman who is his brother's daughter; two Moroccan spouses in their mid-thirties explained that they were the offspring of a brother and a sister; in another couple's case, the mother of a 33-year-old Pakistani man is his wife's maternal aunt. Muslim patients do not perceive these customary intertwined familial linkages as factors potentially affecting their future offspring's health. One Tunisian woman, for instance, clarified

⁸³ Data analyses regarding cousins' marriages in Muslim majority countries and in countries with a significant Muslim presence can be found in L. Holy, *Kinship, honour and solidarity: Cousin marriage in the Middle East*, Manchester, Manchester University Press, 1989; A.H. Bittles, and H.A. Hamamy, *Endogamy and consanguineous marriage in Arab populations*, in A.S. Teebi (Ed.), *Genetic disorders among Arab populations*, Heidelberg, Springer-Verlag, 2010, pp. 85-108; S.A. Khoury, and D. Massad, *Consanguineous marriage in Jordan*, in «American Journal of Medical Genetics», 43, 1992, pp. 769-775; H. Baykara-Krumme, *Consanguineous Marriage in Turkish Families in Turkey and in Western Europe*, in «International Migration Review», 50, 3, 2016, pp. 568-598; R. Hussain, *Community perceptions of reasons for preference for consanguineous marriages in Pakistan*, in «Journal of Biosocial Science», 31, 1999, pp. 449-461; R. Hussain, and A.H. Bittles, *Sociodemographic correlates of consanguineous marriage in the Muslim population of India*, in «Journal of Biosocial Science», 32, 4, 2000, pp. 433-442.

⁸⁴ H. Hamamy, *Consanguineous marriages. Preconception consultation in primary health care settings*, in «Journal of Community Genetics», 3, 3, 2012, pp. 185-192.

⁸⁵ See *infra*, chapter V, section 3.

Cousins who marry among themselves are many. That isn't a problem. There are no difficulties in having children, there are not illnesses in child[ren]... but, before getting married, you do blood tests. It's compulsory in our country – you see. Then, [if you want to go ahead with the marriage], you and your own family decide.

In real terms, scientific reports indicate that sexual unions of related parents may imply congenital and genetic disorders in the offspring and also potentially affect the prospective parents' fertility⁸⁶. Accordingly, this information is requested by some questionnaires that patients have to fill in before commencing any fertility treatment. Field-collected data nevertheless disclosed that local physicians providing MAR treatments are rarely aware of patients' blood-relationship. In particular, this occurred in a fertility centre where the author was allowed to conduct in-depth investigations⁸⁷; in this clinic, it appeared that related spouses did not disclose this information to clinic staff.

When enquired about consanguineous unions, the patients either stated that they had informed the fertility clinic staff members of their kinship ties, or they declared that they were never asked about their consanguinity. In real terms, an annex (5bis) of the MAP centre's questionnaire to be filled in by prospective female patients specifically investigates partners' blood relatedness. In this questionnaire, amongst the fifteen questions, one specifically addresses potential parties' blood relationship and consanguinity. Although the question provides some examples of relevant blood relationships – such as first/second cousins, brothers' and/or sisters' offspring, partners with common grandparents – the document is available only in Italian language. And, as clarified by the centre's healthcare professionals, regrettably, not all questions are answered by prospective parents undergoing MAR procedures.

Additionally, it seems that information on patients' blood relationships is very rarely reported in the electronic files that medical doctors access

⁸⁶ With respect to the impacts of partners' consanguinity on healthcare issues, see C.M. de Costa, *Consanguineous marriage and its relevance to obstetric practice*, in «Obstetrical and Gynecological Survey», 57, 8, 2002, pp. 530-536; Hamamy, *Consanguineous marriages. Pre-conception consultation in primary health care settings*, cit.; A.H. Bittles, *The role and significance of consanguinity as a demographic variable*, in «Population and Development Review», 20, 1994, pp. 561-584; Id., *Endogamy, consanguinity and community genetics*, in «Journal of Genetics», 81, 2002, pp. 91-98; Id., *A Community Genetics Perspective on Consanguineous Marriage*, in «Community Genetics», 11, 2008, pp. 324-330; K. Hasan, *The medical and social costs of consanguineous marriages among British Murpiris*, in «South Asia Research», 29, 3, 2009, pp. 275-298; M.E. Teeuw *et al.*, *Challenges in the care for consanguineous couples: An exploratory interview study among general practitioners and midwives*, in «BioMed Central Family Practice», 13, 105, 2012, pp. 1-7. On blood relatedness affecting prospective mothers' ability to conceive a child see *infra*, chapter V, section 4.

⁸⁷ See *supra*, chapter I, section 6.1, and chapter II, section 6, see also *infra*, chapter V, section 1.

when examining the patients. For instance, when scrutinising the details of 231 couples with at least a Muslim partner undergoing MAR procedures from January 2011 to December 2015 in the aforementioned clinic, only one couple of consanguineous partners and four married cousins were actually listed⁸⁸. As a result, although it is a widespread phenomenon amongst Muslim patients, consanguinity and potential consanguinity-related pregnancy outcomes might not be effectively managed through genetic and antenatal care in local fertility clinics. These couples might thus be significantly affected by miscarriages or they might need to resort to therapeutic abortion⁸⁹.

As far as prospective parents' consanguinity is concerned, an additional aspect deserves some specific attention. As highlighted by academic studies, Muslim prospective parents may undergo (secret) heterologous MAR procedures relying upon gametes donated by family members; in some cases, embryos are created using sibling's male and female gametes⁹⁰.

From an Islamic perspective, this procedure is adopted in order to protect the future offspring's nasab avoiding any third-party interference⁹¹. Adopting a medical viewpoint, nonetheless, congenital and genetic disorders tend to occur more frequently in case of (closely) blood-related partners. Although not legally permitted on Italian soil, this *de facto* practice cannot be entirely excluded even in case of homologous fertility treatments, as clarified by the IVF physicians interviewed. In real terms, the day on which the fertilisation of the oocvtes is scheduled, the semen (if not formerly crvopreserved) is given by the prospective father to the biologist; nonetheless, no DNA testing is conducted on the material produced⁹². As a result, an intended father can potentially hand over the semen belonging to someone else⁹³. In order to cope with some issues linked to both parties' consent to MAP, some fertility clinics recently began to require the partners undergoing a MAR procedure to sign additional paperwork; rarely, however, the examined forms included what can be called the patient's statement of «semen ownership».

⁹³ See *supra*, chapter II, section 1.

⁸⁸ For further details on the examined quantitative data, see *supra*, chapter I, sections under 6, and *infra*, chapter V, sections 2, 4 and 5.

⁸⁹ On abortion in *Islām* see *supra*, chapter III, section 7.3.2-7.3.3 and section 3.3 in this chapter. On high rates of abortions and miscarriages amid Muslim patients see *infra*, chapter V, section 5.

⁹⁰ See *supra*, chapter III, section 6.2.

⁹¹ On the importance of avoiding lineage confusion in *Islām*, see *supra*, chapter III, section 4.3 and *infra*, section 5.2.

⁹² For a discussion on DNA paternity test in *Islām* see *inter alia* S. Ayman, *Paternity between Law and Biology: The Reconstruction of the Islamic Law of Paternity in the Wake of DNA Testing*, in «Zygon: Journal of Religion & Science», 47, 1, 2012, pp. 214-239; S.S.S. Haneef, *The Status of an Illegitimate Child in Islamic Law: A Critical Analysis of DNA Paternity Test*, in «Global Jurist», 16, 2, 2016, pp. 159-173. See also *supra*, chapter III, section 7.1.

4.2.2. Local traditions and kindred customs

A second element potentially affecting the outcome of MAR treatments is represented by local traditions and kindred customs. These encompass herbal fertility solutions believed to favour pregnancies as well as fertility rituals and spells for infertile/sterile «cursed spouses». Although being described as non-*sharīʿah* compliant formulae by many local clerics, Muslim migrant women tend to rely upon these traditional remedies to childlessness also when undergoing (fertility) medical treatments, as further corroborated by scholarly studies⁹⁴.

Despite the fact that these are commonly practised traditional customs, ethnographic observations and interviews indicated that these practices were not disclosed by Muslim patients to healthcare professionals, but rather to cultural mediators. The given statements clarified some traditional remedies and deserve to be here reported.

They always start with this, mainly the Moroccans. For example, [they say:] «I am not pregnant yet because a woman was in love with my husband... because my mother in-law didn't want me as his son's wife», and so on. «So she put spells on me!». They are all pretty sure about that! So, she goes to the *shaykh* – you know, someone like a priest – who reads *al-Qur'ān* and gives her some things to put... some stuff to drink, or some fabric taken from her husband's clothing (e.g. pyjamas) to slip under the sand, seven layers of sands... [...] but that isn't *Islām*, that's tradition!

and

you see – when you have a problem, you go anywhere... They go to the *shaykh*, they go to people who give them stuff and herbs; they travel for days... they put those [herbs] into a small pouch and then [they] wear it... or use it as a tampon.

Ranging from rituals to phytotheraphy, these so-called traditional rites and herbal remedies can affect the women's health negatively and prevent the positive outcome of a fertility treatment. In fact, the most contentious issue that emerged with regard to these herbal/magic traditions, is that some of these rituals can cause infections or haemorrhage.

Additional customary practices that may put at risk women's health are linked to the collection of sperm for ART procedures, as unveiled by fieldwork material. In local fertility clinics, men are usually required to provide

⁹⁴ For further discussion on healers, herbal remedies, traditional rites and ethno-gynaecology, see for instance M.C. Inhorn, *Quest for Conception Gender, Infertility and Egyptian Medical Traditions*, Philadelphia, University of Pennsylvania Press, 1994, at pp. 81-110.

semen samples before commencing the IVF procedure, and to do so using a men's room.

As elucidated in the previous chapter, male masturbation may be perceived as problematic when adopting either a strict Islamic approach or the customary viewpoint of some Muslim communities⁹⁵. Muslim prospective fathers undergoing IVF therefore can face either religious prohibition, or some sort of social de-masculinisation. Accordingly, Muslim male patients were described as habitually opting for two alternative paths: either the semen is collected at home and then immediately brought to the hospital⁹⁶, or they ask for a special authorisation. The first option might de facto facilitate cross-sibling heterologous procedures (and consequently, potential anomalies for conceived children), although being illegal on Italian soil⁹⁷. The second option implies that Muslim male patients require the permission for their wife to be with them in the men's room in the fertility clinic. IVF physicians, biologists and embryologists strongly criticised this practice since this recurrently entailed additional pain for the woman and caused further bleeding, being she asked to help the man in delivering the semen immediately after the oocvte retrieval. Nonetheless, this special permission seems to be frequently requested by Muslim patients in local MAP centres.

4.3. Patients' migratory projects

Additional MAR therapy-related issues are connected to the predominantly migratory attitude of Muslim patients. More specifically, migration influences and affects the outcome of fertility treatments, as disclosed by empirical evidence. In fact, Muslim prospective parents can undertake fertility procedures in different countries and travel whilst having already began their path to conception in a different city or country.

In the most commonly reported scenario, Muslim spouses approaching local fertility clinics underwent gynaecological procedures and/or fertility treatments abroad, predominately in Muslim majority countries. As diagnosed by interviewed IVF physicians, sterility/infertility female factors affecting the couple are sometimes to be linked to improperly performed gynae-

⁹⁵ See *supra*, chapter III, section 6.

⁹⁶ A considerable number of Muslim women described this as the usual way of providing the husband's semen.

⁹⁷ As mentioned *supra*, in section 4.2.1. See also *infra*, chapter II, section 1; chapter III, section 6.2; chapter VI, section 5. Intended parents can indeed potentially deliver the male gametes of someone else (including one of the parties' brother) to the IVF physician.

cological surgery – such as previously induced abortions causing bleeding and miscarriages⁹⁸.

Although field-collected data indicated that patients favour MAR treatments performed by Italian clinics, a number of disclosed reasons supported and justified Muslim patients' fertility tourism. On the one hand, MAP procedures are less expensive in Italy when compared to other Muslim majority or European countries, and this happens since Muslim patients usually benefit from medical fee exemptions in public or SSN-funded fertility clinics⁹⁹. On the other hand, the waiting list for MAR treatment admission in public clinics established in hospitals can be notably long, therefore implying several months' wait to obtain an appointment date for the first medical examination¹⁰⁰. Being impatient to conceive a child, listed patients – predominantly, Muslim women – may thus undergo additional surgery and/or undertake ancillary (invasive) fertility therapy. An IVF physician explained:

Some of them underwent surgery in their countries of origin – small surgeries such as ovarian cysts. When in public clinics, they do that because they are waiting for several months, even years! [...] So they do something, just to show that they are doing something... because they don't want to sit on their hands while waiting to be called, awaiting further medical instructions.

Foreign fertility treatments are nonetheless rarely disclosed to Italian healthcare personnel. The reasons for this conduct are again to be found in the public MAP centres' long waiting lists. As reported, by administrative staff: patients «are afraid that – if we know – we would put them at the bottom of the list. So, they keep it for themselves». Cultural mediators revealed further details of this carefully hidden fertility tourism in Muslim majority countries, as clarified by the statement reported below.

Look – they want to have a child, here and now; so they don't accept the waiting list. They want their names to be put down, then they go somewhere else in the meantime, to their own countries... You ask, doctors sometimes and they say: «No». But I know... so, they say to me: «Don't tell the doctor!». Sometimes, they even say: «Swear to God, swear on your children [that] you won't tell to the doctor!». Honestly, I cannot understand this, but this is what happens.

One cultural mediator also identified typical fertility and healthcare tourism routes, as chosen by prospective patients; in particular, she illustrated what follows:

⁹⁸ See for instance the statements reported *supra*, section 2.2.

⁹⁹ Several nurses declared that Muslim migrant patients frequently reported the cost of entering similar procedures in Muslim majority countries and/or other European countries.

¹⁰⁰ On the length of waiting lists and the economic costs of treatments, see *infra*, chapter V, section 8.

People are on the move. When they can't find what they are looking for here, then they go somewhere else. In my experience, Moroccan women go to Spain; Nigerian women go to England, also because of their language skills. They go there mostly for procreation techniques and induced abortions. [...] In Egypt and Morocco, they usually go to treat tubal diseases.

The second most commonly reported scenario regards «non-sedentary» Muslim spouses. In this case, the same couple undergoes a first cycle of a MAR procedure in one country and then a second cycle in a different country. Abiding by various domestic laws and praxes, medical protocols differ across diverse states and fertility centres. Patients can therefore be subject to dissimilar – and sometimes even contrasting – treatments and hormonal stimulations over a short period of time.

Additionally, local healthcare professionals cannot access the patients' entire medical record in case of non-sedentary prospective parents. As a result, IVF physicians can rarely examine the complete picture of (im)migrant patients' health; the lack of interim treatment notes, progress reports, regular reassessments, physician referrals, medical doctor's letters, or healthcare personnel's communication notes was indeed lamented by some informants. On the other hand, some patients *de facto* brought with them former medical examinations which were undertaken in several countries. One doctor, for instance, recalled some cases: «[...] sometimes you see foreign medical reports. For example, I remember an Arab couple with documents released by a clinic in Morocco; these were written in French».

A third issue emerged: informants highlighted that constant migratory patterns considerably affect the partners' fertility *per se*. Two are the most recurrently described scenarios. On the one hand, patients can frequently request to reschedule their medical appointments due to periodical travelling, and this delays the beginning of the MAP therapy¹⁰¹. The administrative staff interviewed repeatedly substantiated this aspect; an example is reported below.

Maybe... when you call them, they don't reply: you go on and on... sometimes, for days. Or they answer and say [that] they're about leaving, so they can't come... [they] can't attend the appointment you gave them, and you have to reschedule it.

On the other hand, child conception becomes more complicated when the spouses do not live together. Timing sexual intercourse in relation to woman's ovulation facilitates conception; nonetheless, this level I MAR technique becomes more complicated when husband and wife are settled in dif-

¹⁰¹ Sometimes the postponement of the medical appointment is due to *ramadhān*. See *su-pra*, chapter III, section 7.3.1 and section 3.2. See also *infra*, chapter V, section 8.

ferent countries¹⁰². An andrologist described some cross-border dynamics in which prospective Muslim parents were put under significant pressure.

The problem is that 70% of men with sexual dysfunction has a wife living outside Europe, so they cannot access assisted procreation. Moreover, the man is here, and the woman is there; often they are not reunited¹⁰³... So, it's not easy... When he's visiting her for few days, everyone's expecting him to get her pregnant.

A cultural mediator similarly narrated these cross-country conception dynamics, whilst also emphasising the sense of stressful urgency caused by relatives and extended kindred with respect to the couple's long-desired and not-yet-conceived offspring. In her words:

I give you a typical case. Few days ago, a woman said: «It has been seven years and we have no child!». So, I ask: «Why didn't you do anything before?». And she won't talk... So, I ask her: «Have you been living with your husband?... day and night together?». Then, she starts explaining that she just arrived here; he lived here, and he was visiting her in August... So, I tell her that it's natural: «It's difficult to have a child in this way... there's travelling, stress and family pressure...». But, she is desperate: every month, when she has her period, that's a drama! She says that her mother in-law always finds a way to... she doesn't accept [that] they have no children yet, so she's worried and impatient [to conceive] now.

Social and familial pressure to achieve the goal of starting a family were similarly voiced by Muslim patients and religious figures¹⁰⁴. The experience of a Bangladeshi couple can shed further light on these issues. They married twelve years ago in Dhaka. More than ten years ago, the newly-wed husband moved to Italy and the husband has been living there ever since. Every year, he used to spend a couple of months in Bangladesh to visit his wife and relatives. Regularly working as a builder and as a cook, he eventually managed to complete a family reunification procedure; his wife was thus able to join him in Torino six years ago. After twelve years of married life (although less than half spent together in the same country), they approached a local fertility clinic in order to conceive a child.

When being part of these long-distance matrimonial relationships, Muslim spouses can opt for MAR treatments in non-European countries. By way of illustration, two young Moroccan spouses explained that, since the man was unable to satisfy the requirements for family reunification on Italian soil, they had concurred to undergo fertility treatments in Morocco instead of Italy. Nonetheless, they were not able to start MAP procedures due

¹⁰² On the three levels of MAR methods, see *supra*, chapter II, section 5.

¹⁰³ Literally, he said *ricongiunta* to identify a wife who benefitted from family reunification.

¹⁰⁴ See *infra*, section 6.

to the fact that the husband was settled abroad and constantly travelling to visit his wife in Morocco. He stated: «I tried... but I have to be there... and I go there only forty/fifty days as a whole, a year, vising». So, they say: «That's no good. We can't [proceed with the fertility treatment]». Accordingly, as soon as the wife relocated to Italy, they eventually began the MAR procedure in Torino.

As revealed by the cases discussed above, in case of foreign Muslim patients, delays and repercussions on the outcome of fertility treatments are frequently linked to patients' migratory patterns.

5. Unspoken secrets

In addition to *ad hoc* needs and issues, unspoken secrets surfaced with respect to Muslim prospective parents undergoing MAR procedures in Torino. Field-collected data indeed disclosed that some topics were rarely touched upon and dealt with, although specifically conditioning Muslim patients. Three main confidential matters were identified.

The first unspoken secret concerns the (perceived) need not to reveal the manner in which the couple's offspring was eventually conceived. In spite of the fact that *Islām* supports medically assisted reproduction, rarely Muslim patients (similar to non-Muslim persons) are not embarrassed in disclosing to have opted for MAP treatments.

As unveiled by the informants, two additional subjects were habitually meant to be kept secret. These regards two parenthood methods that are forbidden in compliance with *sharīʿah*, namely heterologous fertility procedures and adoption¹⁰⁵. The latter is discussed in the following subsections, whereas MAR procedures involving donors are addressed in the next chapter.

5.1. Restrictions on disclosure of MAP

Islām is a pro-natalist religion and supports some methods of medically assisted procreation¹⁰⁶, social and psychological stigma can nevertheless be associated to fertility treatments. Accordingly, interviewed Muslim partners undergoing MAR procedures had rarely disclosed their reproductive choice to extended families and local communities.

¹⁰⁵ At least, according to some interpretations; see *supra*, chapter III, sections 4.3, 6.1 and 6.2.

¹⁰⁶ See *supra*, chapter III, sections 3, 5, 6-6.2.

Patients' strict confidentiality concerning reproductive health is well known also to healthcare providers. During interviews, the directors of fertility centres asserted that seldom their Muslim patients inform their families about the conception methods undertaken. They reported the rationales provided by their patients, such as the following: «You won't tell that my son – who's been finally conceived – that he was conceived through assisted techniques, will you?! I am a man...», and «Look, I don't want them to think she isn't mine! They don't need to know. Nobody needs to know».

Analysing field-collected data, it was confirmed that the couple's desire for parenthood satisfied by relying upon MAR techniques was habitually not disclosed to the spouses' relatives and extended families. Three main set of reasons for this course of action were brought to light: the control (potentially) exerted by relatives, the process of migrant families' nuclearisation¹⁰⁷, and the social stigma attached to infertile partners and children. This argument can be clarified by the explanation provided by a local cultural mediator:

You clearly see powerful control by families, relatives, friends... even from abroad! They all supervise the couple and influence them. [...] When a couple marries, it's taken for granted that within a month they... So, they start to ask: «Any news?» that basically means: «Are you pregnant?». This happens for Moroccans and Egyptians, mostly for Egyptians now... from what I see.

Patients undergoing fertility treatments in clinics established in Torino asserted their need for privacy primarily to protect themselves from kindred pressure and the extended family's interference in the couple's life plan. A 37-year-old Moroccan woman, for instance, explained that her own family was not aware of her «reproductive choice». She further elaborated that she had already conceived her two-year-old daughter through MAR procedures in the same fertility centre, therefore «now we are looking for a son, a little brother for her... And, if and when, everything goes well, then I'll tell this to my relatives... Well, maybe».

Muslim women, in particular, repeatedly expressed their desire to avoid family tensions and spreading rumours. Undergoing fertility treatments in a different country – such as Italy – then better protects the couple's «little secret». By way of illustration, a 29-year-old Muslim woman, who is temporary settled in Torino whilst waiting for her husband to complete his postgraduate studies, clarified:

¹⁰⁷ For further discussion on the fragmentation of family relations between extended families and migrant nuclear families, see T. Parsons and B.F. Bales, *Family socialization and interaction process*, London, Routledge, 2001 (1956). See also *infra*, chapter VI, section 4.

We are doing it here, so nobody knows. After all, it's a private matter. Only three people know about this: a friend who's helping me with Italian [language], my mum, and my husband. Naturally... not my in-laws!

The interference and control exerted by the husband's parents – predominantly their mothers – was also reported with fear by several Muslim wives, who described this as a potential threat to their matrimonial life. In particular, women were afraid that, if MAR methods do not lead to pregnancy, their husbands would resort to traditional *sharī'ah* compliant remedies to childlessness such as divorce or polygyny¹⁰⁸. By way of illustration, one prospective Muslim mother declared:

I had another miscarriage [...] I'm worried, I am really worried. You see – it's customary that... In our religion, in our culture, if the wife gives her husband no child; then... after a while, his mother starts telling him that she isn't right for him... he needs to look somewhere else to get what he needs... and so on.

Muslim patients' need for privacy is, in some cases, part of the couple's migratory project. In the shift from extended kindred systems to smaller family units, the desire for parenthood can indeed become the spouses' joint project. Two Moroccan spouses who have been living together in It-aly for several years, described a child as «a couple's project in which none else should interfere»¹⁰⁹. A Tunisian couple similarly explained that a child «is their own project». Giving an account of their conduct, they elucidated what follows. «We've been speaking about this [i.e. ART procedures] among ourselves 'cos if people know, then they'll ask... In this way, nobody asks!» – as voiced by the husband. The wife added: «Maybe later... when we'll have a child, we'll tell this. Not now».

As a result, infertility and sterility issues are very rarely openly discussed even with family members and friends from the local Muslim community. The reasons vary, as reported by some cultural mediators.

To us, to our cultures, illnesses are to be concealed... you have to keep quiet about that. You shouldn't talk about your problems...

and

Maybe she [the Muslim prospective mother] thinks: «I don't need to tell what I have – for example, illness – since she [the cultural mediator] has her own hurdles too». So, she doesn't say a word.

¹⁰⁸ See *supra*, chapter III, section 4.2 and *infra*, section 6.

¹⁰⁹ The husband relocated to Italy sixteen years ago and his wife joined him eight years ago.

Muslim women are thus not comfortable in publicly disclosing any health-related problems. It can be inferred that a combination of social habits and religious customs prevents a free and open discussion of infertility issues and MAR practices amongst Muslim patients and their familial and social circles. In addition to traditional Islamically compliant remedies to childlessness implying changes in the nuclear family, fear of ostracism and stigmatisation were also repeatedly voiced.

In order to effectively deal with these sensitive matters, local public and private fertility clinics rely upon the support provided by psychotherapists¹¹⁰. Due to cultural and language barriers, however, the issues faced by Muslim couples undergoing fertility treatments are only occasionally voiced to clinic psychologists, as reported by mentioned staff members.

As an exception, Muslim prospective parents can decide to discuss personal matters and share intimate feelings with an interlocutor who is not linked with their personal and family network but, at the same time, who is familiar with their own language, culture and religion. As disclosed by empirical data, Muslim patients indeed perceived cultural mediators as good listeners not criticising neither them nor their own ideas¹¹¹. The extras of some interviews released by these professionals further elucidate these points.

What we do is also important because... sometimes, women talk to us – cultural mediators – not only because we are familiar with their culture and language, but also because we are from different places (e.g. Syria, Lebanon) so they know we won't tell anyone... being far away from their family, community... that helps,

and

We became these women's little world... This is not fine! But, once in a while, we are the only person they can open up with, talk freely... We become their best friends. [...] Sometimes, I had the feeling that some [patients] pretend not to understand and ask them [the clinic personnel] to call me just to meet me and have a little chat.

The fact that Muslim patients can in fact rely upon cultural mediators further explains why local religious figures are very rarely approached by Muslim prospective parents considering MAR procedures as a good solution to childlessness. On the one hand, religious figures asserted that Muslim prospective parents need guidance in order to follow a *sharīʿah*

¹¹⁰ On the distress suffered by infertile couples, see for instance, M.T. Coglitore, *Aspetti psicologici, relazionali e sessuali della coppia sterile*, in A. Santosuosso, C.A. Redi, S. Garagna, and M. Zuccotti, *I giudici davanti alla genetica*, Pavia, Collegio Ghislieri, 2002, pp. 67-71; J. Wright *et al.*, *Psychosocial distress and infertility: A review of controlled research*, in «International Journal of Fertility», 34, 2, 1989, pp. 126-142; J. Wright *et al.*, *Psychosocial distress and infertility: Men and women respond differently*, in «Fertility and Sterility», 55, 1, 1991, pp. 100-108.

¹¹¹ See *supra*, chapter I, section 6.2.

compliant path¹¹²; on the other hand, religious advice is rarely sought. Local *a'immah* indeed reported very low numbers of people approaching them. By way of illustration, an Egyptian *imām* disclosed that, over a period of four years, only ten people had solicited for his opinion and guidance on infertility matters. Eventually, three couples, who did not conceive any children, decided to go to the local hospital in order to begin fertility procedures; another woman, instead, had divorced from her husband and married another man. Other local Islamic clerics further elaborated their interactions with local prospective Muslim parents when explaining that

[...] people rarely go to the *imām*: they're afraid we might talk to someone. But people are very very confused about what is right and what is wrong, *halāl* and *harām...* so they should ask...

Women say that this is girls' stuff... so they prefer to call me over the phone... they are ashamed to talk in front of me about certain bodily parts and intimate procedures...

and

It's more women who come to us, who ask... in most of the cases, their husbands are not aware of that.

Nuclear family dynamics, gender seclusion rules, social stigma in addition to embarrassment and discomfort can thus delineate Muslim behaviour leading to unspoken secrets.

Furthermore, amongst local Muslim religious figures, very few are conversant with Islamic law principles and provisions with respect to fertility issues and *sharī'ah* compliant procreation methods. The head of an Islamic worship centre, for instance, declared: «Many people came to us to ask for advice, but I am a normal human being, I cannot help...». Accordingly, some Muslim clerics can decide to study the situation in order to help Muslim believers asking for their help. A local *imām* elucidated:

Some asked for my help. Four women came to the mosque to find a way to... to ask if they could go to the hospital to have children. So, first, I talked to the doctor to understand. I need to know, then I can help.

¹¹² Muslim prospective parents' very poor knowledge of Islamic laws was indeed lamented by local *a'immah* when addressing *sharī'ah* compliant remedies to involuntary childlessness. See *supra*, chapter III.

When the local religious figures' acquisition of knowledge was not a feasible solution, then local religious figures habitually referred Muslim prospective parents to bigger Islamic organisations. As explained by the head of a national body:

When the local *imām* does not know what to do, then he asks us... or he refers people to us, and we deal with this over the phone. If we don't know, we use the European Council for Fatwa and Research [...]. The point is that these are difficult matters and they usually require several phone calls.

As an alternative solution to national Islamic organisations, Muslim prospective parents searching for assistance and guidance in Islamic law were advised to wait for Islamic scholars to visit some mosques in Torino. As clarified by the head of an Islamic worship centre:

They don't come to talk... it's seen as a private matter! [...] After all, what can they tell you at the mosque?! [...] People who work here, they know just the basics. ...then, it's too difficult! Even a *fatwā*, it changes from a person to another one. You have to wait for the professors coming during *ramadhān*, they know.

Accordingly, Muslim prospective parents willing to undertake MAR procedures rarely asked for the guidance of local *a'immah*. The reasons for not seeking the *imām*'s advice vary, as revealed by ethnographic investigations. First, assisted reproduction is practised in Muslim majority countries, therefore Muslim patients assume that undergoing fertility treatments is permitted by Islamic provisions. The most common statements were the followings: «They do it at home, so it's fine», «Many friends did it back home: it's permitted», and «They're even advertising [fertility] clinics on the telly, so…».

Secondly, sources encompassing Islamic principles are widely available nowadays, Muslim patients can thus easily find information by simply surfing the web without resorting to local religious figures or Islamic scholars settled in Muslim majority countries. When interviewed, Muslim female and male patients frequently declared:

Provided you are married, it's *halāl* – I know that, This is not *harām*: in our religion you can do it, *Islām* says that, if a woman is sick, then she should be treated, There's Google... I'll show you how to search there, you'll find what you need, 'What would I need the *imām* for?!¹¹³.

¹¹³ For an interesting discussion on the challenge posed to religious authority specifically by Muslim women, see *inter alia* J. Hammer and R. Spielhaus, *Muslim Women and the Challenge of Authority: An Introduction*, in «The Muslim World», 103, 3, 2013, Special Issue: *Muslim Women and the Challenge of Authority*, pp. 287-294, and the essay included in mentioned special issue.

Thirdly, the knowledge and the religious authority of local $im\bar{a}m$ was doubted by the patients. Accordingly, Muslim prospective parents referred to some Islamic scholars living abroad; in some cases, they relied upon an online $fatw\bar{a}$, or contacted some clerics they trusted to get a phone $fatw\bar{a}$. As asserted by some informants: «I called my mum and the *malawi*, just in case», and «I talked to the *shaykh* when I was there. "That's all right" – he said. So, it's OK».

An additional reason not to refer to a local *imām* is specifically linked to dishonour and the nuclearisation of migrant families. As disclosed by field-collected data, some patients underwent MAR procedures as part of their own autonomous reproductive choice. This self-determining decision was intended either to assert the prospective father's masculinity and power, or the autonomy of their nuclear family¹¹⁴. Two Muslim prospective fathers, for instance, declared: «That's us. That's my family. That's my child. That's my own decision», and «I am not asking anyone to tell me what to do: I decide!».

The need to avoid any social stigma concerning to the spouses' infertility and the conceived child's lineage was also stressed by some patients. Three Moroccan female patients concurred: «It's better to do it here; you can keep it quiet... it's a secret!», and they added: «relatives don't know, neighbours don't know... so no-one can say that you had "an injection child", that [s/ he's] not your own». Muslim parents and children can indeed be negatively affected by stories circulating about the parents' infertility and spreading rumours doubting the purity of child's *nasab* – as reported by a significant number of informants.

Cultural mediators narrated similar stories and further corroborated the issue of secrecy when declaring that «maybe they [the patients] tell you they contacted the *imām* to look like good Muslims, pious Muslims. But they don't... Of course, they won't do that, believe me», and «Some women hide this [the fertility treatment] even from their husbands, let alone the *imām*!». Empirical research indeed indicated that, in some situations, Muslim prospective mothers solicited a fertility treatment in local clinics without informing their husbands, as further elaborated below in section 6.

5.2. (Non) shariʿah compliant adoption and foster care

All interviewed medical doctors reported constantly mentioning adoption as an alternative parenthood method, as requested by Italian law¹¹⁵. Some simply referred to the form to be read and signed by prospective patients, others addressed the topic without going into detail. A number of

¹¹⁴ On this aspect, see also *supra*, section 2.2.

¹¹⁵ See *supra*, chapter II, section 2.

reasons explains this choice, as elaborated by the statement released by the head of a fertility clinics.

Adoption; we refer to it briefly because patients might be upset by this. Maybe, they already took this route and they have been discriminated against precisely for having mentioned that they have tried, or are willing to try, medically assisted procreation methods... or they took the path of adoption and [they] have been told that the best parents are those who already have children, and those who are not looking for pregnancy to fill a void in their own lives... Psychologists usually write this kind of things when verifying the couple's adequacy to be adoptive parents (however, this used to happen more frequently in the past; nowadays this is less common). Maybe, they are beyond the adoption age limit, so... it's not an option. So, we do not insist on this.

According to the perception reported by patients, adoption is a sensitive matter for prospective parents, more specifically so when they are undergoing fertility treatments. Healthcare professionals prefer thus to avoid indepth discussion on adoption procedures, independently from their patients' religious affiliation.

The Muslim patients who were undergoing MAR procedures similarly tried to elude conversations addressing the adequacy of adoption, child custody and foster care. The reasons for behaving in this particular way is to be found in the patients' former negative adoption assessment evaluation, or in the parties' desire to prevent their current adoption process from being known to the fertility clinic staff and their extended family. Actually, patients wishing for parenthood can simultaneously follow both adoptive and MAP paths. In other words, patients can start the legal assessment and approval process as prospective adoptive parents, whilst undergoing fertility treatments. As clarified by an obstetrician, in these situations, Muslim patients usually preferred not to disclose this to clinic staff members.

No, they [Muslim patients] don't mention adoption, Italians too... Well, sometimes, they let the cat out of the bag; when they're talking to the nurse during a clinical examination, maybe they mention this. But they won't say that as they think this is an *aut aut*¹¹⁶: if they do this [adoption], then they can't do the [fertility] treatment.

Adopting the perspective of Muslim patients, additional issues arise. According to Islamic law, adoption (*tabanni*) is forbidden; Muslim couples may nonetheless opt for this parenthood method¹¹⁷. In some scenarios, prospective parents chose the Western adoption model; in other cases, hybrid forms of adoption or inter-familial foster care were favoured, as discussed below.

¹¹⁶ Latin expression corresponding to «either-or».

¹¹⁷ In compliance with Islamic law, only *kafālah* is permitted, see *supra*, chapter III, section 4.3.

When addressing this topic during the empirical investigations conducted by the author, amongst Muslim patients undergoing MAR procedures in Torino, uneasiness, discomfort and embarrassment surfaced. In some cases, patients – predominantly men – pretended not to understand certain questions despite the fact that they were rephrased in Arabic relying upon the terminology used in the *Qur'ān* to address adoption, child custody and foster care. In other cases, the interviewees changed the subject, thus completely avoiding a discussion of this matter. Few women felt comfortable enough to converse about adoption reporting their personal experiences and presenting their own ideas on this non-*sharī'ab* compliant remedy to childlessness. In one case, a Muslim woman declared:

He's thinking about it [adoption]; I don't. Honestly, I don't want that. [...] We'll see... We'll do this [MAR treatment], first. And, God willing, we'll have a child! [...] At worst, I'll be his daughter, and he'll be my son!

Some Muslim patients voiced stronger disapproval with respect to any forms of adoption, while narrating some families' traumatic experiences. Remarkably, emphasis was put on some (actually occurred) negative consequences of adoption and foster care rather than on Islamic provisions. By way of illustration, a patient stated:

My aunt had six children: five boys and a girl. When the girl died, she adopted one... an orphan. [...] She acted as if she were her own daughter – you know what I mean. Once she was 12/13-years old, she listened to tittle-tattle, so she discovered... the truth: she was shocked! And things stopped working well...

Another woman similarly asserted: «No, I would never ever adopt!». She articulated her thoughts explaining that her own cousin – who is also her best friend – was adopted without her knowing her own status. When she was a teenager, she discovered that she actually was her father's niece; more precisely, she was the daughter of her (adoptive) father's brother. Narrating her cousin's experience, the informant added that «people were pointing at her at weddings, family gatherings... So, we gradually came to know the truth. We were, and still are, shocked. This is not right; this is completely wrong!».

On the contrary, a Tunisian woman explained that, after her former husband's death, when she remarried in her mid-forties, she had a strong desire for motherhood. She would have liked to parent some children with her new husband. Since MAR procedures were not successful, she considered adoption and foster care. In her words,

Typically, you try other things first; then if these don't work... you think about adoption. [...] I asked my sister in-law – who has many [children] – to give me

one... to make one [child] for me. «I'll take very good care of him or her!» – I told her. But she didn't want to... So, I had no more [children].

Cultural mediators corroborated the fact that the hybrid adoption models – such as cross-sibling foster care – can actually be performed within Muslim (extended) kindred. Narratives concerning Muslim patients' foster care and/or adoption patterns enacted within the extended family boundaries were similarly reported by nurses and physicians. In these scenarios, the adoption process – which is forbidden in Islām – is almost unnoticeable since the child's surname remains the same and a *de facto* adoption appear as inter-familial foster care. Although a fictive parent-child relationship is in effect created between the blood-related adoptive parent and the adopted offspring, the child's *nasab* is in some way protected and preserved, as required by *sharīʿah*¹¹⁸. Islamic provisions are thus readjusted to cope with the needs of Muslim intended parents in the XXI century.

An additional *shari* ab compliant remedy can similarly lead to analogous inter-familial foster care. (In)fertile wives of the same husband can indeed be invited to raise together the children delivered by a co-wife. Preserving the long-desired offspring's bloodline, this formula meets all the spouses' desire for parenthood and wish for children. In actual fact, some Islamic clerics recommended co-wives to live harmoniously whilst raising together the couples' offspring as if they were one big family¹¹⁹.

When these dynamics were described by Muslim female patients undergoing fertility procedures in Torino, however, the polygynous family arrangements were presented as a rather unpleasant hypothesis. In the informants' words:

These situations are complicated. These happen, yes, but they are complex. [...] My aunt has no children. She did fertility treatments, but they did not work. [...] Then, her husband married a second wife and they had some children together. The first son my uncle had with his second wife was raised by my own aunt – the first wife – as if he were her own child. He was calling my uncle's first wife shouting: «Mum!». [...] The second wife is a very poor woman, so she is fine with that. But what else could she do? My uncle is also supporting her family, so she has to be fine with that.

The patient interviewed also added that she would never opt for a polygynous nuptial model similar to the one entered into by some members of her extended family; her still unmet desire for offspring is therefore to be satisfied with MAR techniques.

¹¹⁸ See *supra*, chapter III, sections 4.3, 6.1-6.2.

¹¹⁹ As previously pinpointed in chapter III, section 4.2.

In real terms, ethnographic investigations clearly disclosed that, when Muslim prospective parents would not consider any sort of rearrangements in their nuclear family, they identified fertility centres as the only solution to their procreative problems. This implied high stress levels and huge expectations, as MAR procedures become the sole option for these childless partners to continue their life together as a couple.

6. Understanding Muslim prospective parents

Embracing the perspective of Muslim communities, the production of offspring is perceived not only as a means of personal achievement, but also as a tool of social legitimisation. As confirmed by scholarly studies, «[i]t is seen as the duty of the individual to undergo the ritual of reproducing [...] to contribute to the social reproduction of the group, before an adult is accepted as one of its members»¹²⁰. As formerly discussed, pious Muslims can thus understand child-bearing as a religious and social duty¹²¹. Although European Muslims might be ready to compromise in reducing the ideal family size, Muslim spouses are firmly invited to bear children as part of their Islamic right-and-duty to marry and to widen the worldwide Muslim community (*Ummah*).

This compelling *shari* ah compliant requirement is clearly perceived and identified by healthcare professionals offering fertility treatments in Torino. With respect to Muslim patients, the interviewed medical doctors recurrently described their migrant Muslim patients as emotionally prevented from meeting their extended families when long-wanted children were not yet conceived. The heads of two fertility clinics, for instance, reported statements such as the following: «They often tell me that they can't visit their family in their country with no children», and «They tell me they can't go back home without children».

Individual social identity is indeed linked to social group belonging, and human procreation becomes an essential requirement in local Muslim communities. Social and familial spheres thus tend to cause a sense of stressful urgency to reproduce for married Muslim partners. This compulsion is distinctly perceived by local healthcare providers. As an illustration, some clinic staff members declared: «There's lots of pressure, mainly from the family – they tell you [this] many times», and «you see that a child is a social necessity for them!». They also added: «The goal is a child. Full stop», and «child equals target. That's it!». For all of them, that's the

¹²⁰ Tremayne, The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran, cit., at p. 135.

¹²¹ See *supra*, chapter III, section 3.

priority». Muslim couples undergoing treatments indeed frequently maintained «we want a child: that's the goal!», «We need this now, we can't wait any longer! ...we can't be like this [i.e. childless]». The destination of the spouses' journey is therefore identified with the desired result of procreation; the object of partners' ambition and efforts becomes their offspring. And these dynamics occur for both *Sunnī* and *Shī'ī* Muslim prospective parents.

Accordingly, Muslim men and women are greatly affected by sterility or infertility diagnoses. A married couple may even be ostracised or stigmatised, and Muslim partners can face social legitimisation issues when their roles as *Ummah* members and as spouses are questioned locally. Doubts can be expressed regarding the manliness and virility of a Muslim man fathering no offspring; in effect, male infertility tends to be socially conflated with impotency. By way of illustration, an andrologist explained that Muslim patients occasionally voiced their state of despair when declaring: «Doctor, what shall I tell to my family? They're telling me I am not a man!». Similarly, an IVF physician reported: «For example, "I don't go back to my own country because I'm not a man with no heirs!" – They often tell me so». Muslim prospective fathers voiced similar concerns whilst asserting their pivotal need for a child. A Muslim Bangladeshi man, for instance, stated:

I can't wait anymore: I'm 38, she's 31. I want this for her, as well... I work; she is at home, she's always alone and she thinks... and this isn't good. Then, everybody has children... [...] This, this child is my prince, now! I am ready to leave my work, if that can help, now... Look – I am taking a leave of absence, I don't go to work so that we do this, now.

This declaration was echoed in other Muslim male patients' statements such as the following ones: «I need a child now, right now! That's all I need!», and «I don't care where and how... as long as a child comes!». Emphasis was thus placed upon the earnest and imperative need for a child.

In addition to the compelling necessity to procreate, local healthcare providers also detected the urgency to conceive as manifested by Muslim patients; «Muslim men and women alike are both eager to get a baby done very quickly» – an embryologist reported. Two IVF physicians similarly asserted: «They don't know, and they don't care [about the reasons] why they're infertile... they are all on the result, they just want the child!», and «They are usually in a rush. Even more so, women: they want to get pregnant... now!». This psychological pressure can also imply that some false statements are voiced by Muslim intended mothers approaching clinics offering ARTs/MAPs. As disclosed by some patients and corroborated by cultural mediators, some migrant Muslim women may exaggerate their inability

to conceive a child (in case of primary or secondary infertility), in order to promptly begin a fertility treatment¹²².

Muslim prospective mothers, indeed, are particularly affected by delayed or impossible pregnancies, specifically when their husbands decide to rely upon traditional *sharīʿah* compliant remedies to childlessness such as divorce through repudiation (talāq) or polygyny¹²³. Furthermore, when adopting the viewpoint of Islamic jurisprudence (fiqh), infertility primarily concerns women¹²⁴. Confirming this, local healthcare providers brought to light dramatic scenarios when narrating what follows:

Yesterday, I met a woman crying: she was telling me that her husband can repudiate her because of that. She kept telling me [that] she needs a child, she absolutely needs a child!

Muslim women... it might happen that they beg me to produce more oocytes, they so earnestly.

Sometimes they even beg: they implore to become parents, to produce more oocytes.

and

One asked me to proceed with the treatment using a donor's sperm without telling her husband – she was so desperate!

The reported statements distinctly pinpoint the Muslim women's difficulty in accepting a sterility/infertility diagnosis or a failed MAR procedure that might encompass female and/or male factors¹²⁵. In some cases, the Muslim female patients were desperate to such an extent that they expressed their desire to conceal from their husbands that they had undergone a fertility procedure involving third parties. By way of illustration, a Muslim prospective mother disclosed her personal experience as delineated below.

I said to the doctor: «Please, do it for me! I won't tell him! We won't tell anyone... he doesn't need to know – doesn't he!? – If we have a child, when we'll have a child... he'll be fine». But – you see – he didn't want to! He said: «That's illegal... my husband needs to know for us to proceed... here we cannot do that» – he said to me. [...] I really really wanted a child, I insisted and insisted, but I had no more

¹²⁴ On this, see *inter alia* S. Houot, *Islamic jurisprudence (Fiqh), and assisted reproduction: Establishing limits to avoid social disorders*, in Inhorn, and Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, cit., at p. 55. See also *supra*, sections 2.2-2.3.

¹²⁵ For further discussion on female and male infertility factors affecting couples with at least one Muslim partner, see *infra*, chapter V, section 4.

¹²² See *infra*, chapter V, section 8.

¹²³ See *supra*, chapter III, section 4.2.

eggs... and I needed those. The doctor had found those [the oocytes] for me, and I was fine with that... but I didn't... I didn't want my husband to know... Then, it was too expensive... So, I let it go... and we had no child. [...] We aren't young, so we are [still] together ...with no children of our own, though.

Building upon his own experience, a local *imām* explained that this state of despair can even lead some Muslim women to be unfaithful in the attempt to conceive a child with another man. In some cases, adultery was perceived as the lesser evil when compared to childlessness.

Accurate accounts of the married women's need for a child were also provided by local cultural mediators. Some of them clarified these dynamics occurring amongst Muslim women when disclosing that «Once a woman has had a child, then her life is better... in the family, socially, religiously, legally», and «she wants a child, at any cost! Naturally, it protects her». When interviewed, one Muslim patient, raised analogous issues explaining that, «My mum is also warning me: "You have to give your husband a child a.s.a.p. so that you can keep his heart close to you!" – She often tells me this». Accordingly, family pressure and relatives' interference amplify the partner's perceived necessity to undergo fertility treatments; in particular, Muslim women are strongly advised to procreate in order to acquire better social and familial status. Determined and strong-willed behaviours of Muslim prospective mothers were carefully portrayed by some cultural mediators, as illustrated below.

Sometimes nurses say so, yes... but women are not suffering in silence, to me. They want to have children! It's cultural: she gets married to have children. She has to do that, and [she] does everything she could to do that. That's the norm...

and

Sometimes I have to explain them that risks exist... in the treatments, procedures, medications [...] And usually they say: «All right, all right, all right... let's go on!». They even don't pay attention to what I say. The idea is: at any cost, I go on and I have a child.

Some Muslim female patients were similarly described by local clinic personnel as being prepared to do anything it takes to pursue a pregnancy. In real terms, motherhood is an important stepping-stone in Muslim women's lives. This desire for offspring can thus be linked to Muslim wives' social, matrimonial, familial, legal, and migratory statuses, or also involve more personal issues. A Muslim patient, for instance, shared her deepest feelings when disclosing:

I'm depressed every time I get my period... my only comfort is buying baby clothes. I usually wait for sales and buy a few pieces... I'll use them anyway! [...] To be honest with you, I'm terrified. I don't want to be like my mother or my aunt... I

don't want to go through to what they went through! I like children, I love them... I want to be a mum, I really want to be a mum... I need that.

Another Muslim patient, who had recently relocated to Torino, voiced her loneliness when she stated: «I want a daughter so that she will become my friend... we'll do things together, then».

The wish for offspring as a way of bridging the linguistic and cultural gap in the country of settlement was also emphasised by the psychologist of a public MAP centre. The psychologist stated that Muslim women usually do not to speak the local language and do not work; frequently do not have friends and passively watch TV programmes whilst missing their country of origin¹²⁶. They do not have «alternative life plans» or «replacement creative projects». As a result, when compared to non-Muslim patients, Muslim prospective mothers tend to be lonelier and more depressed. Accordingly, a child becomes a «future company project»; the informant in effect reported that some patients disclosed: «I want a child, so he'll look after me when I'll be old».

Offspring thus becomes a stepping-stone in the migratory projects of the Muslim women interviewed. With regard to that matter, an additional unspoken truth emerged. Muslim intended wives are utterly worried about being divorced if the outcome of the fertility cycles is negative; this change in their nuclear family might indeed imply their relocation to their country of origin. Ostracism and stigma can therefore significantly affect these relocated divorced and infertile ex-wives.

On the contrary, few Muslim women adopted a spiritual approach when coping with the lack of positive procreative results. For instance, one prospective mother stated:

In *Islām*, you have to trust God! We say: «He can give you a son, a daughter or none... thus we must accept His will». [...] Since I moved here... and I wasn't getting pregnant, I got close to God. I think it's part of the process: the more difficulties, the closer to God! You see – sometimes, if everything goes well, you move away from God. So, it isn't all bad in this...

The reported statement resounds with some declarations released by Islamic scholars and heads of worship centres with regard to acts of worship and childlessness acceptance, as formerly addressed¹²⁷. This also indicates that, in what has been called «the pilgrimage for pregnancy»¹²⁸, pious Muslims are required to faithfully accept and embrace their own fate. From

¹²⁶ See also *supra*, section 2.3.

¹²⁷ See *supra*, in chapter III, section 4.1.

¹²⁸ See Inhorn, *Quest for Conception Gender, Infertility and Egyptian Medical Traditions*, cit., at pp. 3, 50, 289.

an Islamic perspective, independently from the parties' need for offspring, divine willingness eventually moulds every prospective parent's individual destiny, including potential sterility or infertility. Locally, this approach high impacts on patient-doctor relationships.

Pious Muslims, more specifically Muslim married women, are nonetheless conscious of their need to resort to medically assisted procreation whenever possible. If fertility cycles are not successful, or the couple cannot undergo homologous MAR treatments, then Muslim spouses would most probably refer to traditional *sharī'ah* compliant remedies to childlessness¹²⁹. Otherwise, some Muslim partners might opt for heterologous MAP procedures or adoption, both in violation of (*Sunnī*) Islamic provisions and Muslim customs, thus implying the need to conceal some details to their extended families and local social spheres.

¹²⁹ As described *supra*, in chapter III, sections under 4.

Chapter five

Local Muslim patients

1. Access and usage of local fertility clinics

At the beginning of the present volume, it was emphasised that both the global and the local Muslim population are growing at a faster rate than the non-Muslim population; accordingly, the catchment area of fertility clinics offering MAR treatments increasingly encompasses «new» Italians and foreigners settled on Italian soil¹.

Building upon qualitative and quantitative data², the present part of the volume intends to shed further light on local Muslim patients. Furthermore, healthcare providers' perceptions of Muslim patients are analysed alongside quantitative data as kindly released by public and private fertility clinics established in Torino. More specifically, interviewees' declarations are compared to quantitative statistical data encompassing a total of 16,028 patients undergoing fertility treatments of levels I-III, during the years 2009-2017 in a clinic established in a public hospital³, in addition to data regarding donor's procedures as reported by two private fertility clinics.

Accordingly, the following sections address clinic staff's perceptions and observations of Muslim patients⁴, whilst relating the released interviews to the available figure regarding Muslim prospective parents undergoing homologous and heterologous fertility cycles. The overall dimension of the phenomenon of local access and usage of fertility clinics by Muslim patients is thus undisclosed and discussed.

¹ See *supra*, chapter I, section 5.

² As formerly detailed in chapter I, sections under 6, and as provided by the local fertility clinics listed in chapter II, section 6.

³ The author was granted access to the electronic lists of all patients' appointments for MAR treatments in order to identify foreign and/or Muslim patients. For details, see *infra*, section 2.

⁴ For further insights on healthcare providers' perceptions of Muslim patients see *supra*, chapter IV, sections 2.1-2.3 and 3.1.

2. Quantifying Muslim patients

Data concerning local Muslim patients were inferred by relying upon both qualitative and quantitative data as made available by local MAR clinics and healthcare personnel as investigated by the author.

As far as the former are concerned, the healthcare providers who were interviewed offered a range of diverse answers when invited to quantify their Muslim patients. In particular, significant differences emerged in the catchment areas of public, SSN-funded, and private MAR clinics, with respect to Muslim patients⁵. By way of illustration, the head of two private fertility centres declared that Muslim patients are equivalent to «about 5% a year, in the last two years» and «in almost thirty years I had four-five [Muslim] couples altogether». The electronic record of another private MAP centre documented six Moroccan patients, five Nigerians, four Iranians, one Syrian, and one Lebanese, from 2011 to 2016; assuming that all these foreign patients were Muslims, only seventeen were counted in five years⁶.

Whereas small percentages of Muslim prospective patients tend to undergo MAR procedures in local private centres, the centres' statistics quoted by the informant indicated a consistently growing number of Muslim patients accessing SSN-funded fertility cycles. A medical doctor of an SSNfunded MAR centre, for instance, asserted that Muslim patients amount to «no more than 10%... out of 900 couples a year, with regard to I-II level treatments».

A higher increase in the percentages of Muslim patients was reported by the healthcare personnel of a public hospital. In this centre, two medical doctors explained «One out of ten couples is Muslim. [...] I see 1,200 couples, a year» and «Muslim women are so many! I'd say 30%, mainly because it's a public hospital». Examining the declarations released by other clinic staff members of the same fertility centre, the prominent share of foreign and Muslim patients was further confirmed. By way of illustration, an andrologist stated: «Among my patients, at least 30-35% are foreigners. And, among those, 40% are Muslims». An obstetrician similarly declared:

Muslim patients? There are more and more... I see them, when I receive them, I see them in the laboratory... I see this from the appointment list, from the waiting list. There are plenty of them here.

⁵ Detailed figure of insemination cycles performed in the fertility centres based in Torino during the years 2014 and 2015 can be found *supra*, in chapter II, section 6.

⁶ For data regarding the number of patients of fertility centres in Torino, see *supra*, chapter I, sections under 6, and chapter II, section 6.

One of the MAR centre's biologists then reported an even greater number of Muslim prospective mothers undergoing IVF procedures. In her words:

They are many... Here, Muslim women are almost 50% [of female patients]. Some mornings, I see only one Italian woman here... if we consider other foreigners such as Romanians, Albanians, and so on. [...] There has been an exponential growth during the last years... there are two reasons. Public service: about 90% [of Muslim patients] benefit from ticket exemptions. Due to their customs and traditions, having no children is a handicap. So, there are many of them.

Healthcare providers thus delineated a figure of Muslim patients ranging from 5-10% in the case of private or SSN-funded clinics, to 30-40% in public MAR centres⁷. These patterns were explained on the grounds of the clearly perceived «Islamic need to procreate»⁸, and the financial conditions of the majority of Muslim patients. Field-collected data indeed mirrored the fact that the majority of fertility treatments carried out in Torino are (partially/totally) funded by the national health system (SSN)⁹. In fact, locally, private fertility centres are more numerous than public ones; nonetheless, MAP procedures are predominantly granted by public or SSN-funded clinics. Additionally, in Piedmontese public/SSN-funded centres, the cost of fertility cycles is covered by the national health service when the treatment is considered an essential level of assistance (LEA)¹⁰.

In order to further investigate and quantify the local catchment area of Muslim patients, attention should also be paid to quantitative data as accessed in some local fertility clinics. More specifically, examining the waiting list of a MAR centre established in a public hospital, a total of 8,014 patients were identified by the author. The list encompassed couples willing to undergo fertility procedures in the aforementioned clinic from January 2009 to March 2017. Cross-referencing patient's nationalities, names and surnames, 5,570 Italian patients were singled out; 2,444 foreign patients were identified and 712 Muslim patients were counted¹¹. The in-depth clinic-

⁷ In the city of Torino, during the years 2014 and 2015, private MAR clinics provided respectively 1,284 and 1,212 homologous insemination cycles – as formerly reported in chapter II, Table 7. The sole SSN-funded centre provided 1,385 and 1,344 homologous insemination cycles in 2014 and 2015 respectively. With respect to local public fertility clinics, 1,058 and 1,168 homologous insemination cycles were offered in 2014 and 2015.

⁸ On this aspect see *supra*, chapters III, section 3, and chapter IV, section 6.

⁹ See *supra*, chapter I, section 6.1.

¹⁰ See *supra*, chapter II, sections 5-6. See also *infra*, section 7.

¹¹ Muslim majority countries and countries with a significant Muslim presence (MMCs and SMPCs) include: Afghanistan, Albania, Algeria, Azerbaijan, Bahrain, Bangladesh, Bosnia-Herzegovina, Benin, Brunei, Burkina Faso, Chad, Cocos (Keeling) Islands, Comoros, Djibouti, Egypt, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea Bissau, India, Indonesia, Iran, Iraq, Ivory Coast, Jordan, Kazakhstan, Kosovo, Kuwait, Kyrgyzstan, Lebanon, Libya, Mac-

	Patients included on the waiting list	Italian patients	Foreign patients	Muslim patients
2009	796	604	192	54
2010	918	656	262	59
2011	1,074	761	313	87
2012	1,126	797	329	99
2013	1,121	790	331	92
2014	902	612	290	94
2015	950	594	356	107
2016	978	654	324	99
2017 (partial)	149	102	47	21
Total	8,014	5,570	2,444	712

TAB. 5.1. Waiting list of a public MAP centre

related information that were collected with regard to Muslim prospective mothers and fathers is analysed in the following sections of the present chapter.

First of all, it is worth mentioning that the overall figure of local prospective parents, whose identification data were included on the waiting list of the public fertility clinic examined, increased between 2009 and 2012, when the growth rate ranged from +16.9% to +4.8%. A negligible decrease was registered in 2013 (-0.4%); whilst the total number of patients sharply decreased in 2014 (-19.5%). Since then, the number of patients grew again until December 2016¹². These statistics, as detailed in the Table 5.1 and the Figure 5.1, are in line with the Italian and Piedmontese trends, as previously analysed in chapters I and II.

Comparing Italian and foreign patients, the Table 5.1 and the Figure 5.1 show that, from 2013 to 2014, the decrement of foreign patients (-12.4%) was lower than that of Italian ones (-22.5%). In the same time lapse, an opposite trend was registered amongst Muslim patients whose number slightly increased (+2.2%)¹³. A higher rate of increment in Muslim patients (+13.8%) was recorded from 2014 to 2015, similarly to the increase in the number of foreign patients (+22.8%) and in contrast to the decrease in Italian patients (-3%). The following year, an opposite trend was documented,

edonia, Malaysia, Maldives, Mali, Mauritania, Mayotte, Montenegro, Morocco, Niger, Nigeria, Oman, Pakistan, Palestinian Territories, Qatar, Saudi Arabia, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Syria, Tajikistan, Tanzania, Tunisia, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Western Sahara, and Yemen. Religious identity-markers were identified in names and surnames such as (variously spelled) Islām and Muḥammad. When possible, these details were double-checked by meeting the patients or asking clinic staff for further details. For discussion on clinic staff and the methodology adopted, see *supra*, chapter I, section 6.1.

 $^{^{12}}$ The growth rate ranged from +5.3 % to +2.9 %.

¹³ A decrement of Muslim patients (-7%) was, however, recorded from 2012 to 2013.

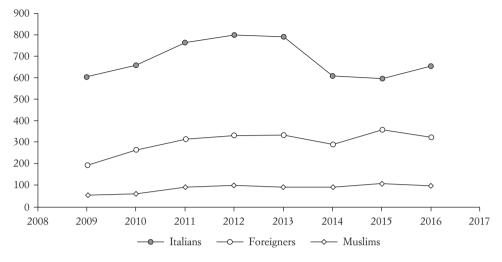


FIG. 5.1. Patients included on the waiting list.

more specifically, field-collected data indicated a decrease in both foreign (-9%) and Muslim patients (-7.5%) and an increase in Italian patients (+10%).

As formerly discussed, this phenomenon may not indicate an actual reduction of Muslim intended parents undergoing fertility procedures, but rather the fact that Muslims are increasingly less easily identified¹⁴. This is mostly due to the naturalisation of (Muslim) foreigners. In real terms, healthcare professionals disclosed higher percentages of Muslim patients accessing ART/MAP centres in Torino.

The data reported above are also to be analysed in connection with the total number of patients whose personal data were included on the aforementioned waiting list. In fact, the yearly percentage of Italian patients on the MAP centre's waiting list ranged from 62.5% in 2015 to 79% in 2011.

When looking at the figure of foreign patients, the area of variation encompassed the minimum of 24.1% in 2009, and the maximum of 37.5% in 2015. The number of Muslim prospective parents counted amongst these patients fluctuated between 6.4% in 2010 to 11.3% in 2015. Combined with the data formerly discussed in chapter I, this confirms that not only are MAR procedures increasingly relied upon by prospective parents on Italian soil, but Muslim patients are to be named as constant and escalating users of these fertility techniques in Torino.

Interesting data also emerged from the analysis of the earlier months of the year 2017. As detailed in the Figure 5.2, the former downward trend

¹⁴ See *supra*, chapter I, section 5.

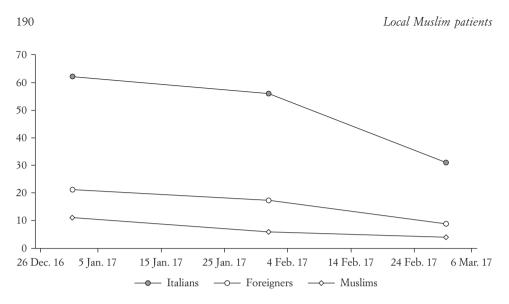


FIG. 5.2. Patients included on the waiting list - 2017 (partial).

was confirmed; nonetheless, a proportionally higher percentage of Muslim patients was registered. From 19th January 2017 to 9th March 2017, out of 149 patients, the number of Muslims on the clinic's waiting list reached 21 prospective parents, namely 14.1% of the entire number of patients accessing the MAR centre studied.

3. Identifying Muslim patients

Ethnographic observations indicated that local healthcare professionals normally assumed the religious belonging of their patients relying upon prospective parents' nationality, outfit, physical appearance, behaviour, or body language. Mirroring the structure of the previous section, clinic informants' perception of Muslim prospective parents are addressed here and related to the quantitative data collected.

When enquired about Muslim patients, a nurse interviewed in a public MAR centre, for instance, declared:

You infer this [Muslim belonging] from their clothing, style... usually, they [Muslim women] wear the headscarf. Or you see their Arab surname or face (e.g. darker skin colour), patient's conduct, couples' dynamics and so on.

A biologist similarly asserted: «These women wear the headscarf, look down, the husband grabs the controls... you see that they're different! Usually, you see that». An andrologist, instead, stated: «I see they're Muslims because they all circumcised». Heads of private clinics mentioned different aspects whilst carefully emphasising that they avoided any direct questions regarding faith, creed or religious belonging. One informant affirmed: «I can't discriminate: I can't ask; either I see that [they are Muslims] or I don't know»; another one explained: «I never ask that – it's illegal! – I assume this from their country of origin». Instead, an IVF physician identified the patient's religious belonging on the grounds of her pious behaviour. He explained that he suddenly discovered that the woman undergoing the treatment was Muslim when she offered a prayer to God in the transfer room near to the laboratory. In his words, «I saw this, once... because once it happened that a Muslim woman was praying *Allāh* during the embryo transfer. At that point, it was pretty clear to all of us that she was Muslim».

Relying upon the criteria of physical appearance and nationality can, nonetheless, lead to mistakes, as disclosed by field investigations. On one occasion, by way of illustration, some nurses introduced an Egyptian couple to the author. The healthcare personnel assumed the partners were Muslims whereas they were actually Coptic Christians. When interviewed, this couple voiced its disappointment for being associated with Muslim patients because of their physical appearance and country of origin. The husband's words were the following:

Yes, yes... everyone believes that. And, to be honest with you, we are starting to be quite annoyed about it! It isn't a problem... but you see her: she has no head-scarf, I speak the [Italian] language well, my daughter's name is –¹⁵. We are not Muslims. Too much focus is here for Muslims... everything is for them! Why don't I have anyone like you asking me questions in Egypt? I'm a minority there as they are here. [...] Nowadays it's like that: everything is about Muslims, here too...

With regard to Muslim patients' nationality, private and public clinics reported different country of origins. Private MAR centres listed Maghrebian countries as predominant, with some limited cases of Middle Eastern and Albanian prospective parents. The personnel of public and SSN-funded fertility clinics listed Muslim patients whose countries of origin are Morocco, Egypt, Tunisia, Algeria, Lebanon, Syria, Ethiopia, and Bangladesh. A cultural mediator active in a public fertility clinic reported that, amongst Muslim patients, 70% are Moroccans, 25% are Egyptians, and 5% are from other Muslim majority countries.

These interviewees' perceptions were compared to quantitative empirical data. Actually, when specifically looking at the material gathered, interesting elements surfaced with regard to Muslim prospective parents' nationalities.

¹⁵ The girl's name is not reported in order to protect the informants' privacy, but it was a very common typically Christian name.

MMCs & SMPCs	European	Patients' nationality	Female patients' nationality	Male patients' nationality
Albania		44	23	21
Algeria		3	1	2
Bangladesh		10	5	5
Benin		2	1	1
Egypt		31	15	16
Ethiopia		4	2	2
ndia		2	1	1
ran		4	2	2
	Italy	39	14	25
vory Cost		6	3	3
	France	1	1	-
Kosovo		2	1	1
Lebanon		2	1	1
	Lithuania	1	1	_
Macedonia		10	4	6
Mali		2	1	1
Mauritius		4	2	2
Aorocco		276	144	132
Vigeria		26	16	10
Pakistan		4	2	2
Philippines		1	1	_
11	Romania	4	4	_
enegal		11	5	6
ierra Leone		1	-	1
Somalia		1	1	-
iri Lanka		2	1	1
lunisia		18	8	10
Turkey		4	2	2
Jugoslavia		1	-	1
Total		516	262	254

TAB. 5.2. Couples - with at least one foreign partner - willing to undergo MAR

More specifically, analysing the patient waiting list of the aforementioned public fertility clinic, information concerning nationality and/or country of origin were extrapolated for a total of 516 patients (262 women and 245 men) and examined in detail.

The figures reported in the Table 5.2 thus concern couples with at least one (identified) Muslim partner¹⁶.

As detailed in the Table 5.2, Italians amount to 39, namely 7.6% of patients who are Muslims or are married to a Muslim partner with whom they are willing to undergo a fertility cycle in the aforementioned MAP centre. Other European countries such as Romania, Lithuania and France were also identified.

¹⁶ It cannot be excluded that some Muslims might have not been identified and counted; for instance, it would have not been possible to single out an Italian-national Muslim partner with a non-Muslim name or surname if no additional information regarding the patient was reported by the administrative or clinic staff. On Muslim names, see *supra*, chapter I, section 6.1.

Considering non-European (Muslim) prospective parents, the highest number of foreign Muslim patients is to be found amongst Moroccans who represent the 53.5% of the listed patients. Interestingly, this percentage is definitely higher than the statistics perceived and reported by local cultural mediators; it could thus be ventured that only a smaller amount of Muslim patients actually do require the intervention of such professional figure¹⁷.

Amid alien Muslim patients, Moroccans are followed by an assortment of nationals of some Muslim majority countries (MMCs) or countries with a significant Muslim presence (SMPCs). Relevant percentages were found amongst Muslim prospective parents from Albania (8.5%), Egypt (6%), Nigeria (5%), Tunisia (3.5%), Senegal (2.1%), Bangladesh (1.9%), Macedonia (1.9%), Bangladesh (1.9%), and Ivory Cost (1.2%). The Figure 5.3 sheds light on these data¹⁸.

Additional information can also be inferred with respect to prospective fathers' and mothers' nationalities. Examining Muslim partners and spouses married to a Muslim partner undergoing MAR procedures, Moroccans (52%), Italians (9.8%), Albanians (8.3%), Egyptians (6.3%), Nigerians (3.9%), and Tunisians (3.9%) were the more common prospective fathers' nationalities. With regard to prospective mothers, the countries occurring more frequently were Morocco (55%), Albania (8.8%), Nigeria (6.1%), Egypt (5.7%), Italy (5.3%), and Tunisia (3.1%).

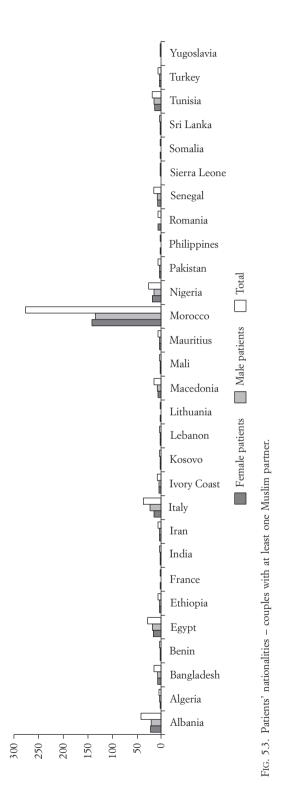
Delving deeper into the patients' country of origin, further details were investigated with respect to Muslim prospective parents' endogamous or exogamous nuptial unions¹⁹, as detailed in the Table 5.3. In the electronic document provided, data concerning the nationality of both partners were reported for 514 patients; amid those, 42 exogamous couples and 210 endogamous couples were identified.

Muslim endogamous partners were principally counted amongst Moroccans (59%), followed by Albanians (10%), Egyptians (6.7%), Nigerians (4.3%), Senegalese (2.4.%), and Bangladeshis (2.4%). Exogamous partners, who are Muslim or married to a Muslim partner, were predominately identified amongst Italians and Moroccans, whose percentages reached 34.5% and 26.2% respectively.

¹⁷ On this, see *supra*, chapter I, section 6.2 and chapter IV, section 2.2.

¹⁸ For a comparison with the national and Piedmontese rates of foreign and Muslim population, see *supra*, chapter I, sections 4-5.

¹⁹ It is worth mentioning that, in compliance to *Islām*, Muslim women can only marry Muslim men, whilst Muslim men can marry women belonging to the «People of the Book». See *Qur'ān* (II: 221; V: 5). The expression People of the Book (*abl al-kitāb*) identifies religious groups whose texts are recognised by *Islām*, namely Jews and Christians. To some interpretation, Zoroastrians and Sabians are also to be regarded as People of the Book (*Qur'ān*, XXII: 17, II: 62, and V: 69).



Local Muslim patients

	Exogamous wife's nationality	Exogamous husband's nationality	Muslim exogamous partners	Muslim endogamous partners
Albania	2	_	2	42
Algeria	-	1	1	2
Bangladesh	_	-	_	10
Benin	_	-	_	2
Egypt	_	2	2	28
Ethiopia	_	-	_	4
France	1	-	1	-
India	-	-	-	2
Iran	-	-	-	4
Italy	8	21	29	8
Ivory Coast	-	-	-	6
Kosovo	1	1	2	-
Lebanon	-	-	-	2
Lithuania	1	-	1	-
Macedonia	_	2	2	8
Mali	_	-	-	2
Mauritius	_	1	1	2
Morocco	16	6	22	248
Nigeria	7	1	8	18
Pakistan	-	-	_	4
Philippines	1	-	1	_
Romania	4	-	4	_
Senegal	-	1	1	10
Sierra Leone	-	1	1	-
Sri Lanka	-	-	-	2
Tunisia	1	4	5	12
Turkey	-	-	-	4
Yugoslavia	-	1	1	-
Total	42	42	84	420

TAB 5.3. Prospective parents' endogamous or exogamous relationships

With reference to exogamous prospective mothers undergoing fertility treatments, Moroccan, Italian and Romanian women were pinpointed. Prospective fathers not married to co-nationals were mostly found amongst Italians, Moroccans, and Tunisians. As formerly discussed, Muslim endogamous prospective parents become specifically relevant in MAR procedures since these patients show the tendency to be blood-related²⁰.

4. Muslim patients' clinical picture

When enquired about the clinical picture of Muslim patients²¹, healthcare professionals asserted that multiple issues affect the couples' chances

²⁰ See *supra*, chapter IV, sections 3.3 and 4.2.1.

²¹ As previously discussed, the Muslim patients' clinical picture encompasses one of the specificities which have been singled out by the healthcare providers. See *supra*, chapter IV, section 2.1.

Year of first fertility treatment	Average age Muslim women	Average age Muslim men
2009	33	39
2010	35	42
2011	32	40
2012	34	42
2013	34	42
2014	33	41
2015	35	41
2016	34	42
Overall average age	33.7	41

TAB. 5.4. Muslim prospective parents' average age

of conceiving and, amongst Muslim patients, infertility factors are equally shared between the spouses. Quoting the words of the head of a private MAP centre: «the sterility factor is connected to women in 50% of the cases and to men in 50% of the cases, for Muslims and foreigners too».

Exploring potential challenges to ART treatments in depth, some aspects emerged with respect to Muslim prospective fathers and mothers. As far as the latter are concerned, medical doctors reported that Muslim women should have higher fertility levels due to their young age, specifically when compared to other female patients. A nurse, for instance, stated: «They're getting pregnant more easily because they're younger!».

Indeed, quantitative data confirmed the patterns voiced by healthcare professionals. Amongst the material provided, information regarding both intended Muslim fathers' and mothers' year of birth were made available with respect to 230 couples, who underwent at least one MAR procedure from January 2009 to December 2016. In the years examined, Muslim male patients' average age ranged from 39 to 42 years, Muslim female patients' average age fluctuated from 32 to 35 years, as reported in the Table 5.4. The data thus demonstrate that, as time passes, the average age of (foreign) Muslim prospective parents increased slightly, similarly to the Italian trend formerly discussed²². In the long term, Muslim intended parents' fertility could similarly be increasingly affected by postponement of pregnancy.

Although healthcare professionals asserted that Muslim prospective mothers are comparatively younger than Italian (non-Muslim) ones, Muslim patients' fertility tends to be highly impacted by other factors, predominantly obesity and former infections. Some declarations released by medical doctors can clarify these points: «The main issue, for many of them, is their own weight. To them, women should be like that... but this is not fine for

²² On this see *supra*, chapter II, section 4.

the treatment», and «there are several overweight women, even obese ones. I give you an example: 20-year-old girls weighing 85 or 120 kilos».

As disclosed by empirical investigations, the second (potential) infertility factor regards infections and/or damages to ovaries or fallopian tubes. More specifically, some healthcare professionals explained what follows:

Muslim users are generally younger, even younger than 30-year-old. They show problems linked to their ethnic origin such as diet. The infertility factors are connected to ovulatory problems – such as polycystic ovarian disease – and different models of physical appearance and body shape.

A peculiarity of Muslim women is that they have ovarian problems (e.g. polycystic ovarian disease) linked to their heating habits or to the sanitary conditions and standards they are used to. But, overall, they're more fertile because they're younger...

and

Sometimes they [Muslim women] can't have babies because of what they did to them before... I mean, some have gone through abortions or operations before – mostly, fallopian tubes infections – which weren't done properly so, now, their reproductive system isn't working as it's supposed to.

According to the opinion of the interviewed clinic staff, then, Muslim women's infertility/sterility issues are predominantly linked to foreign cultural habits and sanitary conditions; their overall younger age can nonetheless counter-balance these problems.

Amongst the factors affecting the fertility of Muslim women, an additional aspect is to be mentioned. Scientific studies indicate that anovulatory infertility is sometimes linked to polycystic ovarian syndrome (PCOS). Obesity is one the factor potentially causing PCOS and customary consanguineous marriages affect genetic susceptibility to metabolic complications²³. As a result, blood relatedness amongst Muslim intended parents can become a vicious circle potentially implying congenital and genetic disorders in the offspring and also affecting prospective mothers' ability to conceive a child²⁴.

Other IVF physicians elucidated that Muslim male infertility is a widespread phenomenon greatly affecting couples relying upon fertility treatments locally. By way of illustration, one interviewee stated what follows:

²³ See G. Wakley, J. Fuller, and B. Qureshi, *A Muslim woman with infertility*, in «Practitioner», 244, 2000, at pp. 1005-1008, 1013-1014; F. Haq, and J. Rizvi, *Infertility and polycystic ovarian syndrome: a study of association between body mass index and intrafamily marriages*, in «Gynecologic and Obstetric Investigation», 65, 4, 2008, pp. 269-274.

²⁴ On the first aspect, see *supra*, chapter IV, section 4.2.1.

To our patients from Islamic countries, the problem lies mainly in the male partner. Because women are younger (20/30-year-old) and there is a bigger age gap between the man and the woman. [...] Moreover, they have different lifestyles. Women aren't thrown in the deep end, living alone in Europe – like patients from Eastern countries, who are affected by chlamydia, etc. [...] Many of these [Muslim] women live with their own families until they marry and then they relocate to Europe with their husbands... so they haven't had many sexual partners either.

Muslim intended fathers' infertility/sterility problems are predominantly linked to working conditions and customs. For instance, one IVF physician asserted that Muslim men show a higher tendency to «pathologies in the seminal fluid, due to heavy work; for example, many are builders... And culturally, that's a bigger problem».

Cultural mediators instead emphasised that, whilst Muslim women usually seek a solution to childlessness and sterility²⁵, Muslim men are less keen to explore their potential infertility factors. In their words, «that's cultural: the fault belongs to the woman, always... When it isn't like that, then it isn't true: the doctor made a mistake, quite clear», «to Muslim men, going to the doctor... is a huge step!». Another informant further explained that «this [going to a fertility clinic] takes away from him his manliness... he feels emasculated».

Accordingly, due to traditions and customs, Muslim men might refuse an infertility diagnosis so that their virility is not questioned by their wife or by their extended kindred. Muslim couples' dynamics are thus considerably influenced by the infertility factor(s) affecting them, as described by clinicians and cultural mediators²⁶. Indeed, clinic staff reported that very rarely a Muslim woman accompanies her husband to andrological examinations, whereas the opposite is the norm. Moreover, from a cultural perspective, Muslim wives are taught to «bear the burden of infertility», upholding their husband's masculinity and sharing their «sterility secret»²⁷.

In order to shed further light upon infertility and sterility factors with specific reference to Muslim intended parents, qualitative data regarding patients undergoing fertility cycles from 2009 to 2016 were collected and ex-

²⁷ This is corroborated by the empirical investigations conducted by Inhorn. See for instance M.C. Inhorn, *The «worms are weak»: Male infertility and patriarchal paradoxes in Egypt*, in L. Ouzgane (Ed.), *Islamic masculinities*, London, Zed Books, 2006, pp. 217-237; Id., *The New Arab Man: Emergent Masculinities, Technologies, and Islam in the Middle East*, Princeton, Princeton University Press; and Id., *The New Arab Man: Emergent Masculinities, Technologies, and Islam in the Middle East*, in Institute on Culture, Religion & World Affairs (Ed.), *Key Issues in Religion and World Affairs*, 2015, pp. 1-14.

²⁵ As also pinpointed by interviewed local religious figures, see *supra*, chapter III, section 2.1.

²⁶ On perceptions of Muslim couples' dynamics by local healthcare providers, see *supra*, chapter IV, sections 2.2 and 2.3.

Fertility treatment year	Female infertility factor	Male infertility factor	Idiopathic infertility factor
2009	7	9	1
2010	13	11	3
2011	12	31	5
2012	19	32	4
2013	11	35	4
2014	11	23	9
2015	14	22	15
2016	15	25	10

TAB. 5.5. Infertility factors affecting prospective parents

amined. Relying upon the information collected for a total of 341 couples with at least one Muslim partner²⁸, it emerged that 55.1% couples were diagnosed with male infertility factors, 29.9% couples were diagnosed with female infertility factors²⁹, and 15% couples were diagnosed with idiopathic infertility factor. These figures are illustrated in the Table 5.5. It should be added that the reported infertility/sterility factor is the one originally diagnosed by a medical specialist and registered in the clinic electronic system when the couple was admitted to the first fertility treatment; potential additional reproductive difficulties subsequently emerged were not recorded in mentioned document.

Regarding the idiopathic factor – which indicates an unknown infertility/sterility cause or mechanism – interesting data surfaced³⁰. Until 2013, a small percentage of couples was reported to be affected by the aforementioned infertility factor. In 2009, for instance, this was reported for only one couple (out of 17). Over the years, nonetheless, Muslim patients and the partners of a Muslim person were increasingly diagnosed with an idiopathic factor; by way of illustration, from 2009 to 2015 the percentage increase was equal to +1,400%.

With respect to male infertility factors affecting Muslim intended parents, a significant percentage increase (+181.8%) was recorded from 2010 to 2011. The number of couples affected by this factor increased until 2013, when a decrease began and lasted until 2015³¹. As far as female in-

 $^{^{28}}$ The number of couples undergoing MAR procedures in this public fertility clinic were 17 in 2009, 27 in 2010, 48 in 2011, 55 in 2012, 50 in 2013, 43 in 2014, 51 in 2015, and 50 in 2016.

²⁹ As reported, these include endocrine, ovarian, tubal, and obstructive factors.

³⁰ Idiopathic infertility is different from unexplained infertility, which implies that no abnormality is identified in the gametes and/or reproductive system of the intended parents. See G.L. Schattman, S.C. Esteves, and A. Agarwal (Eds.), *Unexplained Infertility: Pathophysiology, Evaluation and Treatment*, Dordrecht, Springer, 2015.

 $^{^{31}}$ From 2013 to 2015, the percentage decrease was equal to -37.1%; from 2015 to 2016 the percentage increase was +13.6%.

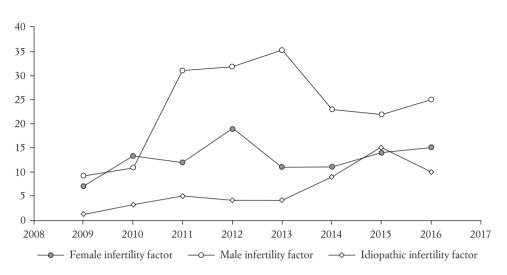


FIG. 5.4. Couples' infertility factors.

fertility factors are concerned, this increased from 2009 to 2012 (+171.4%) and from 2013 to 2016 (+36.4%); while it sharply decreased (-42.1%) from 2012 to 2013. Noticeably, only in 2010 the couples diagnosed with female infertility factors (48.1%) outnumbered those affected by male infertility factors (40.7%)³².

Although traditionally infertility/sterility issues are linked to Muslim wives³³, field-collected data indicated that Muslim prospective fathers were significantly affected by reproductive difficulties. Over a period of eight years, in effect, 54% of couples with at least one Muslim partner were affected by male infertility factors. As a result, traditional *sharī'ah* compliant remedies to childlessness implying changes in the nuclear family – such as polygyny, or the infertile wife's repudiation – might not be pertinent in these situations³⁴.

As shown by the Figure 5.4, additionally, the incidence of the idiopathic factor is increasing amongst Muslim couples and the partners of Muslim persons. In 2015, for the first time, couples affected by the idiopathic factor (29.4%) outnumbered those diagnosed with the female infertility factor (27.5%). This increase might also be read as an indicator of the pressing need for a child as experienced by Muslim intended parents. As formerly discussed in chapters III and IV, family networks and social circles can in-

³² In the same year, 11.1% couples were diagnosed idiopathic infertility factor.

³³ As seen above, indeed, *fiqh* connects infertility to women. See *supra*, chapters III and IV.

³⁴ See *supra*, chapter III, section 4.2.

deed exert significant pressure on childless Muslims. This happens more specifically in a migratory context, when high levels of stress can negatively impact on the fertility of travelling couples: even though no infertility factor is identified, the intended parents need to undergo an ART/MAR procedure to conceive³⁵.

5. MAR procedures and outcomes

Infertility factors naturally condition the type of MAP treatment medical doctors recommend the couple to undergo, as well as the outcome of the fertility procedure. With respect to these two aspects, the data reported by the healthcare personnel in a public MAR centre regarded 231 patients. They underwent 380 level II-III MAP procedures (including frozen/thawed embryo replacement (FER) or frozen oocytes (FOR) cycles) from January 2009 to December 2016³⁶.

The figures concerning couples with at least one Muslim partner are detailed in the Table 5.6. The reported figures indicate that the number of cycles involving frozen/thawed material ranged from 73.7% (in 2009) to 38.2% 8 (in 2016) of the overall MAR procedures³⁷.

In absolute terms, amongst couples with at least a Muslim partner, FER treatments constantly increased from 2009 to 2011, showing a yearly increment of +71.4% and +116.7% respectively. From 2013, the overall figure of these procedures began to decrease, recording a total reduction equal to -53.8%. In the same period, the number of FOR procedures underwent by couples with at least a Muslim partner fluctuated between a minimum of 4 (in 2010 and 2015) to a maximum of 9 (in 2016).

As far as the outcome of the treatments are concerned, in the period examined, out of 380 MAR procedures, 177 pregnancies were registered, and 66 miscarriages were recorded. Accordingly, the success rate for assisted conception varied from 52% in 2009 to 72.3% in 2012³⁸; whilst the average success rate was equal to 62.5%. Investigating the yearly number

³⁶ For details on these MAP techniques and their availability on Italian soil, see *supra*, chapter I, section 4 and chapter II, sections 3, 5, and 6. With regard to the impact of these techniques on the publicly funded costs of fertility treatments see *infra*, section 7.

³⁷ On the use of cryopreserved oocytes and embryos in compliance to Islamic provisions, see *supra*, chapter III, section 7.3.4 and chapter IV, section 3.3.

³⁸ It should be mentioned that, when adopting the perspective of healthcare professionals offering MAR procedures, the success rate for assisted conception includes miscarriages as well as pregnancies.

³⁵ On the impact of psychological distress on (psychosomatic) infertility, see for instance A.M. Brkovich, and W.A. Fisher, *Psychological distress and infertility: Forty years of research*, in «Journal of Psychosomatic Obstetrics & Gynecology», 19, 4, 1998, pp. 218-228. See also *supra*, chapter IV, section 5.1.

Year of fertility treatment	No. of MAR procedures	No. of FER procedures	No. of FOR procedures	No. of miscarriages	No. of pregnancies
2009	19	7	7	2	8
2010	30	12	4	2	16
2011	58	26	5	8	29
2012	65	25	7	16	31
2013	54	21	8	13	23
2014	44	21	6	8	19
2015	55	18	4	11	27
2016	55	12	9	6	24

TAB. 5.6. Fertility procedures and outcomes

of achieved pregnancies, the success rate of the provided MAP procedures grew of +287.5% from 2009 to 2012.

The number of achieved pregnancies among spouses encompassing at least a Muslim partner decreased in the years 2013, 2014 and 2016³⁹, but it grew again in 2015 with an increment of +42.1%. With regard to miscarriages, the total number of patients' miscarriages grew significantly (+700%) from 2009 to 2012, and again (+37.5%) in 2015; it decreased from 2012 to 2014 (-50%), and in 2016 (-45.5%). The trends affecting couples with at least a Muslim partner are graphically represented in the Figure 5.5.

An additional interesting aspect surfaced from the examination of the comprehensive list of prospective 16,028 patients willing to undergo fertility treatments of I-III levels during the years 2009-2017 in a MAP centre established in the premises of a public hospital in Torino.

Healthcare practitioners pay careful attention to previous pregnancies and former MAR procedures undergone by the patients; these data are indeed reported on the fertility treatment waiting list next to the parties' names and ages. By way of illustration, from 22nd January 2009 to 9th March 2017, these details were reported for 147 couples, amongst which 49 encompassed a foreign partner. When specifically considering couples with at least one foreign partner, 23% reported previous pregnancies with positive outcomes, whilst 28.6% reported former MAR treatments or pregnancies⁴⁰.

Couples with at least one foreign partner, and amongst those couples with at least one Muslim partner, show higher percentages of previous problematic pregnancies, such as extra-uterine or pathologic pregnancies,

⁴⁰ In compliance with the information detailed in the section entitled «Notes» for 7,919 couples of patients, from 22nd January 2009 to 9th March 2017, out of 19 recorded previous pregnancies, 4 concerned foreign citizens (21%) and 3 Muslims (15%). According to the data listed under the letterhead «Notes on MAP» for 592 couples of patients, from 10th March 2015 to 1st June 2016, out of 76 recorded previous pregnancies, 19 regarded foreign patients (25%) and 4 Muslim patients (5.3%).

³⁹ The registered decrements were of -25.8%, -17.4%, and -11.1% respectively.

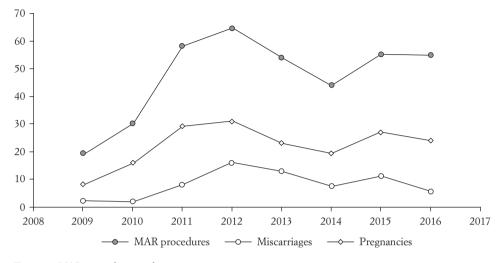


FIG. 5.5. MAR procedures and outcomes.

and miscarriages⁴¹. In the list examined, for instance, out of 17 female patients, three Muslim women reported an extra-uterine pregnancy or a miscarriage; furthermore, 40% Muslim patients recorded biochemical pregnancies⁴².

The reported data are in line with studies disclosing that, when compared to indigenous women, pregnant women in Europe with a migrant background are at a higher risk of giving birth to stillborn children or children affected by congenital anomaly⁴³. Antenatal and perinatal care (including prenatal screening for congenital anomalies) are thus highly recommended amongst the foreign population⁴⁴, as well as health literacy for both clinicians and intended parents. Specific attention should also be paid to customary blood relatedness between intended Muslim parents, in effect, consanguinity is to be named amongst the factors increasing the risk of miscarriages and congenital anomalies⁴⁵.

⁴¹ For further discussion on the Islamic perspective on abortion and miscarriages, see *supra*, chapter III, section 7.3.3 and chapter IV, section 3.3.

⁴² Biochemical pregnancies were reported for four Muslim women out of ten patients.

⁴⁴ PGD indeed decreases spontaneous abortion rates in recurrent miscarriage patients. See S. Munné *et al.*, *Preimplantation genetic diagnosis reduces pregnancy loss in women aged 35 years and older with a history of recurrent miscarriages*, in «Fertility and Sterility», 84, 2, 2005, pp. 331-335.

⁴⁵ On Muslim consanguineous intended parents undergoing MAP treatments, see *supra*, chapter IV, section 4.2.1.

⁴³ See for instance A.M.N. Andersen, A. Gundlund, and S.F. Villadsen, *Stillbirth and congenital anomalies in migrants in Europe*, in «Best Practice & Research Clinical Obstetrics & Gynaecology», 32, 2016, pp. 50-59.

6. Heterologous (non) sharīʿah compliant treatments

In the Muslim world, heterologous treatments are one of the most debated topics concerning ART techniques⁴⁶. As formerly discussed, MAR procedures involving third parties were forbidden on Italian soil from 2004 to 2014. Accordingly, only a limited number of clinics offering these treatments can nowadays be counted on Italian soil⁴⁷; this figure is nonetheless growing, and 2,800 donor's fertility cycles were already officially reported in 2015⁴⁸.

The fact that heterologous MAP treatments are now legally performed on Italian soil should not be overestimated, according to one psychologist. In the case of fertility procedures involving donors, the most controversial issues are related to couple's power dynamics, secret and taboo. With respect to the former, the interviewed psychologist explained that heterologous MAR treatments encompass an «irreversible path», and sometimes the couple underestimates the role played by donated female or male gametes. The involvement of third parties can indeed lead to asymmetric affective and power relations between the partners. Additionally, until three years ago, patients «felt the social stigma of undergoing an illegal procedure. Some felt they were buying a baby; others felt they were part of a mercification process». As a result, this «sense of guilt», in addition to a sort of symbolic sexual transgression, were experienced by Muslim and non-Muslim patients alike⁴⁹.

⁴⁶ Additional clarification with regard to the topics discussed in this section can be found *supra*, in chapters III and IV.

⁴⁷ See *supra*, chapter II. The Conference of Regions and Autonomous Provinces, whilst detailing the requirements ISS-authorised MAP centres have to satisfy and prospective donors' physical and mental characteristics, also identifies a list of four centres authorised to perform heterologous fertility treatments. See Rep. 14/09/CR02/C7SAN and the Resolution of the Regional Council 15th September 2014, No. 12-311.

⁴⁸ See Ministero della Salute, *Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita* (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18) anno 2016, Roma, Ministero della Salute, 2017, at pp. 7-10.

⁴⁹ On couples' asymmetric affective and power relations, see M. Bydlowski, *Les enfants du désir*, Paris, Editions Odile Jacob, 2008, and M. Vigneri, *I bambini che vengono dal freddo. Sulla donna infertile e le nuove frontiere procreative*, in «Rivista di Psicoanalisi», LVII, 1, January-March 2011, pp. 117-145. Infertile prospective parents' dynamics are even more affected in the Muslim world. For instance, Tremayne points out that due to the «symbolic sexual transgression» perceived by infertile Muslim men whose wives relied upon sperm donors, the children conceived through third party's gametes can become «a tool to exercise control over women by the male members of the larger family». See S. Tremayne, *The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran*, in M.C. Inhorn, and S. Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives*, New York, Oxford, Berghahn, pp. 130-156, at pp. 149-150.

Adopting the perspective of Islam, in effect, fertility treatments involving third parties in form of male/female gametes, as well as uterus and/or embryo donors, can be highly problematic. Whereas some $Sh\bar{i}'\bar{i}$ clerics permit third party donation, $Sunn\bar{i}$ scholars forbid Muslim prospective parents to undergo heterologous fertility cycles. In real terms, however, local religious figures conceded that local $Sunn\bar{i}$ Muslim prospective parents may nonetheless undergo these treatments whilst not disclosing their parenthood choice both to the local community and to their extended family.

When enquired about these types of MAP procedure, local healthcare providers manifested some familiarity with Islamic provisions on family planning⁵⁰. As an illustration, one IVF physician voiced his perceptions of Muslim patients as it follows: «When this comes up, a Muslim never comes back [to undergo a heterologous cycle]: I'm told it's easier for them to change their wife!». Other interviewed medical doctors similarly expressed their awareness of additional *sharī'ah* compliant remedies to childlessness for Muslim prospective parents⁵¹. For instance, one physician stated: «They can marry another wife, can't they? So, alternative options exist, at least for [Muslim] men».

In real terms, however, Muslim patients may actually undergo MAR procedures, and this happens in spite of the fact that fertility treatments involving third parties are condemned by some Islamic teachings⁵². Depending upon individual perceptions of Islamic provisions, these methods may be regarded as a viable option or the last resort, similarly to adoption⁵³. In this case, Muslim intended parents can even resort to fertility tourism. In the words of one IVF physician:

My colleagues from Islamic countries tell me that if a heterologous procedure is needed, then the couple goes to Europe, to Spain for example. Out of sight, out of mind... Far away from their families, the couple does what is needed!

Another medical doctor further explained: «I have been doing this [heterologous MAR procedures] abroad since 1989; from 2002, in Ukraine. For Muslims and non-Muslims alike»⁵⁴. When specifically asked about Muslim patients, the informant also gave accounts of the cases illustrated in the Table 5.7.

Heterologous fertility treatments in a foreign European country were thus provided by an Italian physician to two Sunni Muslim couples; in both

⁵⁰ As advocated by some Islamic clerics during interviews; see *supra*, chapter III, section 7.2.

⁵¹ These are discussed in chapter III, sections under 4.

⁵² See *supra*, chapter III, sections under 6. See also chapter IV, sections 4.2.1 and 5.1.

⁵³ See *supra*, chapter IV, section 5.2.

⁵⁴ As discussed above in chapter II, section 4.

Muslim female	Muslim male	Infertility	Donor's gametes
patients' nationality	patients' nationality	factor	
Algeria	Algeria	Female	Female
Morocco	Morocco	Female	Female

TAB. 5.7. Muslim prospective parents undergoing MAR procedures in a private clinic

cases the procedures demanded the use of donor's oocytes. As reported by the head of the centre, the outcome was rather different: the Moroccan spouses conceived a child, whilst the MAP procedure was not successful for the Algerian couple. The latter did not undergo a fresh heterologous procedure, but the healthcare professional declared that «they might change their mind again, and ask for a new treatment in the future. Economic issues are often involved, so... maybe you delay this a bit».

The stories of two Albanian Muslim couples undergoing heterologous procedures were instead narrated by the psychologist the partners met in another private fertility clinic in Torino. In the first case, the procedure encompassed the donation of male gametes. No ethical, moral or religious issues were raised by the couple, as outlined by the informant. In the second case, the MAR procedure involved embryo-donation; both parties welcomed this solution. The medical doctor reported that the patients declared: «Now we have it all, that's the only thing [a child] that was missing!».

The empirical evidence gathered and analysed thus disclosed that Muslim prospective parents living in Torino can in fact opt for MAR procedures involving third parties. In some cases, Muslim patients were not concerned about (or did not voice) potential social, psychological and religious stigma that can be associated to this type of fertility treatment. In other situations, Muslim patients were conscious that heterologous fertility methods are (potentially) non-*sharī ah* compliant. Accordingly, when undergoing heterologous treatments, they decided not to disclose this «unspoken secret» to their extended families and local communities⁵⁵.

Independently from the specific situations illustrated, in order to consider the numerical dimension of Muslims having recourse to heterologous fertility procedures, quantitative data are to be relied upon. With respect to this matter, the head of a local private fertility clinic offering both homologous and heterologous treatments kindly provided some statistics. The doctor stated that in 2016, out of 351 couples, 150 undertook a heterologous MAR procedure in the centre; amongst these, 130 couples required the contribution of oocyte donors. Out of these patients, 11 Muslim couples were counted. In other words, in the year examined, 8.5% of

⁵⁵ For further details on these dynamics affecting the nuclear family and the extended kindred, see *supra*, chapter IV, section 6.

Muslim female patients' nationality	Muslim male patients' nationality	Infertility factor	Donor's gametes
Albania	Albania	Female/Male	Female/Male
Albania	Albania	Male	-
Albania	Italy	Female	Female
Albania	Italy	Male	-
Bangladesh	Bangladesh	Female	Female
Morocco	Morocco	Female	-
Morocco	Italy	Female	Female
Senegal	Senegal	Female	Female
Syria	Syria	Male	-
Tunisia	Italy	Female	-
Turkey	Turkey	Male	Male

TAB. 5.8. Muslim prospective parents and MAR procedures involving third parties

the centre's patients undergoing fertility treatments involving donors were Muslims. The Table 5.8 details their nationalities and the treatments undertaken.

The field-collected data reported above indicate that Muslim couples seem to more easily accept treatments involving donors' female gametes, rather than male ones⁵⁶. In fact, out of eleven couples, five were diagnosed with male infertility factors: three couples did not undergo any heterologous treatment at the centre, two did undertake a heterologous cycle. The couple undergoing the treatments included Albanian and Turkish patients who were part of an endogamous marriage⁵⁷. The Albanian intended parents also benefitted from the donation of female gametes.

Analysing the couples affected by the female infertility factor, it emerged that only two out of seven couples did not pursue any MAP technique involving a third party in terms of donation of oocytes. In both cases, the physician I interviewed assumed that financial issues had influenced the patients' decision⁵⁸. The (potentially) non-Islamically compliant element of the treatment was indeed not raised by the Muslim patients, as reported by the medical doctor during the interviews. In real terms, when questioned about ethical issues raised by Muslim patients, a healthcare professional declared that

once they came here [to the fertility clinic], they – most of them, at least – have already decided – I mean – that they want a treatment. Any ethical speculations were probably previously addressed before booking the appointment... or these are not voiced here anyway⁵⁹.

- ⁵⁶ On donation of male gametes, see *supra*, chapter III, section 6.2.
- ⁵⁷ On this see *supra*, section 3.
- ⁵⁸ On the financial costs of these fertility treatments, see *infra*, section 7.
- ⁵⁹ See also *supra*, chapter IV, section 2.1.

With respect to the nationalities of the patients approaching local centres offering heterologous treatments examined here, the above-mentioned intended parents abandoning the MAR procedures were described as a Tunisian woman married to an Italian man and two Moroccan spouses. An Albanian-Italian exogamous couple and three endogamously married Albanian, Bangladeshi, and Senegalese partners opted instead for a procedure encompassing the use of donated female gametes.

As voiced with alarm by the local Islamic scholars⁶⁰, heterologous treatments can thus be chosen by couples encompassing one or two Muslim partners, although this remedy to childlessness is regarded as a non-*sharī ah* compliant solution according to *Sunnī* Muslim interpretations.

7. Fertility cycles: Cost and benefits

With respect to the cost of MAR cycles, an interesting scenario emerged. As briefly mentioned above, the majority of fertility treatments in Torino are performed in public or SSN-funded clinics⁶¹. This implies that, locally, the number of patients benefitting from SSN-funded fertility treatments is higher. Amongst these, foreigners are to be named as patients frequently entitled to (complete) medical fee exemptions⁶². Actually, in addition to SSN-funded treatments, various groups of patients who are resident in Piemonte can also profit from further cost-sharing exemptions. This implies that, locally, a patient can undergo up to three complete MAR cycles⁶³, within the prospective mother's 43-year age limit⁶⁴, which are (partly/completely) publicly-funded.

As confirmed by field-collected data, in public fertility clinics, fee exemptions are normally granted to a significant number of Muslim patients. One andrologist, for instance, stated that «only 10% of my patients pay». In a MAR centre established in a public hospital, an IVF physician further explained that «Muslims are numerous for two reasons: the economic situation

⁶³ A complete MAR cycle includes hormonal stimulation, oocyte pick-up and embryo transfer – as clarified by the IVF physicians during interviews. If the MAP procedures are not completed (e.g. oocytes are not eventually fertilised), patients can begin a fresh phase of the fertility treatment and this new procedure is considered part of the same publicly-funded MAR cycle until the three stages reported above are completed. As a result, in the case of FER/FOR procedures, couples are entitled to require more than one implantation of their own embryos as part of the same publicly-funded MAR cycle. See also *supra*, section 5.

⁶⁴ On patient age limits and regional variations, see *supra*, chapter II. See also *supra*, section 4.

⁶⁰ See *supra*, chapter III, sections 6 and 7.1.

⁶¹ See *supra*, section 2 and also chapter II, section 6.

⁶² As detailed *supra*, in chapter II, when patients rely upon facilities that are linked to the national health service's structures (SSN), they co-pay a fee for diagnostic procedures, specialist visits and pharmaceuticals through what is known as a «ticket» in Italian.

Patients' competent ASL	Couple's fee exemption	No. of couples with at least one Muslim partner	No. of fertility treatments
Alessandria	9	9	10
Aosta	_	1	1
Asti	9	15	32
Bari	1	1	1
Biella	15	17	30
Brescia	-	1	1
Cuneo	11	13	23
Imperia	-	1	2
Rimini	-	1	3
Siracusa	-	1	1
Torino	132	174	266
Vercelli	4	5	8

TAB. 5.9. Local patients, medical fee exemptions, and ASLs

of a patient accessing a public hospital and complete fee exemptions». This reasoning was corroborated by the statement released by the head of the centre who clarified that «Islamic families come to us... there's an income selection: they cannot afford private treatment». The quantitative dimension of this phenomenon is therefore to be further investigated.

In the material provided by a fertility clinic established in a public hospital, quantitative information on cost-sharing exemptions were made available for 239 couples encompassing at least one Muslim patient⁶⁵. Amongst the patients undergoing MAP procedures in the aforementioned fertility centre in Torino from January 2009 to December 2015, 75.8% (i.e. 181 couples) benefitted from medical fee exemptions. Further details are provided in the Table 5.9, where the number of patients benefiting from ticket exemptions are divided according to the competent local population-based health management organisation (ASL)⁶⁶.

The figures reported also indicate that the catchment area of the fertility centre established in a public hospital in Torino is extensive, encompassing several Italian local health enterprises, including Southern Italian cities. In particular, field-collected data disclosed that patients from two Italian cities – Alessandria and Bari – underwent a total of 11 (partly/completely) cost-free MAR treatments in Torino in the period examined. Fee exemptions were also granted in various percentages to patients whose competent ASL is located in other Piedmontese cities, more specifically Biella (88.2%), Cuneo (84.6%), Vercelli (80%), and Asti (60%).

⁶⁵ Three types of exemptions were most often reported: E02, E05 and Farm. The latter identifies pharmaceuticals; E02 regards unemployed patients and their family members; E05 concerns low income families.

⁶⁶ The acronym identifies the *Azienda sanitaria locale*, which means local health enterprise. See *supra*, chapter II, section 6.

Patients' ASL	competent	Couple's fee exemption	No. of couples with at least one Muslim partner	No. of fertility treatments
	TO 1	25	31	54
	TO 2	55	71	110
Torino	TO 3	24	25	37
	TO 4	12	27	29
	TO 5	16	20	36

TAB. 5.10. Patients' medical fee exemptions in Torino

As far as the city of Torino is concerned, 75.9% of couples with at least one Muslim patient undergoing MAR procedures were exempted from paying the (entire) cost of medical fees. The Table 5.10 shows further details with respect to population-based health management organisations (ASL) in Torino.

ART patients from diverse local population-based health management organisation in Torino were thus entitled from several medical fee exemptions. By way of illustration, 96% of couples with at least one Muslim partner whose competent ASL is TO3 benefitted from (partial/complete) costsharing exemptions; the percentages for TO1 and TO5 were respectively 80.6% and 80%, and the figures decreased to 77.5% in TO2 and 44.4% in TO4. This implies that, out of 266 MAR procedures, about 202 benefited from fee exemptions. Overall, out of 378 fertility treatments provided by a public MAP centre in Torino, the cost of 75.3% of MAR procedures was covered by the Italian national health system (SSN) and by regional funds⁶⁷.

As stated above and as disclosed by quantitative and qualitative empirical data, locally, Muslim patients tend to be amongst the categories who are exempted from paying the (entire) cost of medical tickets. This is predominantly due to unemployment or low annual gross income among locally resident (migrant) Muslims. Consequently, fertility treatments can practically be cost-free in case of patients benefitting from complete medical exemptions and accessing public or SSN-funded fertility clinics.

The economic advantage described might also explain the reason why MAP treatments are becoming increasingly popular amongst local Muslims. Furthermore, since statistics indicate that Muslim women tend to be younger when compared to non-Muslim women undergoing fertility procedures, two additional aspects surfaced. First of all, the outcome of the fertility treatment is more likely to be positive⁶⁸. Secondly, within the limit of 43

⁶⁷ For further details on MAP centres in Torino and the number of inseminations cycles yearly performed, see *supra*, chapter II, section 6.

⁶⁸ See *supra*, section 5.

years of age, younger Muslim women are more likely to undergo three publicly funded complete MAR cycles.

With respect to the cost of a complete fertility cycle, additional data are to be addressed. More specifically, in compliance with Italian laws, medical doctors offering and providing fertility treatments are required to clearly estimate and state the cost of each MAR cycle before the partners undertake any treatment⁶⁹. As far as the examined geographical area is concerned, empirical investigations revealed that the cost of fertility treatments varies greatly. In public clinics, medical fees amount to 900/1,000 euro, unless the patient is entitled to fee exemptions, as detailed above. In SSN-funded clinics, a complete IVF cycle costs up to 1,200/1,500 euro in compliance with regional provisions; if the prospective mother is older than 43 years, then the fee more than doubles reaching about 3,000-3,500 euro⁷⁰.

Private fertility centres' prices are significantly higher than those reported above. By way of illustration, 3,900/4,000 euro were usually reported for a complete IVF cycle. In case of heterologous MAP treatments, two options exist. If the cycle is performed abroad by an Italian physician, then it costs 6,000 euro (travel expenses included). If the procedure is completed in Italy using donor's gametes, the estimated prices are 1,200 euro for third party sperm, and 8,000 euro for third party oocytes. These amounts are to be added to the IVF procedure expenses; accordingly, the final amount for a MAR cycle involving donor(s) ranges from 5,200 to 12,000 euro in Torino.

Some sort of corrective to the above-mentioned prices was elaborated by (Muslim) prospective parents, specifically when affected by financial difficulties although not entitled to fee exemptions. As disclosed by empirical investigations, some local private clinics lamented two increasing phenomena. Indeed, it has been noted that the economic and financial crisis has caused the spreading of treatments unpaid balances and price negotiation⁷¹. By way of illustration, the head of a centre stated: «They're Arabs, they love that! They sit and start to negotiate... they always ask for discount!». Nonetheless, the situations described are relatively diversified. In point of fact, the head of another private clinic asserted that amongst the centre's Muslim patients they usually count «regularly settled men who, being employed, can pay for the treatments». Very different scenarios were described by the research informants also with respect to the (potentially) limited financial resources of prospective patients. The cost of MAR pro-

⁶⁹ As clarified *supra*, in chapter II, section 2.

⁷⁰ For further details on age limits and the regionally-based Italian health care system, see *supra*, chapter II. On the gradually growing age of Muslim prospective mothers see also *supra*, section 4.

⁷¹ See *supra*, chapter I, section 3.

cedures, however, considerably affects the couples' chance of undergoing more than one complete cycle.

8. Fertility treatments and patients' waiting lists

The empirical evidence gathered indicated that higher cost of fertility treatments tends to correspond to a shorter patients' waiting list - namely, a list of the patients entitled to receive treatment after having been referred to the fertility clinic by a specialist such as a gynaecologist or an andrologist. Accordingly, the present section explores patient waiting lists of local fertility clinics, whilst identifying specificities characterising Muslim prospective parents.

As an illustration, many private ART/MAP centres asserted that they do not have a patient waiting list. As soon as the prospective parents undergo the necessary medical visits and examinations, they began the fertility treatment(s). In two months, a complete MAR cycle is concluded, and, if this is not successful, «they can start a fresh one straightaway» – declared the head of a private MAP centre. In SSN-funded fertility clinics, the waiting list lasts 3/4 months; nonetheless, the administrative staff confirmed that they can facilitate women approaching the age limit of 43 years.

The timescale in public MAR centres is significantly different from those reported above. In a public fertility clinic, for instance, patients are compelled to wait 6/8 months before undergoing a specialist examination (e.g. a gynaecological or an andrological appointment) to confirm the couple's reproductive difficulties⁷². If a fertility treatment is recommended by the specialist, the patients' names are then added to the homologous MAR procedure waiting list; at this point, the couple's first medical appointment is normally scheduled within 12/15 months. Accordingly, some couples can wait up two years before commencing a publicly-funded MAR cycle in Torino.

Because of this extended timescale, patients may exaggerate the time they already spent in trying to conceive a child in order to accelerate the process, whilst also approaching several MAP centres in the same city or re-

⁷² The clinical definition of infertility is «a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse» as reported by Zegers-Hochschild *et al.* See F. Zegers-Hochschild *et al.*, *International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009, in «Fertility and Sterility», 92, 5, 2009, pp. 1520-1524, at p. 1522; and Iid., <i>International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009, in «Fertility and Sterility», 92, 5, 2009, pp. 1520-1524, at p. 1522; and Iid., <i>International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009, in «Human Reproduction», 24, 11, 2009, pp. 2683-2687, at p. 2686.*

gion at the same time. As disclosed by field-collected data, recently-reunited Muslim women may indeed state that they have been unable to conceive any offspring since their wedding⁷³. In a significant number of cases, however, these women only recently relocated to Italy with a spouse visa: formerly, the wives lived in their country of descent whereas their husbands were settled in Italy. Affected by what can be called a «logistic temporary infertility», the aforementioned couples may be included on the patient waiting list. Nonetheless, by the time they are contacted by the hospital personnel to start the ART cycle, the intended parents may declare that they are no longer interested in undertaking any fertility treatment (because already pregnant) or ask to be placed at the bottom of the list (in case of secondary infertility). In the meantime, indeed, a pregnancy could have occurred. This habit can explain the high level of drop out from the lists, as discussed below.

The patient waiting list of a public fertility clinic was carefully examined by the author to pinpoint relevant data on Muslim prospective parents and their partners. In particular, attention was paid to some specific aspects. First of all, the percentage of patients who eventually opted not to undergo a MAR cycle booked previously was inspected thoroughly. Secondly, a distinction was made between patients renouncing any fertility treatments, and those asking to be reinserted at the bottom of the waiting list. Thirdly, the reasons justifying these patients' requests were carefully investigated.

As far as the first aspect is concerned, the field-collected data provided and examined indicated that a considerable number of couples beginning the procedure and requesting to be placed on the waiting list were eventually cancelled from the pending MAR treatments register⁷⁴. In some cases, once contacted, the prospective parents asked to be removed from the list. In other cases, the administrative staff of the fertility centre cancelled the patients' identification data from the list. Specifically considering the partners' justification as registered by the administrative personnel, it emerged that 63.7% of contacted couples had declared they were no longer interested in undergoing a MAR cycle⁷⁵. A smaller figure – 33.3% of the couples contacted – had stated that their fertility issue was «already taken care of». The three most frequently reported scenarios were either that the partners were currently being treated in the same (in case of different treatment, e.g. MAR procedure of level I) or in another fertility centre, or the wife was already pregnant (in some cases, as a result of a MAR cycle). Amongst these,

⁷³ For further discussion, see *supra*, chapter IV, section 6.

⁷⁴ The list encompassed 16,028 patients requesting II-III level MAR treatments, during the years 2009-2017.

⁷⁵ Figure concerning patients whose details were reported in the list named «MAP notes» from 8th November 2013 to 9th February 2017.

some couples asked for their names to be put at the bottom of the list, as further elaborated below.

With regard to couples with at least one foreign and/or Muslim partner, 23% were removed from the list since they had declared they were no longer interested in undergoing any MAR procedures at the centre, whereas 10% had reported a pregnancy or to be currently undergoing fertility treatments. Nonetheless, when attentively examining the data made available, an additional aspect surfaced: less detailed information was habitually reported with respect to foreign patients. The reasons for this conduct are probably be found in the linguistic barrier, an element that becomes even more evident during telephone conversations, as further corroborated by the ethnographic observations conducted by the author⁷⁶.

The postponement of the first appointment seems to be requested mainly by foreign patients. As outlined by administrative staff members, a series of reasons were frequently voiced. Some concerned migratory aspects such as business trips or journeys to visit the extended family in one of the partners' country of origin. Other appointment deferral justifications regarded family-related issues or the couple's financial difficulties. In some cases, the partners had already undergone, or were intending to undergo, fertility treatments in the same centre or in another MAR clinic; this option was however less common when comparing foreign to Italian patients.

Scrutinising quantitative data, the material examined indicated that from 8th November 2013 to 9th February 2017, out of 135 couples, 33 asked for the postponement of their first medical appointment. Amongst these couples, in 27 cases, at least one partner was a foreign citizen and, amongst these prospective parents, at least nine partners had a Muslim surname. In the same time span, only six couples, whose members were both Italian nationals, asked to reschedule their first medical visit in the same fertility clinic. Amongst these patients, five out of six Italian couples justified their request for deferral on the basis of currently on-going MAR treatments in the same or in another centre. On the contrary, only one couple of foreign partners declared that they were currently undergoing fertility treatments in the same or in another MAP clinic.

Nonetheless, it should not be inferred from the aforementioned empirical material that foreign and/or Muslim patients do not rely upon fertility treatments offered by the same or other centres. In fact, when studying the data reported on the centre waiting list, out of 13, five foreign couples (and amongst these one Muslim couple) declared either that they were currently undergoing MAR procedures (in the same or in another fertility clinic), or

⁷⁶ On linguistic barriers and doctor-patient communication, see *supra*, chapter IV, sections 2.3-2.3, and 4.1.1-4.1.3.

that the wife was already pregnant as a result of former fertility cycles⁷⁷. The significantly lower percentage of Muslim couples (1 out of 13, namely 7.7%) can be explained by specifically considering female patients' age. As discussed above, in effect, Muslim partners seeking parenthood showed the tendency to be younger when compared to the standard age range of other fertility clinic's patients. Accordingly, younger Muslim couples are less inclined to resort to a private MAP centre for an «almost immediate» treatment, unlike prospective mothers approaching the age limit of 43⁷⁸.

An additional aspect deserves consideration. Notably, the month of Islamic ritual fasting (*ramadhān*) was not explicitly mentioned by Muslim patients as the reason justifying the postponement request of their first medical appointment⁷⁹. Nonetheless, when discussing this aspect with the clinic personnel, it appeared that, once the partners had decided to defer their first medical appointment, the clinic administrative staff did not enquire further into the reasons for this request. In real terms, it can be ventured that a number of appointments were actually postponed, upon the patients' request, because of *ramadhān*, although this was not explicitly mentioned. In other words, prospective patients simply declared that they would be abroad without referring to the religious celebrations. As a result, some healthcare practitioners declared that, in the near future, they intend to enquire whether *ramadhān* is the actual reason for the postponement in order to better accommodate Muslim patients' needs.

In view of the dynamics discussed above, it is also important to examine additional field-collected data. As a case in point, out of 416 listed couples with at least one Muslim partner, notes were reported by medical doctors for 102 couples willing to undergo homologous MAR cycles in the public fertility centre in Torino taken into consideration. Amongst these patients, 45 couples eventually underwent one or more fertility treatments, 57 did not receive any treatment, or anticipated/postponed the MAR procedure before or after the years examined in the present study, namely 2009-2016.

In the aforementioned document, the highest percentages of reasons adduced to justify denials or refusals were to be found either in spontaneous pregnancies, or in the (positive) outcome of previous MAR cycles, which might have led to miscarriages, abortions, extra-uterine pregnancies, twin pregnancies, or the birth of a living baby⁸⁰. Additional justifications were identified in male/female infertility factors implying the need of heterologous treatments, or patients' failure to respond to the prescribed

 $^{^{77}}$ The data analysed were reported in the column entitled «MAP notes» from 4th May 2015 to 1st June 2016.

⁷⁸ On Muslim patients' average age, see *supra*, chapters II and IV, and section 4.

⁷⁹ On this aspect see *supra*, chapter III, section 7.3.1, and chapter IV, section 3.2.

⁸⁰ See also *supra*, section 5.

	2009	2010	2011	2012	2013	2014	2015	Total	
Number of couples with at least one Muslim partner <i>listed for</i> MAR procedures	50	48	56	52	53	58	65	382	
Number of couples with at least one Muslim partner <i>undergoing</i> MAR procedures	37	32	37	33	32	34	31	236	

TAB. 5.11. Muslim patients and MAR procedures

therapy. In two reported cases, MAP procedures were interrupted due to miscommunication occurred between doctors and foreign Muslim patients: mistakes regarded patients' eugenic requests implying foetus' gender selection, misreading and errors concerning the prescribed hormonal stimulation therapy⁸¹.

In some cases, however, clinic staff declared that patients attended the first medical appointment but then missed the following ones without providing any explanation⁸². On the contrary, some prospective parents adduced logistic difficulties (e.g. being aboard, or having recently relocated), or financial issues (e.g. not being entitled to medical fee exemptions), or difficult relationships between the partners. In two cases, in fact, either the woman interrupted the treatment «due to difficulties with her husband», or the man eventually denied his consent to the fertility treatment.

The numerical dimension of Muslim patients' attendance/non-attendance was also revealed. Singling out the couples with at least one Muslim partner from the MAP centre's waiting list, complete data were made available for 764 patients. Amongst these listed patients, about 60% of the couples with at least one Muslim partner actually attended the first medical appointment and then underwent a fertility procedure. Accordingly, from January 2009 to December 2015⁸³, the MAR procedures' attendance rate ranged from a minimum of 60% (in 2013) to a maximum of 74% (in 2009), as detailed in the Table 5.11 and Figure 5.6.

Additional details were inferred by analysing the waiting list for patients undergoing level II MAR procedures in the same fertility clinic⁸⁴. In general terms, couples – whose identification data are inserted on the waiting list – can begin the cycle in the very same year of insertion, or during the following year. Once the process is started, the partners can undergo new MAR

⁸¹ On doctor-patient relationships and potential miscommunication, see *supra*, chapter IV, sections 3.1-3.3.

⁸² This was reported for 19.3% of examined couples.

⁸³ In this fertility centre, the patients' waiting list usually lasts one year, therefore patients registered in 2015 should have attended their first medical appointment by 2016.

⁸⁴ For further details on this list, see *supra*, chapter I, section 6.1.

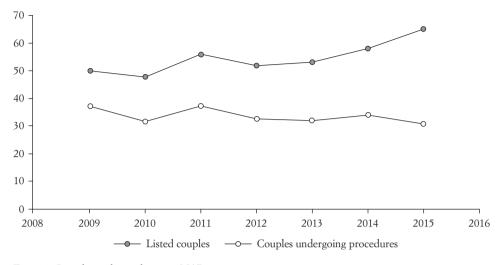


FIG. 5.6. Listed couples undergoing MAP.

TAB. 5.12. Couples	inserted on the	waiting list	and undergoing	MAP treatment

		Fertility treatment year							
		2009	2010	2011	2012	2013	2014	2015	2016
Year of inclusion on the patient waiting list for MAR procedures (II level)	2009	19	18	19	4	3	2	1	4
	2010	-	9	28	13	2	3	5	3
	2011	-	-	11	32	17	4	3	1
	2012	-	-	-	16	20	7	3	3
	2013	_	_	_	_	10	19	11	5
	2014	-	-	-	-	-	6	23	13
	2015	-	-	-	-	-	-	8	26

procedures (up to a maximum of three complete cycles) for several years⁸⁵. Empirical information suggested that higher percentages of listed patients receiving fertility treatments persist for two or three years.

The Table 5.12 shows these patterns. By way of illustration, amongst the couples (with at least one Muslim partner) added to the waiting list in the year 2009, 19 began treatment during the same year, 18 the following year, 19 in 2011; then, a total of 14 couples underwent additional MAR procedures from 2012 to 2016.

As a matter of course in the local MAP centre studied, the reported statistics of fertility treatments undergone by couples with at least one Muslim

⁸⁵ On the distinction between MAR complete cycle and fertility procedures, see *supra*, section 7.

partner are to be added to the growing figure of Muslim prospective patients recently included on the patient waiting list, as formerly investigated.

The overall quantity of Muslim patients thus becomes significant in some local public MAP centres. Accordingly, the administrative and clinic personnel's familiarity with Islamic provisions and Muslim patients' specificities is gradually becoming a focal issue in Torino.

Chapter six

Concluding remarks

1. New parenthood and childhood patterns

In recent history, the concept of «family» has changed significantly; new kinship realities increasingly emerge outside conventional legal, social and religious models. As a result of scientific progress and (forced) migration, family circles have been widened and new parenthood and childhood patterns habitually come into view. Accordingly, on European soil, state and non-state socio-legal actors are repeatedly called upon to adjust to emerging plural kinship frameworks.

Exploring vertical familial relationships, the proposed study investigated the Muslim prospective parents' right to a private family life within the boundaries of Italian domestic law, on the one hand, and Islamic provisions, on the other. Scrutinising the (potential or actual) implementation of *sharīʿah* compliant remedies to involuntary childlessness in the considerably under-explored Italian scenario, the idea of parenthood and childhood within local Muslim communities has been brought into focus. (Non) Islamically compliant, creative patterns of filiation have thus been investigated in view of current interpretations of *sharīʿah*.

Amongst contemporary forms of filiation and parenthood, reproductive technologies were specifically chosen as marker for social change, being particularly affected by ethics and morals linked to religious belonging. Accordingly, fertility treatments can be supported, accommodated, or rejected by Islamic scholars and/or national legal systems. Muslim prospective parents may then adhere to religious and/or legal restrictions, or find alternative solutions, which can lie beyond state norms and/or Islamic provisions.

In the described scenario, competing and overlapping legal and normative orders coexist whilst affecting the agency of Muslim prospective parents as well as healthcare professionals providing ARTs or MAPs in Italy. Fertility clinics' staff members are indeed required to cope with an increasingly pluralised and international public. Relationships between ART/MAP centres' personnel and prospective Muslim parents were thus examined in order to document healthcare providers' perceptions and patients' specific (unspoken) needs. Reciprocally enacted multiple (non) adjustments and adaptations were thus brought to light when relying upon scholarly publications, empirical investigations and field-collected qualitative and quantitative data. In particular, the proposed analysis adopted a twofold angle in comparing theoretical and practical approaches to Italian and Islamic provisions, as elucidated in the next sections.

2. Italian and Islamic perspectives on medically assisted procreation

On a theoretical level, a number of potentially problematic points were identified when juxtaposing Italian and Islamic provisions. Although being described as a conservative *Sunnī* Muslim MAP system¹, the Italian policies on medically assisted reproduction have been gradually broadened by the judiciary in the attempt to attune to new family constellations². As a result, when superimposing Islamic provisions to Italian laws and case laws, it can be ventured that the Italian legal system can variously accommodate specific Islamic necessities and Muslim patients' demands. Highly contentious issues may nonetheless be identified when comparing these two normative systems with respect to potentially *sharī'ah* compliant MAR³.

First of all, the legal remedies offered to involuntary childlessness differ considerably. Whereas the Italian law on MAP emphasises adoption and foster care as alternative parenthood methods, *Islām* prohibits adoption and permits only *kafālah*⁴. Italian physicians are nonetheless required to mention these formulae to every couple willing to undergo medically assisted procreation⁵. On the contrary, Islamic law emphasises traditional *sharīʿah* compliant remedies to infertility implying changes in the nuclear family, such as polygyny or divorce⁶. And these can also be relied upon to Islamically legitimise ART procedures involving donors⁷.

¹ See M.C. Inhorn, P. Patrizio, and G.I. Serour, *Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon,* in «Reproductive BioMedicine Online», 21, 7, 2010, pp. 848-853; Idd., *Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon,* in M.C. Inhorn, and S. Tremayne (Eds.), *Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives,* New York, and Oxford, Berghahn, 2012, pp. 223-260. See also *supra,* chapter I, section 1, and chapter II, section 4.

- ² See *supra*, chapter II, section 4.
- ³ As discussed in detail in chapters II and III.
- ⁴ See *supra*, chapter III, section 4.3; chapter IV, section 5.2.
- ⁵ See *supra*, chapter II, section 3.
- ⁶ See *supra*, chapter III, section 4.2.
- ⁷ See *supra*, chapter III, section 6.2.

Fictitious parenthood and childhood patterns created through adoption are thus regarded as null and void in the Muslim world; whereas Islamically relevant family constellations grounded on milk (e.g. with the surrogate mother) are not recognised by the Italian legal system⁸. An additional aspect is to be addressed: *sharīʿah* requires prospective parents to be (religiously) married, whilst in Italy fertility treatments are provided to heterosexual cohabiting couples independently from their matrimonial status⁹. Furthermore, the child of not civilly married (Muslim) intended parents undergoing fertility treatments is not automatically linked to the non-married cohabiting couple. On the contrary, if the partners are only civilly married, their offspring is regarded as illegitimate under Islamic law.

MAP- and pregnancy-related medical procedures might similarly not meet the specific needs of Muslim prospective parents pursuing fertility treatments. Whereas *Islām* favours pre-implant genetic testing, for instance, the limited availability of centres offering pre-implantation diagnosis and screening techniques in Italy¹⁰, actually, implies recourse to pre-natal diagnosis, although this can lead (non-Muslim and non-Islamically trained)¹¹ Italian physicians to recommend induced therapeutic abortion. The time limit for permitted induced abortion, furthermore, is different when comparing Italian and Islamic rules that also greatly vary among different denominations and sects¹². Accordingly, Italian laws can cater for only some necessities as voiced by Muslim patients. On the contrary, the prohibition of post-mortem insemination endorsed by the Italian law on medically assisted reproduction is in line with the Islamic necessity to avoid any lineage disruption and kinship confusion.

Similarly, the original ban of Law 40/2004 on embryo cryopreservation accommodated some Muslim viewpoints, whereas the prohibition of embryo destruction is not regarded as being *shari*[•]*ah* compliant¹³. Indeed, Islamic clerics require embryos to be destroyed if the (prospective) parents – who had formerly relied upon MAR methods – divorce or one of the spouses dies. On the other hand, the now permitted genetic counselling and pre-implantation diagnosis meet the Muslim customs of premarital counselling and examination. However, in Italy, eugenics is limited to couples carrying transmissible serious genetic diseases, and this approach does not suit the needs

⁸ See *supra*, chapter III, sections 4.3 and 6.1.

⁹ See *supra*, chapter II, section 1; chapter III, section 7.1.

¹⁰ This is to be linked to the former Italian ban on pre-implantation genetic diagnosis, as detailed in Law 40/2004, see *supra*, chapter II, sections 1 and 4.

¹¹ On these aspects, see *infra*, and also *supra*, chapter III, section 7.2, and chapter IV, section 3.1.

¹² See *supra*, chapter III, sections 7.3.2-7.3.3; chapter IV, section 3.3; chapter V, section 5.

¹³ See *supra*, chapter II, sections 1 and 4; chapter III, sections 6 and 7.

of Muslim partners willing to benefit from embryo/foetus sex selection in local fertility clinics¹⁴.

It should also be stated that changes in Italian laws and judicial interpretations variously affect the diverse Muslim denominations¹⁵. By way of illustration, the removal of the prohibition of heterologous MAR methods on Italian soil was welcomed by those amongst Shī'ī Muslims who permit MAP procedures involving a third party. On the contrary, the creation of oocytes/ sperm/embryos banks and the availability of fertility methods involving donors are perceived by local Sunni Muslim religious figures as a worrying non-shari ah compliant temptation for Muslim prospective parents settled in Italy¹⁶. Shī'ī Islamically compliant kinships created ad hoc to accommodate third party involvement in MAP procedures – such as temporary polygynous marriages - are nonetheless not recognised by the Italian legal system. Similarly, donation of a family member's gametes is forbidden, although favoured by some Muslim traditions¹⁷. On the other hand, some very specific needs of $Sh\bar{i}$ Muslim intended parents can be met by some fertility treatments. for instance those avoiding illicit touch between the donor's male gamete and the woman's intimate parts¹⁸.

Further specificities widen the gap between these two ways of understanding and regulating medically assisted procreation. By way of illustration, local clinic staff members very rarely encompass *shariʿah*-trained Muslim female healthcare professionals, although Islamic guidelines as well as local religious scholars require Muslim patients to be advised and visited by healthcare professionals who are familiar with Islamic provisions¹⁹. Accordingly, heterologous fertility procedures are offered and provided by clinicians to all patients independently form their marital status and religious affiliation. Fertility treatments are also provided during the Islamic month of

¹⁴ See *supra*, chapter III, section 7.3.2; chapter IV, section 3.3. Analysing the Italian system through Islamic lenses, Italian norms on ART/MAP might thus appear more rigid and backward to some Muslim patients. See also chapter I, section 1. In real terms, from a traditional Muslim viewpoint, undergoing fertility procedures with the aim of gender selection practice is intended to foster women's well-being by limiting their number of pregnancies in search for a son.

¹⁵ See *supra*, chapter II, sections 1 and 4; chapter III, sections 6 and 7.

¹⁶ In real terms, locally settled *Sunnī* Muslim couple indeed reoccur to non-Islamically compliant MAR techniques. See *supra*, chapter V, section 6.

¹⁷ See *supra*, chapter II, section 1, chapter III, section 6.2, and chapter IV, section 4.2.1.

¹⁸ In case of heterologous treatments, for instance, the problematic passage of donor's semen or sperm via the vagina of a woman married to another man may be circumvented relying upon GIFT or ZIFT. See *supra*, chapter II, sections 5 and 6; chapter III, section 6.2; chapter V, sections 5 and 6.

¹⁹ See *supra*, chapter III, section 7.2; chapter IV, section 3.1. Pre-natal diagnosis, for instance, should also be delivered by healthcare providers who are at least familiar with religions perspectives, see *supra*, chapter III, section 7.3.3.

fasting (*ramadhān*), and it is not usually possible to abide by Islamic rules of gender proximity, unless specifically requested by Muslim patients²⁰.

3. Comparing different mind-sets on fertility treatments

On a more practical level, the volume delineated the normative boundaries of Italian healthcare professionals' and Muslim patients' agency when adopting legal, sociological and anthropological perspectives. Accordingly, the Italian framework of MAP as well as *sharī'ah* compliant remedies to involuntary childlessness were described in order to shed light on the mindsets of the investigated research subjects²¹. Once clarified the main frame of references, the interactions between Muslim prospective parents undergoing fertility treatments and clinic staff were thoroughly analysed.

It should also be mentioned that, when exploring ART patient-doctor relationships, the role played by other key figures was taken into consideration, in particular nurses, clinic staff members and cultural mediators. With regard to Muslim prospective parents, specific attention was paid to local *a'immab*, nationally-active Islamic scholars as well as local Muslim communities and patients' extended kindred²².

A variety of issues emerged, and these were specifically linked to distinct informants' perspectives. Adopting the viewpoint of Islamic religious figures, for instance, a number of potentially problematic points were identified with respect to *sharīʿah* compliant MAP. Heads of national Islamic bodies and local worship centres, in particular, pinpointed two main specific aspects: the prohibition to enter into fertility procedures for Muslim unmarried partners, and the ban of heterologous MAP treatments (for *Sunnī* Muslims)²³.

With regard to fertility procedures, additional issues were raised, in particular, the preference for female Muslim healthcare providers, as well as the need to avoid fertility treatments during the Islamic holy month of fasting²⁴. Distinct issues in genetics and medical procedures part of ART treatments and outcomes were also pinpointed as being potentially problematic for Muslim patients. These regarded pre-implant diagnosis, eugenics (mainly, embryonic selection and sex-selection), pre-natal diagnosis, (induced) abortion, cryopreservation of fertilised ova and frozen embryos²⁵.

- ²¹ See *supra*, chapter II, sections 3, 5 and 6; chapter III, sections 4 and 5.
- ²² See *supra*, chapter I, sections 6.1-6.4.
- ²³ See *supra*, chapter III, sections 7.1 and 6.1 respectively.
- ²⁴ See *supra*, chapter III, sections 7.2 and 7.3.1 with regard to the mentioned issues.
- ²⁵ See *supra*, chapter III, sections 7.3.2-7.3.4.

²⁰ See *supra*, chapter III, sections 7.1-7.2 and 7.3.1; chapter IV, sections 2.1-2.3 and 3.1-3.2; chapter V, section 8.

In light of the majority of opinions voiced, if a *sharīʿah*-trained female Muslim doctor is not available, then local clinicians should be at least conversant with Islamic laws in order to better understand and adapt to Muslim patients' specific needs. Accordingly, heterologous MAP procedures should not be offered to *Sunnī* Muslim patients, and diagnosis recommending induced abortion of ART conceived foetuses should be delivered by religiously-conscious medical staff.

Similarly, frozen gametes and embryos must be used carefully as they may imply lineage muddling, similar to the one created by non-Islamic adoption²⁶; as a result, fertilised ova are to be destroyed if the couple's Islamic marriage is dissolved in order to preserve the family lineage. Additionally, non-urgent medical procedures should be postponed after *ramadhān*. It is also preferable that a religious figure such as an *imām* be available in the hospital or medical centre.

When embracing the viewpoint of Muslim patients undergoing fertility treatments in Torino, a different scenario surfaced whilst validating the fluid nature of contemporary Muslim attitudes. Firstly, the last two needs as emphasised by local religious figures were not voiced by patients undergoing MAR cycles in Torino. The necessity to receive Islamic guidance on *sharīʿah* compliant remedies to childlessness was indeed not mentioned by the interviewed Muslim patients. A number of reasons were advanced: ARTs are offered in Muslim majority countries, local *aʾimmab* are not regarded as authoritative experts on these topics, Islamic sources are widely available on the web, and Islamic scholars can be accessed through extended kindred networks settled in Muslim majority countries²⁷.

Similarly, *ramadhān* was rarely explicitly mentioned by patients in local fertility clinics. In real terms, however, appointment deferrals were requested on the grounds of travelling during the Islamic month of fasting, although intended Muslim parents frequently provided no explanation to clinic personnel²⁸. Additionally, empirical evidence indicates that devout Muslim prospective mothers may fast despite undergoing ART cycles or already being pregnant²⁹.

As far as the preference for a (Muslim) female doctor, this need was usually reported by more conservative Muslim couples or, predominantly, by Muslim men. The majority of Muslim patients undergoing treatments in publicly funded MAP centres were nonetheless keen to be examined by any available physician regardless their gender or religious affiliation. With respect to this matter, Muslim patients were instead voicing a different need:

²⁶ See *supra*, chapter III, section 4.3.

²⁷ See *supra*, chapter IV, section 5.1.

²⁸ See *supra*, chapter IV, section 3.2 and chapter V, section 8.

²⁹ On this aspect see also *infra*, section 5.

Muslim women, in particular, usually asked for healthcare continuity and cultural/linguistic mediation³⁰.

Placing absolute trust in the IVF physicians as part of the Islamic principle of complete acceptance of God's plans³¹, and being bound by modesty and gender seclusion rules, continuity can indeed help in overcoming communication issues and improve doctor-patient relations. Empirical data also suggested that a distinction should be made. Communication issues grounded on both customary rules and language inabilities predominantly affect foreign Muslim intended parents undergoing treatments in publicly funded MAP centres³². Foreign Muslim prospective parents approaching private fertility clinics offering homologous or heterologous fertility treatments, actually, tend to be fluent in the Italian language or to rely upon a private interpreter³³. Additionally, cultural mediators are not involved in a significant number of medical appointments³⁴.

When enquired about Muslim patients, the directors of ART centres and clinic personnel unanimously reported a very high share of Muslim patients, who were identified predominantly relying upon the prospective parents' nationality, outfit, physical appearance, behaviour and body language³⁵. Healthcare professionals providing fertility treatments may, however, manifest uneasiness in coping with an increasingly culturally and religiously diverse population receiving fertility treatments. Two main issues were predominantly raised: some regarded the legal boundaries IVF physicians are compelled to abide by, others regarded MAP procedures and outcomes.

From a legal perspective, the lack of linguistic skills and conversational fluency was regularly reported as the main aspect considerably affecting doctor-patient relations, predominantly in publicly funded fertility clinics³⁶. As a matter of fact, when the help of a cultural mediator cannot be relied upon, and the husband cannot act as an interpreter, clinic staff may refer to other Arabic-speaking patients to provide translation³⁷. This approach violates foreign Muslim patients' privacy and clinic confidentiality. Therefore, to some clinicians, the fertility treatment should be interrupted in case of severe linguistic barriers affecting patient-doctor relationships³⁸.

An additional aspect surfaced. Medically assisted conception and reproduction are part of a set of healthcare services granted to all residents (and

- ³⁴ See *supra*, chapter IV, section 2.2, and chapter V, section 3.
- ³⁵ See *supra*, chapter IV, section 2.1, and chapter V, sections 2 and 3.
- ³⁶ See *supra*, chapter IV, section 4.1.
- ³⁷ See *supra*, chapter IV, section 4.1.1.
- ³⁸ See *supra*, chapter IV, section 4.1.3.

³⁰ See *supra*, chapter IV, section 3.1.

³¹ See *supra*, chapter III, section 4.1.

³² See *supra*, chapter IV, sections under 4.1, and chapter V, section 8.

³³ See *supra*, chapter IV, sections 2 and 4.1; chapter V, section 6.

that can be cost-free for some patients), provided intended patients manifest informed consent to undergo fertility procedures³⁹. Nonetheless, foreign Muslim patients' consent may be vitiated and grounded on misunderstandings, even when informed consent forms are provided in Arabic language⁴⁰.

As far as MAR procedures are concerned, aspects concerning women's well-being emerged. Firstly, Muslim women undergoing a MAP treatment may nonetheless fast during *ramadhān*, thus jeopardising the positive outcome of the procedure⁴¹. Women's fertility issues can also be linked to previous miscarriages or incorrectly performed gynaecological procedures or abortions⁴². Women's well-being is also challenged by a customary practice that was described as widespread amid Muslim patients. To avoid de-masculinisation and Islamic prohibition of (self) masturbation, Muslim partners may indeed manifest the need to collect the semen together at the fertility clinic, before proceeding with the oocytes fertilisation. This practice however causes additional pain and blood loss to the intended mother⁴³.

Cultural mediators pinpointed similar issues raising concerns for Muslim female patients' well-being. In addition to fertility treatments, Muslim women frequently resort to traditional remedies against infertility⁴⁴. These are usually not revealed to medical doctors, although they may cause infections and/or bleeding, therefore potentially endangering the positive outcome of a MAR cycle. Fertility tourism may also be widely practised by foreign Muslim patients⁴⁵. Although not disclosed to healthcare personnel, in effect, «non-sedentary» Muslim couples can undergo (almost) concurrent gynaecological procedures and/or fertility treatments in different countries.

Additional issues might be concealed by patients to the clinic staff, namely adoption, *kafālah* or (cross-sibling) foster care procedures initiated by the partners while undergoing fertility treatments⁴⁶. Afraid of being refused treatment in publicly funded ART/MAP centres, Muslim patients can thus avoid conversation on these topics and also perceive the recommended appointment with a psychologist as a unnecessarily inquisitive practice⁴⁷.

³⁹ See *supra*, chapter II, sections 2 and 6; chapter V, section 7.

⁴⁰ Recently settled Muslim women may indeed be illiterate. Communication difficulties were addressed *supra*, chapter IV, sections 2.2, 4.1, 4.1.1, 4.1.3; chapter V, section 8.

⁴¹ See *supra*, chapter IV, section 3.2.

⁴⁵ See *supra*, chapter IV, section 4.3.

⁴⁶ See *supra*, chapter III, section 4.3; chapter IV, sections 5, 5.2 and 6.

⁴⁷ When the patients are not fluent in the Italian language, a cultural mediator assists them during the meetings with healthcare professionals. For further details, see *supra*, chapter IV, section 5.1.

⁴² See *supra*, chapter IV, section 4.3.

⁴³ See *supra*, chapter IV, sections 4.2.2 and 4.3; chapter V, section 4.

⁴⁴ See *supra*, chapter IV, section 4.2.

4. Local Muslim intended parents: Specificities beyond stereotypes

The proposed quantitative and qualitative data analysis unveiled some characteristics of local Muslim intended parents⁴⁸. Avoiding stereotyping and exceptionalism⁴⁹, this section builds upon the insights gained through empirical investigations and focuses on some atypical features characterising Muslim prospective parents undergoing fertility treatments in Torino⁵⁰.

In other words, the present study intends not to problematize Muslim patients, instead it is aimed to pinpoint specificities which might lead to potential problematic issues in MAP-related matters. In identifying specificities, both voiced demands and unspoken needs can be tackled more easily.

With regard to the patients' clinical picture, the local Muslim patients undergoing ART/MAP procedures identified by the research, were predominantly endogamous couples whose country of descent variously ranges from North Africa, South Asia, or Middle East⁵¹.

When compared to the indigenous population accessing fertility centres, Muslim intended parents are usually younger, although a higher age gap between the partners was sometimes reported⁵². Additionally, the age of (foreign) Muslim intended mothers is raising in line with the Italian trend⁵³. Muslim couples also tend to encompass spouses with no children previously parented with another partner; whilst the indigenous population undergoing MAR procedures frequently includes intended parents who had formerly conceived offspring in a prior relationship with another cohabitee or spouse.

Qualitative data indicate that a variety of causes affect fertility of (foreign) Muslim intended fathers and mothers. Migratory lifestyles, employment circumstances, sanitary conditions, cultural habits, customary remedies, blood relatedness and psychological stress particularly affect Muslims approaching local fertility clinics⁵⁴. The clinical picture of Muslim patients accessing a MAP centre located in the premises of a public hospital indicated that Muslim prospective fathers are significantly affected by infertility factors. As a result, although infertility issues are traditionally linked to Muslim wives, Islamically compliant remedies to involuntary childlessness – such as

⁴⁸ Further details on the issues mentioned in this section can be found *supra*, chapter I, section 6.3; chapter IV, sections 2.1-2.3; chapter V, sections 2, 3 and 4.

⁴⁹ See *supra*, chapter I, sections 5 and 6.3; chapter IV, sections 2.1-2.3.

⁵⁰ It should be mentioned that the catchment area of the Piedmontese fertility centres may encompass other Italian regions. For instance, the patients of a fertility clinic located in the premises of a public hospital came from a wide range of Italian health management organisations. For details see *supra*, chapter V, section 7.

⁵¹ See *supra*, chapter I, section 4, and chapter V, section 3.

⁵² See *supra*, chapter V, section 4.

⁵³ See *supra*, chapter I, section 4, and chapter V, section 4.

⁵⁴ Muslim women also show higher percentages of previous problematic pregnancies when compared to other patients. See *supra*, chapter V, section 5.

polygyny and (unilateral) divorce – might not suit the reproductive needs of the couples' examined⁵⁵. *Sharī'ah* is thus to be flexibly interpreted in order to legitimise medical assistance in human reproduction. Searching for a *sharī'ah* compliant solution to Muslim couples' procreative problems, old provisions are thus construed in a new light by intended parents.

The study indeed unveiled increasingly independent and autonomous Muslim prospective mothers and fathers. The reference to local religious figures for Islamic guidance on reproductive matters is in fact reduced to a minimum, and mostly regards worship practices; whereas counselling in reproductive matters is very rarely sought⁵⁶. When adopting this privatised approach to religion, however, the major potential danger lies in the every-day implementation of the cultural understanding of Islamic provisions. As stated by local *a'immah*, clinic staff members, and Muslim women, for instance, Muslim men can feel comfortable in divorcing via repudiation a supposedly infertile wife, or a wife who mothered only daughters.

Local Muslim couples living in a migratory context show also the tendency to form nuclearized family units; intended Muslim parents are therefore predominantly focused on individual needs⁵⁷. By way of illustration, Muslim households tend to encompass a smaller number of children, as lamented by some religious figures⁵⁸.

The scenario however remains fluid and variegated. On the one hand, some Muslim partners succumb to the pressing demands for a child as voiced by their extended kindred while bearing the heavy burden of infertility. On the other hand, some Muslim prospective parents jealously protect their family nucleus and are ready to follow the path of (non-Islamically) compliant remedies to childlessness – such as heterologous MAR procedures or adoption – in order to avoid traditional remedies like polygyny and divorce. Remarkably, traditional formulae to cope with couples' infertility/sterility can also be strategically and skilfully employed as tools facilitating the usage of heterologous fertility treatments by Muslim prospective parents⁵⁹. Particularly in European contexts, the gap between the lived realities of Muslim practices and theological discourses on *Islām* may indeed be widened.

⁵⁵ See *supra*, chapter III, section 4.2. As corroborated by statistical data documenting increase male factors affecting Muslim patients undergoing fertility procedure in Torino. See supra, chapter V, section 4.

⁵⁶ See *supra*, chapter IV, section 5.1. In some cases, Muslim patients rely upon cultural mediators instead of local *a'immab*.

⁵⁹ A combination of (temporary) marriages and divorces, or milk kinship can indeed be relied upon to create kindred networks and legitimise a child conceived through fertility procedures involving third parties. See *supra*, chapter III, section 6.2.

⁵⁷ See *supra*, chapter IV, sections 5-6.

⁵⁸ See *supra*, chapter III, section 3.

Amongst Muslim patients accessing local publicly-funded fertility clinics, however, a higher percentage identify traditional *sharī*[']ah compliant routes to parenting as the second best choice⁶⁰. As a result, if the outcome of ART treatments is negative, Muslim women are subject to a very high level of stress⁶¹. As repeatedly voiced by the research subjects, if pregnancy is not achieved within an established time limit (usually a year after the wedding celebration), this can potentially lead to a divorce, therefore the woman might need to return to her country of origin. This causes anxiety and fosters a compelling need to procreate. In fact, the migratory project of some Muslim women is closely intertwined with their procreative ability.

When compared to non-Muslim patients, Muslim intended mothers as well as fathers indeed face a more urgent need to tackle their procreative problems. Muslim prospective parents' reproductive ability is in turn affected by the compelling necessity to achieve the goal of starting a family⁶². This attitude is specifically linked to religious and customary approaches, according to which parenthood is perceived as culturally mandatory.

In *Islām*, indeed, offspring is not only a means of personal achievement, but it is a tool for social and familial legitimisation. The social burden of infertility is however traditionally liked to women, who are particularly affected by childlessness. When adopting the perspective of Islamic law, a Muslim husband is authorised to divorce his infertile wife through repudiation ($tal\bar{a}q$). Social pressure can thus be exerted by the extended kindred for the man to (unilaterally) divorce his current (supposedly) infertile wife. As an alternative formula, in order to bear children, the man can marry a second wife so that the two wives can raise the children together, as suggested by some local religious figures⁶³. As a result, migrant Muslim couples may refrain from visiting their relatives when a long-wanted offspring is not yet conceived⁶⁴.

In the desperate search for parenthood, Muslim prospective mothers accessing local fertility clinics may thus be more inclined to conceal some information concerning the fact that they underwent gynaecological treatments abroad, or that they are exploring adoption, *kafālah*, and cross-sibling foster care as alternative options⁶⁵. Amongst the Muslim women interviewed, some implored physicians to perform a heterologous fertility cycle without their husband's consent. Some intended Muslim mothers reported to have tried

⁶⁰ This might happen both in case of actual or supposed woman's infertility/sterility, or in case of gender selective infertility (e.g. wives bearing only daughters). See *supra*, chapter III, sections 4.2 and 5.

⁶¹ See *supra*, chapter IV, sections 5.1 and 6.

⁶² See supra, chapter IV, section 6; chapter V, sections 4-5.

⁶³ See *supra*, chapter III, section 4.2, and chapter IV, section 5.2.

⁶⁴ See *supra*, chapter IV, section 6.

⁶⁵ See *supra*, chapter IV, sections 4.3 and 5.2.

unsuccessfully to become pregnant in order to access fertility procedures as a matter of urgency, although they were just recently reunified to their husbands when relocating to Italy⁶⁶. Bearing the heavy burden of childlessness, Muslim intended mothers reoccurring to ART/MAP can thus be passive victims of social stigmatisation and family pressure, physically embodying the shame and the pain of the fertility treatments. On the contrary, some Muslim women can be empowered by their MAP journey towards motherhood. Offspring becomes thus a stepping stone in their migratory process not only in terms of social legitimisation in the eyes of Muslim circles, but also as an opportunity to become more independent in the settlement country, familiarising themselves with a new environment.

Additional features characterising Muslim patients were identified by local healthcare providers. Two attributes, in particular, were described as specifically impacting on the relationship between doctors and Muslim patients: God as ultimate reference and couples' asymmetric power relations⁶⁷.

As far as fatalism and predeterminism are concerned, Muslim patients showed the tendency to constantly voice their need to embrace divine willingness, although being advised to pursue any possible treatments in order to conceive a child. Empirical investigations thus disclosed that Muslims intended parents are pushed towards MAR techniques by religious, familial and individual factors. First, the social pressure exerted by the extended family on the newly married couple can become even stronger for partners relocated to European countries. Secondly, Muslim intended parents living a migratory context may manifest a desperate child-bearing desire, as part of their wish of setting up new kindred networks in the settlement country.

Furthermore, Islamic clerics voiced a sort of «call for action» for childless Muslim spouses, inviting them to refer to local physicians. *Islām* is indeed a pro-natalist religion and Muslims are strongly invited to procreate. Building upon the flexibility of *sharī'ah*, however, the same norm can *de facto* lead to opposite conclusions and this might create confusions amid Muslim intended parents.

On the one hand, Muslims are taught that infertility/sterility must be accepted because it indicates divine will; similarly, miscarriages, therapeutic abortion following pre-natal diagnosis, or a long patients' waiting list are to be read as God's signs. On the other hand, the very same infertility issues affecting the intended Muslim parents can indicate either a divine test meant to urge the couple to identify and solve their procreative problems, or it should be read as a divine message suggesting that the couple should separate. The advice Muslim prospective parents are given by Islamic scholars might thus be perceived as being conflicting and confusing.

⁶⁶ On these matters, see *supra*, chapter IV, section 6; chapter V, section 8.

⁶⁷ See *supra*, chapter IV, sections under 2 and 3.1.

As a result, the advice of local *a'immah* is very rarely sought by Muslim intended parents.

Islamic worships centres can nonetheless help pious Muslims in better understanding *sharīʿah* compliant remedies for involuntary childlessness, and in providing some assistance in linguistic and culture-related matters. The fear of social stigma and dishonour is however constantly perceived as a threat, therefore Muslim couples might prefer to avoid discussion touching upon fertility issues in local social circles. As a matter of fact, Muslim couples' reproductive choices are increasingly protected from religious and/or social interference, particularly when these lead to non-Islamic adoption or fertility treatments involving third parties⁶⁸. In case of traditional ART, some couples disclose that they have undergone a fertility cycle only if, and when, the outcome is positive, and after the offspring's birth; other Muslim parents do not reveal the manner in which their children were conceived in order to avoid rumours and community's ostracism towards them and their offspring.

Additional problematic aspects pinpointed by healthcare providers specifically concern unbalanced couple's dynamics and the (perceived) role of Muslim wives⁶⁹. These two matters were described as severe issues potentially affecting the manifestation of informed consent to an ART cycle and also impacting on the fertility therapy. Clinic staff members frequently detected and reported couple's asymmetric power relations amongst Muslim patients. In particular, Muslim women's submissiveness and obedience was usually described as a result of linguistic inability. Accordingly, healthcare providers in Torino tended to perceive Muslim men's leading role in fertility clinics as a way of exercising control over their wives⁷⁰. The comportment reinforcing the stereotypical perception of the submissive Muslim wife, nonetheless, only partially describes the polychrome context of Muslim patients. In real terms, ethnographic observations unveiled a more variegated scenario.

In the opinion of some Muslim women, shyness and submissiveness become tool for showing respect for their husbands. Accordingly, although able to communicate in Italian (or French or English), these wives might pretend not to understand; thus, leaving the key role to their husbands, who might feel already challenged and emasculated by undergoing ART/ MAP treatments. Other Muslim women might perceive their life in Italy as a temporary phase of their European migratory project. Being uninterested and not compelled to learn the local language, they might favour proactive husbands who control the situation and deal with clinicians and healthcare procedures. In the healthcare providers' narratives, the attitudes of these

⁶⁸ See *supra*, chapter IV, sections 5.1-5.2.

⁶⁹ See *supra*, chapter IV, sections 2-2.3 and 3.1.

⁷⁰ See *supra*, chapter IV, section 2.2.

women are generally juxtaposed with those they describe as «emancipated» Muslim intended mothers, who were named predominantly amongst patients accessing private fertility clinics.

Economic factors indeed play a key role in identifying and understanding prospective parents and patients' healthcare choices and attitudes. Local Muslim prospective mothers and fathers usually belong to the categories of patients who are exempted from paying the (entire) cost of medical fees in public or publicly-funded fertility centres⁷¹. In this case, Muslim patients usually present few cultural/religious-related demands; patient-doctor relations are however significantly affected by religious, cultural and linguistic barriers.

Although the request for physicians familiar with Islamic law cannot be legally claimed and practically met, in fact, local clinic personnel showed greater awareness and ability to cope with an increasingly religiously and culturally diverse audience⁷². Nonetheless, some dynamics were proven to be difficult to understand, and sometimes even to accept, by some Italian healthcare providers⁷³. Notwithstanding, reasonable adjustments and reciprocal accommodation are enacted on a daily basis between healthcare providers and Muslim prospective patients accessing public and private fertility clinics in Torino⁷⁴.

5. Current dynamic scenario and future courses of action

Europe is currently the largest market for assisted reproductive technologies and, amongst EU Member States, the countries where fertility treatments are nationally covered by public funds show the highest average usage of assisted reproductive technologies⁷⁵.

⁷⁵ For a comparative study see *inter alia* P. Präg, and M.C. Mills, Assisted Reproductive Technology in Europe: Usage and Regulation in the Context of Cross-Border Reproductive Care, in M. Kreyenfeld, and D. Konietzka (Eds.), Childlessness in Europe: Contexts, Causes, and Consequences. Demographic Research Monographs, Dordrecht, Springer, 2017, pp. 289-309. See also the ESHRE report-namely European Society of Human Reproduction and Embryology, Comparative Analysis of Medically Assisted Reproduction in the EU: Regulation and Technologies (SANCO/2008/C6/051). Final report, Grimbergen, ESHRE, 2008. Amid various comments, see for instance, Ferraretti et al., Assisted reproductive technology in Europe, 2009. Results generated from European registers by ESHRE, in «Human Reproduction Update», 28, 9, 2013, pp. 2318-2331.

⁷¹ See *supra*, chapter II, sections 3 and chapter V, section 7. See also *infra*, the next section.

⁷² On reasonable and appropriate accommodation of Muslim needs in healthcare services, see *supra*, chapter IV, section 2.1.

⁷³ See *supra*, chapter IV, section 3.1.

⁷⁴ In real terms, local Muslim patients tend to embrace different viewpoints on the actual implementation of Islamic principles in their everyday life. See *supra*, chapter IV, section 2 and chapter V, section 6. The expression «reasonable and reciprocal accommodation» in healthcare services was used by a number of informants, as formerly elucidated.

In Italy, the utilisation of medically assisted reproductive services is actually considerably and constantly increasing; more specifically in Northern regions⁷⁶. The domestic magnification of the MAP treatments offered is to be linked to scientific progress as well as to the national legal framework. The so-described restrictive *Sunnī* Italian law on medically assisted procreation has been gradually eroded by the judiciary in the attempt to attune to contemporary family patterns⁷⁷. Not only the legal spectrum but also the domestic catchment area of fertility treatments is widening. Actually, the category of prospective parents wishing to conceive offspring through MAR techniques is gradually including a more culturally and religiously diverse population⁷⁸.

In line with the global trend documenting a constant increase of Muslims, the share of Muslim intended mothers and fathers approaching local fertility clinics, in particular, it is rapidly growing in both publicly-funded and private MAP centres⁷⁹. Specific demands are thus voiced, and *ad hoc* necessities also emerge in patient-doctor relations, as elucidated in the previous sections.

The insights gained through the conducted study revealed a polychrome and dynamic scenario. While it is true that in the years to come linguistic inability problems affecting foreign Muslim patients should gradually decrease, the same might not be true for other specific aspects, particularly those linked to customary habits and religious practices. Some of these traditions might be well-known and appropriately dealt with by IVF physicians, whilst others might remain unspoken and unperceived. Ethnographic observations and interviews conducted by the author actually highlighted some concealed points at issue. Although not explicitly voiced by clinic staff and patients, problems linked to customs and migrations effectively influ-

⁷⁶ See *supra*, chapter I, section 3. Interestingly, in Torino private fertility clinics are more numerous than public ones, however, the majority of fertility treatments is performed in ART/MAP centres which are partially or totally funded by the national health system. See *supra*, chapter II, section 5 and 6; chapter V, sections 2 and 7.

⁷⁷ As a result, from 2009, the number of fertilised oocytes is agreed between physicians and intended parents, and the produced embryos are partly implanted and partly cryopreserved. Additionally, from 2014 procedures involving donors can be performed on Italian soil and, from 2015, eugenics and pre-implantation genetic diagnosis are permitted. See *supra*, chapter II, sections 1-4. See also *supra*, footnote No. 1 in this chapter.

⁷⁸ Although the overall level of fertility is decreasing amongst both the indigenous and the migrant population, the number of children born to at least one foreign parent is still quite high. Accordingly, the total fertility rate is highly impacted by foreign women (being economic migrants, asylum seekers or refugees), more specifically in Northern Italian regions. The Muslim population is also increasingly naturalised; therefore, it tends to disappear from statics relying upon nationalities. See *supra*, chapter I, sections 4 and 5.

⁷⁹ The share of European Muslim population is rapidly growing and it is projected to increase at a fastest pace than any other religious group. For statistics, see *supra*, chapter I, section 5, and chapter V, section 2.

ence the outcome of fertility treatments undertaken by Muslim intended parents.

As far as the former aspect is concerned, a higher percentage of Muslim patients is potentially affected by consanguinity-related matters. Marriages between cousins are customary in the Muslim world and indeed a significant percentage of interviewed patients reported blood relatedness⁸⁰. In real terms, prospective parents' infertility can be linked to former intra-familial unions. Furthermore, the outcome of homologous fertility procedures can be affected by intended parents' consanguinity, and this may also cause congenital and genetic disorders in the offspring. Specific attention should be paid to mentioned aspect by clinicians when dealing with Muslim patients.

Heterologous fertility treatments can also be potentially affected by parties' blood relatedness. In order to avoid third party interference, Muslims may favour family members or even siblings to donate gametes⁸¹. Although not permitted on Italian soil, this practice can *de facto* be enacted when semen not formerly cryopreserved is given by the intended father to the biologist proceeding with the oocytes fertilisation⁸². To abide by strict Islamic rule prohibiting self-masturbation, Muslim patients can indeed require the permission to bring semen collected at home. These two aspects should therefore be carefully monitored by clinic staff. Issues linked to Muslim patients' migratory lifestyle, as well as the Muslim women's inclination to rely upon traditional formulae to bear children or rites to facilitate pregnancy (which might lead to medical complications)⁸³, should also be kept under observation.

Communication gaps in patient-doctor relations could also be further bridged in auxiliary ways. First of all, since cultural mediators are more familiar with some religious/customary practices and migratory paths leading to reproductive tourism, perhaps a closer collaboration between IVF physicians and cultural mediators could be advisable whenever possible. Additionally, these figures can pinpoint relevant unspoken needs such as the fasting of pregnant women or the actual postponement of medical appointment during *ramadhān*. When this issue was raised by the author, the clinic personnel of a publicly-funded ART centre decided to adopt a different procedure. The reason for appointment postponement was to be further investigated and, when linked to religious needs, pious Muslims would have not be placed at the bottom of the patients' waiting list, but rather be given another appointment at the end of the Islamic holy month. This model could

⁸⁰ See supra, chapter IV, section 4.2.1 and chapter V, section 4.

⁸¹ See *supra*, chapter III, sections under 6.

⁸² See *supra*, chapter IV, section 4.2.2.

⁸³ See *supra*, chapter IV, section 4.2.2.

perhaps be tested and, if successful, eventually adopted in some fertility clinics⁸⁴.

Secondly, patient-clinic staff communication barriers grounded on linguistic inability can be overcome through fruitful collaboration between local worship centres and hospitals. On the one hand, non-professional translation in healthcare matters is strongly disapproved by both Muslim women and cultural mediators, and it should not be encouraged⁸⁵. On the other hand, in less confidential areas⁸⁶, clinic staff could resort to the help provided by volunteers linked to local worship centres. Accordingly, physicians and patients could benefit from the support offered by cultural mediators when addressing essential and important issues related to informed consent, ART/MAP therapies, procedures and outcomes. The offer to provide linguistic, cultural, and religious support, as expressed by a local worship centre⁸⁷, should therefore be evaluated by local fertility clinics.

Furthermore, Muslim associations and Islamic worship centres placed in Torino could be proactive in offering support to the emerging needs of local Muslim patients. First of all, Italian language classes could be provided to recently settled Muslims in an Islamic environment respecting gender seclusion rules, in order for pious Muslim women to be able to attend such courses. Secondly, since *a'immah* repeatedly lamented the poor knowledge of Islamic provisions eventually affecting the positive outcome of fertility procedures, events promoting knowledge of Islamic principles on *sharī'ah* compliant remedies to involuntary childlessness should be offered locally.

From a broader academic perspective, future studies focusing upon prospective (migrant) parents belonging to other religious and/or ethnic groups are also to be welcome⁸⁸. Providing further insights on MAP patients' specificities, additional research can indeed foster mutual knowledge and contribute to a fruitful and reciprocal accommodation process between Muslim patients and fertility centres.

⁸⁵ See *supra*, chapter IV, section 4.1.1.

⁸⁶ For instance, when providing indication on where to access a service in the hospital premises, when reading a general list of blood tests to be booked, etc.

⁸⁷ See *supra*, chapter IV, section 4.1.2.

⁸⁸ Although Italy is to be named amid the few countries where comparative reproductive health reports concerning migrants are available; optimal care offered by clinicians to migrant women can actually be hampered by inadequate researches to inform practice, according to A.J. Gagnon, and K.L. Redden, *Reproductive health research of women migrants to Western countries: A systematic review for refining the clinical lens*, in «Best Practice & Research Clinical Obstetrics & Gynaecology», 32, 2016, pp. 3-14.

⁸⁴ See *supra*, chapter V, section 8.

Bibliographical references

Bibliographical references

- Abbasi-Shavazi, M.J., Inhorn, M.C., Razeghi-Nasrabad, H.B., and Toloo, G. (2008), The «Iranian ART Revolution»: Infertility assisted reproductive technology, and third-party donation in the Islamic republic of Iran, in «Journal of Middle East Women's Studies», 4, 2, pp. 1-28.
- Abbaszade, M., and Dezhkam, L. (2014), Deserving Parents: The right of babies born by assisted reproductive technologies, in «Journal of Jahrom University of Medical Sciences», 11, p. 72.
- Abbey, A., Andrews, F.M., and Halman, L.J. (1991), *Gender's Role in Responses to Infertility*, in «Psychology of Women Quarterly», 15, 2, pp. 295-316.
- Abdelhamid, H. (2013), The female body and biomedicine in the context of the Egyptian legal culture, in B. Feuillet-Liger, K. Orfali, and T. Callus (Eds.), The Female Body: A journey through Law, Culture and Medicine, Bruxelles, Bruylant, pp. 213-235.
- Abduljabbar, H.S., and Amin, R. (2009), Assisted reproductive technology in Saudi Arabia, in «Saudi Medical Journal», 30, 4, pp. 461-464.
- Abedini, M., Ghaheri, A. and Samani, R.O. (2016), Assisted Reproductive Technology in Iran: The First National Report on Centers, 2011, in «International Journal of Fertility & Sterility», 10, 3, October-December, pp. 283-289.
- Aboulghar, M.M., Aboulghar, M.A., Amin, Y.M., Al-Inany, H.G., Mansour, R.T., and Serour, G.I. (2012), *The use of vaginal natural progesterone for prevention* of preterm birth in IVF/ICSI pregnancies, in «Reproductive BioMedicine Online», 25, 2, pp. 133-138.
- Abu-Rabia, A. (2013), Infertility and Surrogacy in Islamic Society: Socio-Cultural, Psychological, Ethical, and Religious Dilemmas, in «The Open Psychology Journal», 6, pp. 54-60.
- Ahmad, A. (2008), *The role of Islamic law in the contemporary world order*, in M.A. Baderin (Ed.), *International law and Islamic law*, Aldershot, Dartmouth, Ashgate, pp. 55-69.
- Ahmad, M.Z., Zailin, S.Y., Mansor, S., Ahmad, I.I.H., and Abdullah, L. (2014), Is Assisted Reproductive Technique Shari'aa-compliant? A Case Study at a Fertility Centre in Malaysia, in «The International Medical Journal Malaysia», 13, 2, pp. 21-27.
- Ahmad, N.H. (2003), Assisted Reproduction. Islamic Views on the Science of Procreation, in «Eubios Journal of Asian and International Bioethics», 13, pp. 59-60.

- Ahmed, I. (2013), *Muslim Immigrants in Europe: The Changing Realities*, in «India Quarterly», 69, 3, pp. 265-282.
- Ahmed, N. (2016), Family, Citizenship and Islam: The Changing Experiences of Migrant Women Ageing in London, Abingdon, Routledge.
- Ahmed, S., Green, J.M., and Hewison, J. (2006), *Attitudes towards prenatal diagnosis and termination of pregnancy for thalassemia in pregnant Pakistani women in the North of England*, in «Prenatal Diagnosis», 26, 3, pp. 248-257.
- Ahmed, Z.B. (2014), *The concept «in-vitro fertilization and egg donation»: An Islamic point of view*, in «Journal of Education, Arts and Humanities», 2, 4, pp. 54-58.
- Ajijola, A.A.D. (1989), Introduction to Islamic law, New Delhi, International Islamic Publisher.
- Akhter, S. (2009), Faith & Philosophy of Islam, Delhi, Kalpaz.
- Akram, S.M. (2000), Orientalism Revisited in Asylum and Refugee Claims, in «International Journal of Refugee Law», 12, 1, pp. 7-40.
- Al-Aqeel, A.I. (2012), Genetic Counseling in the Muslim World: The Challenges, in PAHGC (Ed.), Second Pan Arab Human Genetics Conferences Proceedings, Dubai, PAHGC, pp. 32-61.
- Al-Azami, M.M. (1996), On Schacht's origins of Mohammadan jurisprudence, Oxford, Islamic Texts Society.
- Al-Bar, M.A., and Chamsi-Pasha, H. (2015), Contemporary Bioethics Islamic Perspective, Dordrecht, Springer.
- al-Gindi, A.R. (Ed.) (1984), Islam and Current Medical Concerns, vol. I, The Full Minutes of the Seminar on Human Reproduction in Islam, Held on May 24, 1983 A.D. (Sha'aban 11, 1403 H), Supervised and with an Introduction by Dr. Abd EI-Rahman Abdulla Al-Awadhi, Minister of Public Health and of Planning Chairman of the Islamic Organization for Medical Sciences, Translated by M. Muneer S. Asbahi, Kuwait, Islamic Organisation for Medical Science.
- Al-Mazkur, K., Al-Saif, A., al-Gindi, A.R., and Abu-Ghudda, A. (Eds.) (1988), Recommendations of the Third Symposium on «The Islamic Vision of Some Medical Practices», 18-21 April 1987 A.D., in Medical Jurisprudence. Islam and Current Medical Concerns, vol. III, Kuwait, Islamic Organisation for Medical Science.
- Al-Qaradawi, Y. (1999), The Lawful and the Prohibited in Islam Al-Halal Wal Haram Fil Islam, Cairo, al-Falah Foundation and American Trust Publications.
- al-Ṣadr, M.B. (2003), Principles of Islamic jurisprudence according to Shi'i Law, London, ICAS Press.
- al-Thaxeb, F., and Scott J.E. (1981), Islamic law: An examination of its revitalisation, in «British Journal of Criminology», 21, I, pp. 58-69.
- Alghrani, A. (2013), Womb transplantation and the interplay of Islam and the West, in «Zygon», 48, 3, pp. 618-634.
- Ali, W. (2003), Muslim Women: Between Cliché and Reality, in «Diogenes», 50, 3, pp. 77-87.
- Allievi, S. (2012), Reactive identities and Islamophobia: Muslim minorities and the challenge of religious pluralism in Europe, in «Philosophy and Social Criticism», 38, 4-5, pp. 379-387.
- Altorki, S. (1980), Milk-Kinship in Arab Society: An Unexplored Problem in the Ethnography of Marriage, in «Ethnology», 19, 2, April, pp. 233-244.

- Aluffi, R. (2006), Il matrimonio nel diritto islamico, in S. Ferrari (Ed.), Il matrimonio. Diritto ebraico, canonico e islamico: un commento alle fonti, Torino, Giappichelli, pp. 181-246.
- (2012), Poteri e responsabilità genitoriali nei paesi arabi, in «Minori Giustizia»,
 2, pp. 54-62.
- (2015), Šarī'a, in Enciclopedia giuridica, Roma, Treccani, VIII, pp. 741-754.
- Alwani, T.J. (1993), Ușul al-fiqh al-'islāmī. Source methodology in Islamic jurisprudence, London, International Institute of Islamic Thought, II ed.
- Ammar, N.H. (2007), Wife Battery in Islam. A Comprehensive Understanding of Interpretations, in «Violence Against Women», 13, 5, pp. 516-526.
- An-Na'im, A.A. (Ed.) (2002), Islamic family law in a changing world. A global resource book, London, Zed Books.
- Andersen, A.M.N., Gundlund, A., and Villadsen, S.F. (2016), Stillbirth and congenital anomalies in migrants in Europe, in «Best Practice & Research Clinical Obstetrics & Gynaecology», 32, pp. 50-59.
- Anderson, R.R. (2015), Religious traditions, in J.P. Galst, and M.S. Verp, Prenatal and Preimplantation Diagnosis: The Burden of Choice, Dordrecht, Springer, pp. 195-227.
- Ansari, A.H. (2010), Issues in Islamic law, New Delhi, Serials Publications.
- Arabi, O. (2001), *Studies in modern Islamic law and jurisprudence*, The Hague, Kluwer Law International.
- Aramini, M. (2007), Bioetica e religioni, Milano, Paoline.
- Arbach, O. (2002), *Ethical Considerations in Syria regarding Reproduction Techniques*, in «Medicine and Law», 21, 2, pp. 395-402.
- Arnardóttir, O.M. (2011), Cultural Accommodation in Health Services and European Human Rights, in E. Rynning, and M. Hartlev (Eds.), Nordic Health Law in a European Context: Welfare State Perspectives on Patients' Rights and Biomedicine, Koninklijke, Brill, pp. 181-200.
- Arousell, J., and Carlbom, A. (2016), Culture and religious beliefs in relation to reproductive health, in «Best Practice & Research Clinical Obstetrics & Gynaecology», 32, pp. 77-87.
- Arshad, R. (2010), Islamic family law, London, Thomson Reuters.
- Assim, U.M., and Sloth-Nielsen, J. (2014), Islamic kafalah as an alternative care option for children deprived of a family environment, in «African Human Rights Law Journal», 14, pp. 322-345.
- Atighetchi, D. (2007), *Islamic Bioethics: Problems and Perspectives*, Dordrecht, Springer.
- (2009), Islam e bioetica, Roma, Armando.
- (2010), Aspects of the Management of the Rising Life Comparing Islamic Law and the Laws of Modern Muslim States – De la manière de considérer l'aube de la vie: une comparaison entre droit musulman et droits des États musulmans contemporains, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, pp. 305-329.
- (2014), Islamic perspectives on vulnerable groups, in J. Tham, A. Garcia, and G. Miranda, *Religious Perspectives on Human Vulnerability in Bioethics*, Dordrecht, Springer, pp. 175-191.
- (2017), Human rights and bioethics, an Islamic overview, in J. Tham, A. Garcia, and G. Miranda, *Religious Perspectives on Human Vulnerability in Bioethics*, Dordrecht, Springer, pp. 231-242.

- Audi, R. (2018), Ethical Theory and Moral Intuitions in Biomedical Decision-Making, in M. Soniewicka (Ed.), The Ethics of Reproductive Genetics: Between Utility, Principles, and Virtue, Dordrecht, Springer, pp. 3-12.
- Awad, N.G. (2013), Religio-phobia: Western Islam, Social Integration and the Resurgence of Religiosity in Europe, in «The Muslim World», 3, 4, pp. 433-447.
- Ayman, S. (2012), Paternity between Law and Biology: The Reconstruction of the Islamic Law of Paternity in the Wake of DNA Testing, in «Zygon: Journal of Religion & Science», 47, 1, pp. 214-239.
- Baderin, M.A. (Ed.) (2014), Islamic legal theory, Farnham, Ashgate.
- Bakhtiar, L. (1996), Encyclopedia of Islamic law: A Compendium of the views of the major schools, Chicago, IL, Kazi Publications.
- Balnaves, M., and Caputi, P. (2001), Introduction to Quantitative Research Methods: An Investigative Approach, London, Thousand Oaks, Sage.
- Bamdad, S., and Ahmad, A. (2014), Public perspective towards third-party reproduction in Iran, Paper EPC Princeton University, 0601, pp. 1-5.
- Banakar, R., and Travers, M. (Eds.) (2005), Theory and method in socio-legal research, Oxford, Portland, OR, Hart.
- Bantekas, I. (2007), Religion as a Source of International Law, in J. Rehman, and S. Breau (Eds.), Religion, Human Rights and International Law. A Critical Examination of Islamic State Practices, Koninklijke, Brill, pp. 115-135.
- Baral, J.K., and Chowdhury, A. (Eds.) (1999), Family in Transition: Power and Development, New Delhi, Northern Book Centre.
- Baraldi, C., Barbieri, V., and Giarelli, G. (2008), *Immigrazione, mediazione culturale e salute*, Milano, Franco Angeli.
- Bargach, J. (2002), Orphans of Islam. Family, Abandonment, and Secret Adoption in Morocco, Lanham, Rowman & Littlefield Publishers.
- Baykara-Krumme, H. (2016), Consanguineous Marriage in Turkish Families in Turkey and in Western Europe, in «International Migration Review», 50, 3, pp. 568-598.
- Beaman, L.G. (Ed.) (2012), *Reasonable Accommodation: Managing Religious Diversity*, Vancouver, UBC Press.
- Beltramo, M., Longo, E.G., Merryman, J.H, and Beltramo, S. (Eds.) (1969), *The Italian civil code*, Dobbs Ferry, NY, Oceana.
- Benagiano, G. (2002), Una legge che impone la malpractice? Osservazioni di un ginecologo sulla proposta di legge, in «Bioetica», 10, pp. 561-563.
- Benagiano, G., Filippi, V., Sgargi, S., and Gianaroli, L. (2014), *Italian Constitutional Court removes the prohibition on gamete donation in Italy*, in «Reproductive BioMedicine», 29, 6, pp. 662-664.
- Benagiano, G., and Gianaroli, L. (2010), The Italian Constitutional Court modifies Italian legislation on assisted reproduction technology, in «Reproductive Bio-Medicine», 20, 3, pp. 398-402.
- Benkheira, M.H. (2006), Alliance, asymétrie et différence des sexes. Un problème d'exégèse juridique: la prohibition de la belle-mère et de la belle-fille, in «Islamic Law & Society», 13, 2, pp. 153-207.
- Berkowitz, P., Von Breska, E., Pieńkowski, J., and Catalina Rubianes, A. (2014), *The impact of the economic and financial crisis on the reform of Cohesion Policy* 2008-2013, European Commission Regional Working Paper, WP 03.
- Bernard, R.H. (2000), Social Research Methods: Qualitative and Quantitative Approaches, Thousand Oaks, Sage.

- (2011), Research Methods in Anthropology: Qualitative and Quantitative Approaches, Lanham, Altamira, V ed.
- Berry, S.E. (2011), Bringing Muslim Minorities within the International Convention on the Elimination of All Forms of Racial Discrimination. Square Peg in a Round Hole?, in «Human Rights Law Review», 11, 3, pp. 423-450.
- Bertini, I. (2018), Nuove forme di genitorilià e filiazione. Uso e abuso del richiamo alla natura, Bologna, Il Mulino.
- Biondi, S. (2013), Access to medical-assisted reproduction and PGD in Italian law: A deadly blow to an illiberal statute? Commentary to the European Court on Human Rights's decision Costa and Pavan v. Italy (ECtHR, 28 August 2012, App. 54270/2010), in «Medical Law Review», 21, 3, pp. 474-486.
- Bittles, A.H. (1994), The role and significance of consanguinity as a demographic variable, in «Population and Development Review», 20, pp. 561-584.
- (2002), Endogamy, consanguinity and community genetics, in «Journal of Genetics», 81, pp. 91-98.
- (2008), A Community Genetics Perspective on Consanguineous Marriage, in «Community Genetics», 11, pp. 324-330.
- Bittles, A.H., and Hamamy, H.A. (2010), Endogamy and consanguineous marriage in Arab populations, in A.S. Teebi (Ed.), Genetic disorders among Arab populations, Heidelberg, Springer-Verlag, pp. 85-108.
- Black, A., Hossein, E., and Nadirsyah, H. (2013), Modern perspectives on Islamic Law, Cheltenham, Edward Elgar.
- Blaikie, N. (2008), Analyzing Quantitative Data: From Description to Explanation, London, Thousand Oaks, Sage.
- Boggio, A. (2005), Italy enacts new law on medically assisted reproduction, in «Human Reproduction», 20, 5, pp. 1153-1157.
- Borrmans, M. (1987), *Fécondation artificielle et éthique musulmane*, in «Lateranum», LIII, 1, pp. 88-103.
- Bowe, B.J., and Makki, T.W. (2016), Muslim neighbors or an Islamic threat? A constructionist framing analysis of newspaper coverage of mosque controversies, in «Media, Culture & Society», 38, 4, pp. 540-558.
- Bracchi, E., and Simoncini, C. (2016), La Reglementation de l'Assistance Medicale a la Procreation en Italie: le Droit Face a une Nouvelle Conception de la Famille, in «Canadian Journal of Women and the Law/Revue Femmes et Droit», 28, pp. 548-567.
- Branca, P. (2001), Il Corano. Il libro sacro della civiltà islamica, Bologna, Il Mulino.
- Breau, S.C. (2007), Human Rights and Cultural Relativism: The False Dichotomy, in J. Rehman, and S. Breau (Eds.), Religion, Human Rights and International Law. A Critical Examination of Islamic State Practices, Koninklijke, Brill, pp. 137-165.
- Brenwald, M.L., and Rede, K. (1999), A Primer on Posthumous Conception and Related Issues of Assisted Reproduction, in «Washburn Law Journal», 38, pp. 599-604.
- Brkovich, A.M., and Fisher, W.A. (1998), *Psychological distress and infertility: Forty years of research*, in «Journal of Psychosomatic Obstetrics & Gynecology», 19, 4, pp. 218-228.
- Browner, C.H., and Sargent, C.F. (Ed.) (2011), Reproduction, Globalization, and the State: New Theoretical and Ethnographic Perspectives, London, Duke University Press.
- Brunet, L. (2010), La réception en droit français des institutions familiales de droit musulman: vertus et faiblesses d'un compromis, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, I, pp. 231-251.

- Brunn, S.D., and Gilbreath, D.A. (Eds.) (2015), *The Changing World Religion Map. Sacred Places, Identities, Practices and Politics*, Dordrecht, New York, London, Heidelberg, Springer.
- Brustia Rutto, P., and Agostini, F. (2008), Psicologia della genitorialità: modelli, ricerche, interventi, Torino, Antigone.
- Bryman, A. (2001), Social research methods, Oxford, New York, OUP.
- Bucar, E.M., and Stalnaker, A. (Eds.) (2012), Religious Ethics in a time of Globalism. Shaping Third Wave of Comparative Analysis, Basingstoke, Palgrave.
- Büchler, A., and Kayasseh, E.S. (2014), Medically Assisted Reproduction in Egypt, Iran, Saudi Arabia and the United Arab Emirates. Sunni and Shia Legal Debates, in «European Journal of Law Reform», 16, 2, pp. 430-464.
- Bulmer, M. (Ed.) (2003), Sociological research methods. An introduction, Piscataway, Macmillan Press, II ed.
- Bundren, M.R. (2007), Influence of Catholicism, Islam and Judaism on the Assisted Reproductive Technologies (ART) Bioethical and Legal Debate: A Comparative Survey of ART in Italy, Egypt and Israel, in «University of Detroit Mercy Law Review», 84, 5, pp. 715-746.
- Burney, M.I. (1993), *Health and medical profile of the Muslim world*, Islamabad, Pakistan, COMSTECH Secretariat.
- Buzzi, F. and Tassi, G. (2011), La procreazione medicalmente assistita: normativa, giurisprudenza e aspetti medico legali, Milano, Giuffrè.
- Bydlowski, M. (2008), Les enfants du désir, Paris, Editions Odile Jacob.
- Camenisch, P.F. (Ed.) (1994), Religious Methods and Resources in Bioethics, Dordrecht, Springer.
- Campagnoli, M.C. (2017), Procreazione medicalmente assistita e fecondazione eterologa: il percorso frastagliato della legge 40/2004. Fattispecie, disciplina e profili giurisprudenziali, Vicalvi, Key.
- Campanini, M. (2008), Il Corano e la sua interpretazione, Roma-Bari, Laterza.
- Caputo, G. (1990), Introduzione al diritto islamico, Torino, Giappichelli.
- Carol, S. (2016), Like Will to Like? Partner Choice among Muslim Migrants and Natives in Western Europe, in «Journal of Ethnic and Migration Studies», 42, 2, pp. 261-276.
- Castiglioni, M. (1997), La mediazione linguistico-culturale. Principi, strategie, esperienze, Milano, Franco Angeli.
- Castro, F. (1985), Diritto musulmano e dei paesi musulmani, in Enciclopedia giuridica, Roma-Treccani, IV, pp. 1-18.
 - (2007), Il modello islamico, Edited by G.M. Piccinelli, Torino, Giappichelli.
- Centro Studi e Ricerche IDOS, and Confronti (2016), Dossier Statistico Immigrazione 2016, Roma, Edizioni IDOS.
- (2017), Dossier Statistico Immigrazione 2017, Roma, Edizioni IDOS.
- Césari, J. (2007), *Muslim Identities in Europe: The Snare of Exceptionalism*, in A. Al-Azmeh, and E. Fokas (Eds.), *Islam in Europe: Diversity, Identity and Influence*, Cambridge, CUP, pp. 49-67.
- (2015), Introduction, in J. Césari (Ed.), The Oxford Handbook of European Islam, Oxford, OUP, pp. 1-20.
- Chamsi-Pasha, H., and Al-Bar, M.A. (2015), Assisted reproductive technology: Islamic Sunni perspective, in «Human Fertility, an international, multidisciplinary jour-

nal dedicated to furthering research and promoting good practice», 18, 2, pp. 107-112.

- Charsley, K., and Liversage, A. (2015), Silenced Husbands: Muslim Marriage, Migration and Masculinity, in «Men and Masculinities», 18, 4, pp. 489-508.
- Chelo, E. (2013), L'evoluzione delle techniche di procreazione assistita e gli effetti della legge 40, in L. Lombardi, and S. De Zordo, La procreazione medicalmente assistita e le sue sfide. Generi, tecnologie e disuguaglianze, Milano, Franco Angeli, pp. 144-152.
- Chopin, T., and Foucher, M. (Eds.) (2016), *The State of the Union. 2016 Schuman Report on Europe*, Paris, Foundation Robert Schuman & Lignes de Repères.
- (Eds.) (2017), *The State of the Union. 2017 Schuman Report on Europe*, Paris, Foundation Robert Schuman & Lignes de Repères.
- Christen, M., van Schaik, C., Fischer, J., Huppenbauer, M., and Tanner, C. (Eds.) (2014), *Empirically Informed Ethics: Morality between Facts and Norms*, Dordrecht, Springer.
- Cicero, C. (2016), The Italian Reform of the Law on Filiation and Constitutional Legality, in «Italian Law Journal», 2, 2, pp. 237-252.
- Cilardo, A. (2009), Diritto di famiglia islamico, in A. Cilardo, and F. Mennillo (Eds.), Due sistemi a confronto. La famiglia nell'Islam e nel diritto canonico, Padova, Cedam, pp. 3-58.
- (Ed.) (2011), La tutela dei minori di cultura islamica nell'area mediterranea. Aspetti sociali, giuridici e medici, Napoli, Edizioni Scientifiche Italiane.
- Ciocca, F. (2017), Quanti sono i musulmani in Italia? Stime, analisi e proiezioni, in «Lenius», 22st August, pp. 1-12.
- Cipolletta, S., and Faccio, E. (2013), *Time experience during the assisted reproductive journey: A phenomenological analysis of Italian couples' narratives*, in «Journal of Reproductive and Infant Psychology», 31, 3, pp. 285-298.
- Clarke, M. (2006a), Islam, kinship and new reproductive technology, in «Anthropology Today», 22, 5, pp. 17-20.
- (2006b), Shiite perspectives on kinship and new reproductive technologies, in «ISIM Review», 17, Spring, pp. 26-27.
- (2007a), *The modernity of milk kinship*, in «Social Anthropology», 15, 3, pp. 271-411.
- (2007b), Closeness in the Age of Mechanical Reproduction: Debating Kinship and Biomedicine in Lebanon and the Middle East, in «Anthropological Quarterly», 80, 2, Spring, pp. 379-402.
- (2009), Islam and New Kinship: Reproductive Technology and the Shariah in Lebanon, NY, Oxford, Berghahn.
- (2015), Moral bioethics in transnational perspective, in K. Hampshire, and B. Simpson (Eds.), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, New York, Oxford, Berghahn, pp. 30-45.
- Cliteur, P. (2011), Female Critics of Islamism: Liberal or Secular Islam?, in «Feminist Theology», 19, 2, pp. 154-168.
- Coglitore, M.T. (2002), Aspetti psicologici, relazionali e sessuali della coppia sterile, in A. Santosuosso, C.A. Redi, S. Garagna, and M. Zuccotti, I giudici davanti alla genetica, Pavia, Collegio Ghislieri, pp. 67-71.
- Collins, J., Evers, J.L., Leridon, H., Lutz, W., te Velde, E., Thevenon, O., Crosignani, P.G., Devroey, P., Diedrich, K., Fauser, B.C., Fraser, L., Geraedts, J.P., Gianaroli, L., Glasier, A., Sunde, A., Tarlatzis, B., Van Steirteghem, A.,

Veiga, A., Collins, J., and Crosignani, P.G. (2010), *Europe the continent with the lowest fertility*, in «Human Reproduction Update», 16, 6, pp. 590-602.

- Comitato Nazionale per la Bioetica (Ed.) (1995), La fecondazione assistita. Documenti del Comintato Nazionale per la Bioetica, Roma, Istituto Poligrafico e Zecca dello Stato.
- Compagnoni, F., and D'Agostino, F. (Eds.) (2003), Il confronto interculturale: dibattiti bioetici e pratiche giuridiche. Bioetica, diritti umani e multietnicità, Cinisello Balsamo, San Paolo.
- Conte, É. (2001), Affinités electives et parenté arabe, in «Études rurales», 157/158, Jeux, conflits, représentations, pp. 65-94.
- Conti, A., and Delbon, P. (2005), *Medically-Assisted Procreation in Italy* in «Medicine and Law», 24, 1, pp. 163-172.
- Cook, R.J. (1992), International Protection of Women's Reproductive Rights, in «New York University Journal of International Law and Politics», 24, 2, pp. 645-728.
- Creswell, J.W. (2014), Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, Los Angeles, Sage.
- Culley, L., Hudson, N., and Van Rooij, F. (Eds.) (2009), *Marginalized Reproduction: Ethnicity, Infertility and Reproductive Technologies*, London, Earthscan.
- Cumper, P. (2014), Multiculturalism, Human Rights and the Accommodation of Sharia Law, in «Human Rights Law Review», 14, pp. 31-57.
- Dacquino, S., and Bergallo, A. (2016), *Guida ai servizi sanitari per immigrati*, Torino, Regione Piemonte, LDF.
- Daher, A., Rosenfeld, Y., and Keinan-Boker, L. (2015), Adoption Law, Dilemmas, Attitudes and Barriers to Adoption among Infertility Patients in Israel, in «Medicine and Law», 34, 1, pp. 55-68.
- D'Amico, M. (2013), La fecondazione artificiale fra legislatore e giudici, in L. Lombardi, and S. De Zordo (Eds.), La procreazione medicalmente assistita e le sue sfide. Generi, tecnologie e disuguaglianze, Milano, Franco Angeli, pp. 91-104.
- De Bellefonds, L.Y. (1965), Traité de droit musulman comparé, Paris, La Haye.
- de Costa, C.M. (2002), *Consanguineous marriage and its relevance to obstetric practice*, in «Obstetrical and Gynecological Survey», 57, 8, pp. 530-536.
- Defensor-Santiago, M. (2011), Responsible Planning and Reproductive Health, in «Philippine Law Journal», 86, 1, pp. 54-94.
- de Groot, J., and Morgan, S. (2013), Beyond the «Religious Turn»? Past, Present and Future Perspectives in Gender History, in «Gender & History», 25, 3, pp. 395-422.
- Denzin, N.K. (1989), The research act: A theoretical introduction to sociological methods, Englewood Cliffs, NJ, Prentice Hall.
- Denzin, N.K., and Lincoln, Y.S. (Eds.) (1994), The handbook of qualitative research, London, Sage.
- (Eds.) (1998), *Collecting and interpreting qualitative materials*, London, Thousand Oaks, Sage.
- de Souza, I.E.T. (2016), Intercultural Mediation in Healthcare: From the Professional Medical Interpreters' Perspective, Bloomington, Xilibris.
- De Vries, R.G., and Subedi, J. (1998), *Bioethics and Society: Constructing the Ethical Enterprise*, Upper Saddle River, Prentice-Hall.
- Dickens, B.M. (2002), Ethical issues arising from the use of assisted reproductive technologies, in E. Vayena, P.J. Rowe, and P.D. Griffin (Eds.), Current Practices

and Controversies in Assisted Reproduction Report of a meeting on «Medical, Ethical and Social Aspects of Assisted Reproduction» held at WHO Headquarters in Geneva, Switzerland, 17-21 September 2001, Geneva, World Health Organization, pp. 333-348.

- Dien, M.I. (2004a), Introduction to Islamic law: The Sunni tradition, Edinburgh, Edinburgh University Press.
- (2004b), Islamic law: From historical foundations to contemporary practice, Edinburgh, Edinburgh University Press.
- DiMarco, E. (2009), The Tides of Vatican Influence in Italian Reproductive Matters: From Abortion to Assisted Reproduction, in «Rutgers Journal of Law and Religion», 10, 2, pp. 1-30.
- Dogliotti, M. (1994), Inseminazione eterologa e azione di disconoscimento: una sentenza da dimenticare, in «Famiglia e Diritto», pp. 182 ff.
- Donner, F. (2007), The historical context, in J.D. McAuliffe, The Cambridge Companion to the Qur'an, Cambridge, CUP, pp. 31-33.
- Dooley, M., Dineen, T., Sarma, K., and Nolan, A. (2014), *The psychological impact of infertility and fertility treatment on the male partner*, in «Human Fertility», 17, 3, pp. 203-209.
- Dossetti, M., Lupo, M., and Moretti, M. (Eds.) (2009), *Cinque anni di applicazione della legge sulla procreazione assistita: problemi e responsabilità*, Milano, Giuffrè.
- Draz, M.A. (2000), Introduction to the Quran, London, New York, I.B. Tauris.
- Duca, R. (2014), Family Reunification: The Case of the Muslim Migrant Children in Europe, in «Athens Journal of Social Sciences», April, pp. 111-120.
- Düwell, M. (2013), Bioethics: Methods, Theories, Domains, London, Routledge.
- Eich, T. (2012), Constructing kinship in Sunni Islamic legal texts, in M.C. Inhorn and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 27-52.
- el-Kak, F. (2005), Reproduction: Abortion. Arab States, in S. Joseph, and A. Nămābādī (Eds.), Encyclopedia of Women & Islamic Cultures, vol. III, Family, Body, Sexuality, and Health, Leiden, Brill, pp. 303-305.
- El-Khuffash, A., and Unger, S. (2012), The Concept of Milk Kinship in Islam Issues Raised when Offering Preterm Infants of Muslim Families Donor Human Milk, in «Journal of Human Lactation», 28, 2, May, pp. 125-127.
- El-Kosheri, A.S. (1999), Islamic schools of law, in C. Bar (Ed.), Islamic Law and its reception by the courts in the West, Köln, Karl Heymanns Verlag, pp. 35-46.
- Elliott, J. (2005), Using Narrative in Social Research: Qualitative and Quantitative Approaches, London, Sage.
- Emilsen, W.W. (2012), The New Atheism and Islam, in «The Expository Times», 123, 11, pp. 521-528.
- Emon, A.M. (2012), Islamic natural law theories, Oxford, OUP.
- ESHRE, European Society of Human Reproduction and Embryology (2008), Comparative Analysis of Medically Assisted Reproduction in the EU: Regulation and Technologies (SANCO/2008/C6/051). Final report, Grimbergen, ESHRE.
- Esposito, J.L., and Voll, J.O. (2000), Islam and the West: Muslim Voices of Dialogue, in «Millennium: Journal of International Studies», 29, 3, pp. 613-639.
- Fadel, H.E. (2002), The Islamic Viewpoint on New Assisted Reproductive Technologies, in «Fordham Urban Law Journal», 30, 1, pp. 147-157.

- (2005), Islamic Shari'ah Rulings on New Reproductive Choices, in «Journal of the Islamic Medical Association of North America», 37, pp. 70-77.
- Falcón y Tella, F. (2007), A Study of Some of the Main Challenges Currently Presented to Human Rights, in Id. (Eds.), Challenges for Human Rights, Leiden, Koninklijke Brill, pp. 4-99.
- Fallon, M. (2016), Writing up quantitative research in the social and behavioural sciences, Rotterdam, Boston, Sense publishers.
- Far, M.Y.K. (Ed.) (2007), A Selection of Islamic Laws Based on the Verdicts of Grand Ayatollah Yousof Saanei, Qom, Feqh.
- Faramarzi, A., Hosseini, A., Borzouie, Z., and Khalili, M.A. (2014), A survey of infertile women's attitudes towards surrogacy, in «Journal of Jahrom University of Medical Sciences», 11, p. 114.
- Faruki, K.A. (1975), Islamic Jurisprudence, Karachi, National Book Foundation, II ed.
- Fasouliotis, S.J., and Schenker, J.G. (1999), Social aspects in assisted reproduction, in «Human Reproduction Update», 5, 1, pp. 26-39.
- Ferrando, G. (Ed.) (1991), Atti del convegno tenuto a Genova nel 1987, Padova, Cedam.
- (2013), La nuova legge sulla filiazione. Profili sostanziali, in «Corriere giuridico», IV, pp. 525-535.
- (2016), La fecondazione assistita nel dialogo fra le corti, in «Nuova Giurisprudenza Civile Commentata», I, pp. 165-170.
- Ferraretti, A.P., Goossens, V., de Mouzon, J., Bhattacharya, S., Castilla, J.A., Korsak, V., Kupka, M., Nygren, K.G., Nyboe Andersen, A., European IVF-Monitoring (EIM), and Consortium for European Society of Human Reproduction and Embryology (ESHRE) (2012), Assisted reproductive technology in Europe, 2008. Results generated from European registers by ESHRE, in «Human Reproduction», 27, 9, pp. 2571-2584.
- Ferraretti, A.P., Goossens, V., Kupka, M., Bhattacharya, S., De Mouzon, J., Castilla, J.A., Erb, K., Korsak, V., Nyboe Andersen, A., European IVF-Monitoring (EIM), Consortium for the European Society of Human Reproduction, and Embryology (ESHRE) (2013), Assisted reproductive technology in Europe, 2009. Results generated from European registers by ESHRE, in «Human Reproduction», 28, 9, pp. 2318-2331.
- Ferrero, C.I.A. (2017), *Concepimento e gestazione: Islam*, in Various Authors, *Salute e identità religiose. Per un approccio multiculturale nell'assistenza alla persona*, Milano, Biblioteca Ambrosiana, CoReIs, and Collegio IPASVI, p. 126.
- Financial and Banking Information Infrastructure Committee (2006), A Guide to Names and Naming Practices, UK, FBIIC, available online at https://www. fbiic.gov/public/2008/nov/Naming_practice_guide_UK_2006.pdf.
- Fineschi, V., Neri, M., and Turillazzi, E. (2005), Law, ethics, and medicine. The new Italian law on assisted reproduction technology (Law 40/2004), in «Journal of Medical Ethics», 31, 9, pp. 536-539.
- Fiorucci, M. (2007), La mediazione culturale: strategie per l'incontro, Roma, Armando.
- Fiqh Academy (2001), Resolution and Recommendations of the Council of the Islamic Fiqh Academy (1985-2000), Jeddah, Islamic Research and Training Institute, Islamic Development Bank.
- Flick, U. (1998), An introduction to qualitative research: Theory, method and applications, London, Sage.

- Fondazione ISMU (2014), *Religioni in Italia e nel mondo*, in «ISMU Iniziative e Studi», May, pp. 1-3.
- (2016a), Immigrati e religioni in Italia: gli ortodossi sono più numerosi dei musulmani, in «ISMU Iniziative e Studi», July, 1-4.
- (2016b), The Twenty-first Italian Report on Migrations 2015, Milano, Mc-Graw-Hill Education.
- Ford, C.S. (1945), *A Comparative Study of Human Reproduction*, New Haven, Yale University Press.
- Fortier, C. (2001), Le lait, le sperme, le dos. Et le sang? Représentations physiologiques de la filiation et de la parenté de lait en islam malékite et dans la société maure, in «Cahiers d'Études Africaines», 41, 161, pp. 97-138.
- (2010), Le droit musulman en pratique: Genre, filiation et bioéthique, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, pp. 15-40.
- Fowler, M.D., Reimer Kirkham, S., Sawatzky, R., and Johnston Taylor, E. (Eds.) (2012), *Religion, Religious Ethics and Nursing*, New York, Springer.
- Fox, R.C., and Swazey, J.P. (2008), Observing Bioethics, Oxford, OUP.
- Freeman, T., Graham, S., Ebtehaj, F., and Richards, M. (Eds.) (2014), *Relatedness in* Assisted Reproduction. Families, origins and identities, Cambridge, CUP.
- Gagnon, A.J., and Redden, K.L. (2016), *Reproductive health research of women migrants to Western countries: A systematic review for refining the clinical lens*, in «Best Practice & Research Clinical Obstetrics & Gynaecology», 32, pp. 3-14.
- Gale, R. (2007), The Place of Islam in the Geography of Religion: Trends and Intersections, in «Geography Compass», 1, 5, pp. 1015-1036.
- Galst, J.P., and Verp, M.S. (Eds.) (2015), Prenatal and Preimplantation Diagnosis: The Burden of Choice, Dordrecht, Springer.
- Gardner, D.K., Weissman, A., Howles, C.M., and Shoham, Z. (Eds.) (2009), Textbook of Assisted Reproductive Technologies: Laboratory and Clinical Perspectives, London, Informa, III ed.
- (Eds.) (2012), Textbook of Assisted Reproductive Techniques, Boca Raton, Informa, vol. I, IV ed.
- Garmaroudi Naef, S. (2012), Gestational Surrogacy in Iran: Uterine Kinship in Shia Thought and Practice, in M.C. Inhorn, and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 157-193.
- (2015), The Iranian Embryo Donation Law and Surrogacy Regulations: The Intersection of Religion, Law and Ethics, in «Welt des Islams», 55, 3/4, pp. 348-377.
- Garner, S., and Selod, S. (2015), The Racialization of Muslims: Empirical Studies of Islamophobia, in «Critical Sociology», 41, 1, pp. 9-19.
- Gatrad, A.R., and Sheik, A. (2001), *Muslim birth customs*, in «Archives of Disease in Childhood Fetal Neonatal Edition», 84, I, January, pp. 6-8.
- Gavioli, L. (2009), La mediazione linguistico culturale: una prospettiva interazionista, Perugia, Guerra.
- Ghaly, M. (Ed.) (2016), Islamic Perspectives on the Principles of Biomedical Ethics, London, World Scientific Publishing.
- Ghanem, I. (1987), The Response of Islamic Jurisprudence to Ectopic Pregnancies, Frozen Embryo Implantation and Euthanasia, in «Medicine, Science and the Law», 3, pp. 187-190.

- Gitsels-van der Wal, J.T., Manniën, J., Ghaly, M.M., Verhoeven, P.S., Hutton, E.K., and Reinders, H.S. (2014), *The role of religion in decision-making on antenatal* screening of congenital anomalies: A qualitative study amongst Muslim Turkish origin immigrants, in «Midwifery», 30, 3, pp. 297-302.
- Gleave, R. (1997), Akhbari Shi'i usul al-fiqh and the juristic theory of Yusuf al-Bahrani, in R. Gleave, and E. Kermeli (Eds.), Islamic law. Theory and practice, London, I.B. Tauris, pp. 24-45.
- Gleave, R., and Kermeli, E. (Eds.) (1997), Islamic law: Theory and practice, London, I.B. Tauris.
- Gooshki, E.S., and Allahbedashti, N. (2015), *The process of justifying assisted reproductive technologies in Iran*, in «Indian Journal of Medical Ethics», 12, 2, pp. 87-96.
- Gray, G., and Guppy, N. (1994), Successful surveys: Research methods and practice, Toronto, Harcourt Brace.
- Grebeldinger, J. (2013), Assisted Reproductive Technologies: Reviewing Recent Perspectives and Addressing Research Gaps in Medical Anthropology, Institute for Global and International Studies, Working Papers, 8, pp. 1-18.
- Griffel, F. (2012), Introduction, in M.C. Inhorn, and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 24-26.
- Grothaus-Day, C. (2005), From Pipette to Cradle, from Immortality to Extinction, in «Rutgers Journal of Law and Religion», 7, 2, pp. 1-44.
- Guessous, N. (2012), Women's rights in Muslim societies: Lessons from the Moroccan experience, in «Philosophy and Social Criticism», 38, 4-5, pp. 525-533.
- Gulino, M., Pacchiarotti, A., Montanari Vergallo, G., and Frati, P. (2013), Is age the *limit for human-assisted reproduction techniques? «Yes», said an Italian judge*, in «Journal of Medical Ethics», 39, pp. 250-252.
- Gunderson, G., and Cochrane, J. (2012), *Religion and the Health of the Public.* Shifting the Paradigm, Basingstoke, Palgrave.
- Guolo, R. (2009), La sharia in Italia. Il diritto parallelo nelle comunità islamiche, in «Diritto, immigrazione e cittadinanza», X, 1, pp. 15-28.
- Gürtin, Z.B., Inhorn, M.C., and Tremayne, S. (2015), Islam and Assisted Reproduction in the Middle East: Comparing the Sunni Arab World, Shia Iran and Secular Turkey, in S.D. Brunn and D.A. Gilbreath (Eds.), The Changing World Religion Map. Sacred Places, Identities, Practices and Politics, Dordrecht, New York, London, Heidelberg, Springer, pp. 3137-3153.
- Hackett, C. (2016), 5 facts about the Muslim population in Europe», in «Fact Tank», July, 19.
- Haleem, A.M.A.S. (Ed.) (2004), The Qur'an, Oxford, OUP.
- Hallaq, W.B. (1997), A history of Islamic legal theories: An introduction to Sunnī uşūl al-fiqh, Cambridge, CUP.
- (2009), An Introduction to Islamic Law, Cambridge, CUP.
- Hamamy, H. (2012), Consanguineous marriages. Preconception consultation in primary health care settings, in «Journal of Community Genetics», 3, 3, pp. 185-192.
- Hameed, S. (2015), *Making sense of Islamic creationism in Europe*, in «Public Understanding of Science», 24, 4, pp. 388-399.

- Hammer, J., and Spielhaus, R. (2013), Muslim Women and the Challenge of Authority: An Introduction, in «The Muslim World», 103, 3, Special Issue, Muslim Women and the Challenge of Authority, pp. 287-294.
- Hampshire, K., and Simpson, B. (Eds.) (2015), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, New York, Oxford, Berghahn.
- Haneef, S.S.S. (2016), The Status of an Illegitimate Child in Islamic Law: A Critical Analysis of DNA Paternity Test, in «Global Jurist», 16, 2, pp. 159-173.
- Haq, F., and Rizvi, J. (2008), *Infertility and polycystic ovarian syndrome: A study of association between body mass index and intrafamily marriages*, in «Gynecologic and Obstetric Investigation», 65, 4, pp. 269-274.
- Harrison, C. (2014), Who is your Mother? Who is your Father? Assisted Reproductive Technologies in the Light of Sunni and Shi'a Law, in «Journal of Shi'a Islamic Studies», 7, 1, pp. 23-37.
- Hasan, K. (2009), The medical and social costs of consanguineous marriages among British Murpiris, in «South Asia Research», 29, 3, pp. 275-298.
- Hashemi, K. (2008), Muslim Legal Traditions of Dhimmah and Relevant Human Rights Law, in Id. (Ed.), Religious Legal Traditions, International Human Rights Law and Muslim States, Leiden, Koninklijke Brill, pp. 139-174.
- Hassan, H.H. (1997), An introduction to the study of Islamic law, Islamabad, International Islamic University.
- Hassan, S. (2015), Law-Abiding Citizen: Recent Fatwas on Muslim Minorities' Loyalty to Western Nations, in «The Muslim World», 105, 4, Special Issue, Muslim Modernities: Interdisciplinary Insights across Time and Space, pp. 516-539.
- Hemayatkhah, M., Hemayatkhah, Z., and Jahromi Farahi, E. (2014), A review of ethical issues involved in fertility treatments in different religious frameworks: Cases in Judaism, Christianity, and Islam, in «Journal of Jahrom University of Medical Sciences», 11, p. 65.
- Hippocrene Books (Ed.) (1999), Arabic First Names, New York, Hippocrene Books.
- Hollway, W., and Jefferson, T. (2000), Doing qualitative research differently: Free association, narrative, and the interview method, London, Sage.
- Holm, S., and Jonas, M.F. (Eds.) (2004), Engaging the World: The Use of Empirical Research in Bioethics and the Regulation of Biotechnology, Amsterdam, IOS Press.
- Holy, L. (1989), Kinship, honour and solidarity: Cousin marriage in the Middle East, Manchester, Manchester University Press.
- Hooker, M.B. (1988), Muhammadan law and Islamic law, in Id. (Ed.), Islam in South-East Asia, Leiden, Brill, pp. 160-182.
- Horlacher, G.T. (2000), Various Country and Ethnic Naming Customs, in «Pro-Genealogists, Articles & Education», online at https://web.archive.org/ web/20140705131227/http://www.progenealogists.com/namingpatterns.htm.
- Houot, S. (2010), Des usages éthiques du droit islamique: une réponse aux enjeux posés par la reproduction médicalement assistée, in «Droit et Cultures, Actualités du droit musulman: genre, filiation et bioéthique», 59, pp. 331-355.
- (2012), Islamic jurisprudence (Fiqh), and assisted reproduction: Establishing limits to avoid social disorders, in M.C. Inhorn, and S. Tremayne, Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 53-69.

- Huff, T.E. (2003), Max Weber and the methodology of the social sciences, New Brunswick, NJ, Transaction Publishers.
- Hughes, C.L. (2011), The «Amazing» Fertility Decline: Islam, Economics, and Reproductive Decision Making among Working-Class Moroccan Women, in «Medical Anthropology Quarterly», 25, 4, pp. 417-435.
- Hull, T.H. (2005), Reproductive health trends in Islamic countries, in W.J. Gavin, and M.S. Karim (Eds.), Islam, the state and population policy, London, Hurst & Co, pp. 56-80.
- Hunt, S. (Ed.) (2016), Judaism and Islam, Abingdon, Routledge.
- Husain, F., and O'Brien, M. (2000), Muslim Communities in Europe: Reconstruction and Transformation, in «Current Sociology», 48, 4, pp. 1-13.
- Hussain, R. (1999), Community perceptions of reasons for preference for consanguineous marriages in Pakistan, in «Journal of Biosocial Science», 31, pp. 449-461.
- Hussain, R., and Bittles, A.H. (2000), Sociodemographic correlates of consanguineous marriage in the Muslim population of India, in «Journal of Biosocial Science», 32, 4, pp. 433-442.
- IARTR, Italian Assisted Reproductive Technology Register (2015), *Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2013*, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2016), Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2014, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2017), Executive Summary. Monitoring the activity and outcomes of Italian ART centers in 2015, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- ibn Auda, D. (2013), *Period Arabic Names and Naming Practices*, in «Society for Creative Anachronism», online at http://heraldry.sca.org/laurel/names/arabic-naming2.htm.
- IkRan, E. (2009), A Study on Islamic Consumerism from a Cultural Perspective. Intensification of Muslim identity and its impact on the emerging Muslim market, in «International Area Review», 12, 2, pp. 3-19.
- Imam, Y.O. (2005), *Islam and Reproductive Health*, in «Science and Religion: Global Perspectives», 4th-8th June, pp. 1-21.
- IMANA Ethics Committee (2005a), *Islamic medical ethics: The IMANA Perspective*, in «Journal of the Islamic Medical Association of North America», 37, pp. 33-42.
- (2005b), Islamic medical ethics: The IMANA Perspective, in «JK-Practitioner», 12, 4, pp. 231-237.
- Inhorn, M.C. (1994), Quest for Conception Gender, Infertility and Egyptian Medical Traditions, Philadelphia, University of Pennsylvania Press.
- (2003), Local Babies, Global Science: Gender, Religion and In Vitro Fertilization in Egypt, London, Routledge.
- (2005), Fatwas and ARTs: IVF and Gamete Donation in Sunni v. Shi'a Islam, in «Journal of Gender, Race & Justice», 9, 2, pp. 291-318.
- (2006a), Making muslim babies: IVF and gamete donation in sunni versus shi'a islam, in «Culture, Medicine and Psychiatry», 30, 4, pp. 427-450.

- (2006b), Reproduction: New Technologies, in S. Joseph and A. Nămābādī (Eds.), Encyclopedia of Women & Islamic Cultures: Family, Body, Sexuality and Health, Leiden, Brill, vol. III, pp. 350-352.
- (2006c), The «worms are weak»: Male infertility and patriarchal paradoxes in Egypt, in L. Ouzgane (Ed.), Islamic masculinities, London, Zed Books, pp. 217-237.
- (2011a), Globalization and gametes: Reproductive «tourism», Islamic bioethics, and Middle Eastern modernity, in «Anthropology & Medicine», 18, pp. 87-103.
- (2011b), *Globalization and gametes*, in C.H. Browner, and C.F. Sargent (Eds.), *Reproduction, Globalization, and the State: New Theoretical and Ethnographic Perspectives*, London, Duke University Press, pp. 126-137.
- (2012), The New Arab Man: Emergent Masculinities, Technologies, and Islam in the Middle East, Princeton, PUP.
- (2015a), (Islamic), ART Journeys and moral pioneers. New reproductive technologies in Islamic local moral worlds, in K. Hampshire, and B. Simpson (Eds.), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, New York, Oxford, Berghahn, pp. 20-28.
- (2015b), The New Arab Man: Emergent Masculinities, Technologies, and Islam in the Middle East, in Key Issues in Religion and World Affairs, Boston, Institute on Culture, Religion & World Affairs, pp. 1-14.
- Inhorn, M.C., and Gürtin, Z.B. (2012), Infertility and Assisted Reproduction in the Muslim Middle East: Social, Religious, and Resource Considerations, in «Facts, Views and Vision in Obstetrics and Gynecology», Monograph, pp. 24-29.
- Inhorn, M.C., Patrizio, P., and Serour, G.I. (2010), *Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon*, in «Reproductive BioMedicine Online», 21, 7, pp. 848-853.
- (2012), Third-party reproductive assistance around the Mediterranean. Comparing Sunni Egypt, Catholic Italy, and multisectarian Lebanon, in M.C. Inhorn, and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 223-260.
- Inhorn, M.C., and Tremayne, S. (Eds.) (2012), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn.
- (2016), Islam, Assisted Reproduction, and the Bioethical Aftermath, in «Journal of Religion and Health», 55, 2, April, pp. 422-430.
- International Islamic Center for Population Studies and Research (1998), Islamic Manual of Family Planning, Cairo, IICPSR.
- IOIM, International Organization of Islamic, Medicine, Islamic Medical Association of South Africa (1982), *Islamic code of medical ethics*, Qualbert, Kuwait document.
- Ishak, M.S.B., and Haneef, S.S.S. (2014), Reproductive technology: A critical analysis of theological responses in Christianity and Islam, in «Zygon: Journal of Religion & Science», 49, 2, pp. 396-413.
- Ishaque, S. (2008), Islamic Principles on Adoption: Examining the Impact of Illegitimacy and Inheritance Related Concerns in Context of a Child's Right to an Identity, in «International Journal of Law, Policy and the Family», 22, 3, pp. 393-420.

- Islam, S. (2013), Ethics of Assisted Reproductive Medicine. A Comparative Study of Western Secular and Islamic Bioethics, London, International Institute of Islamic Thought.
- Islam, S., Nordin, R.B, Shamsuddin, R., and Noor, H.B.M. (2012), Ethics of Human Cloning: A Comparative Study of Western Secular and Islamic Bioethics Perspectives, in «Bangladesh Journal of Medical Science», 11, 4, pp. 258-266.
- Islam, S., Nordin, R.B, Shamsuddin, R., Noor, H.B.M., and Al-Mahmood, A.K. (2013), Ethics of surrogacy: A comparative study of Western secular and islamic bioethics, in «Journal of IMA Islamic Medical Association of North America», 44, 1, pp. 1-7.
- Islamic Fiqh Council (2007), Resolutions of Islamic Fiqh Council. Makkah Mukarramah, from 1st to 18th Sessions, during 1398-1427H (1977-2006), Makkah, Muslim World League.
- Isolani, L. (2010), La giurisprudenza costituzionale in materia di procreazione medicalmente assistita, in G. Campanelli, F. Dal Canto, E. Malfatti, S. Panizza, P. Passaglia, and A. Pertici (Eds.), Le garanzie giurisdizionali: il ruolo delle giurisprudenze nell'evoluzione degli ordinamenti, Torino, Giappichelli, pp. 15-33.
- ISS, Istituto Superiore di Sanità (2017), Research for public health, Roma, Istituto Superiore di Sanità.
- Istat (2016a), Indicatori demografici. Stime per l'anno 2015, in Statistiche Report, 19th February, pp. 1-14.
- (2016b), International and internal migration. Year 2015, in Istat Report, 6th December, pp. 1-8.
- (2016c), Anno 2015. Natalità e fecondità nella popolazione residente, in Statistiche Report, 28th November, pp. 1-21.
- (2016d), Births and fertility among the resident population. Year 2015, in Istat Report, 28th November, pp. 1-10.
- (2016e), Demographic indicators. Estimates for the year 2015, in Istat Report, 19th February, pp. 1-7.
- (2016f), Non-EU citizens: Presence, new inflows and acquisition of citizenship. Years 2015-2016, in Statistiche Report, 29th September, pp. 1-2.
- (2016g), A Primer on Posthumous Conception and Related Issues of Assisted Reproduction, in Statistiche Report, 29th September, pp. 1-18.
- (2017a), Indicatori demografici. Stime per l'anno 2016, in Statistiche Report, 6th March, pp. 1-16.
- (2017b), Demographic indicators. Estimates for the year 2016, in Istat Report, 6th March, pp. 1-7.
- (2017c), Non-EU citizens: Presence, new inflows and acquisition of citizenship. Years 2016-2017, in Statistiche Report, 11th October, pp. 1-2.
- Ives, J., Dunn, M., and Cribb, A. (Eds.) (2016), *Empirical Bioethics: Theoretical and Practical Perspectives*, Cambridge, CUP.
- Jeldtoft, N., and Nielsen, J. (Eds.) (2012), Methods and contexts in the study of Muslim minorities: Visible and invisible Muslims, London, Routledge.
- Johnson-Hanks, J.A., Bachrach, C.A., Morgan, S.P., and Kohler, H.P. (2011), A conjunctural history of assisted reproduction and adoption, in J.A. Johnson-Hanks, C.A. Bachrach, S.P. Morgan, and H.P. Kohle, Understanding Family Change and Variation. Toward a Theory of Conjunctural Action, Dordrecht, Springer, pp. 111-136.

- (2011), Understanding Family Change and Variation. Toward a Theory of Conjunctural Action, Dordrecht, Springer.
- Joly, D. (2016), Women from Muslim Communities: Autonomy and Capacity of Action, in «Sociology», 12th January, pp. 1-17.
- Kamali, M.H. (2003), *Principles of Islamic jurisprudence*, Cambridge, Islamic Texts Society, III ed.
- Karadag, A., Ozdemir, R., Ak, M., Ozer, A., Dogan, D.G., and Elkiran, O. (2015), Human milk banking and milk kinship: Perspectives of mothers in a Muslim country, in «Journal of Tropical Pediatrics», 61, 3, pp. 188-196.
- Kelsay, J. (1994), Islam and medical ethics, in P.F. Camenisch (Ed.), Religious Methods and Resources in Bioethics, Dordrecht, Springer, pp. 93-107.
- Khadduri, M., and Liebesny, H.J. (Eds.) (2008), Origin and development of Islamic law, Clark, NJ, The Lawbook Exchange.
- Khalid-Rashid, S. (2008), Muslim law, Lucknow, Eastern Book.
- Khan, N. (2011), Are Europe's Migrants Not a Potential Resource?, in «Studies in Ethnicity and Nationalism», 11, 2, pp. 324-328.
- Khoury, S.A., and Massad, D. (1992), *Consanguineous marriage in Jordan*, in «American Journal of Medical Genetics», 43, pp. 769-775.
- Klein, J.U. (2013), Religious views: The impact of traditional Theological opinion on the Practice of third-party reproduction, Case study: DIVF and Islam - 389, in M.V. Sauer (Ed.), Principles of Oocyte and Embryo Donation London, Springer, II ed., pp. 383-394.
- Klijzing, E., and Corijn, M. (Eds.) (2002), Dynamics of Fertility and Partnership in Europe: Insights and lessons from comparative research, vol. II, Economic Commission for Europe, and United Nations Population Fund, New York, United Nations.
- Krawietz, B. (2016), Sharia and medical ethics, in P. Rudolph, and P. Bearman (Eds.), The Ashgate Research Companion to Islamic Law, Oxon, Ashgate, Routledge, pp. 291-306.
- Kreyenfeld, M., and Konietzka, D. (2017), Analysing childlessness, in Iid. (Eds.), Childlessness in Europe: Contexts, Causes, and Consequences. Demographic Research Monographs, Dordrecht, Springer, pp. 3-15.
- Kushnir, V.A, and Frattarelli, J.L. (2009), *Aneuploidy in abortuses following IVF and ICSI*, in «Journal of Assisted Reproduction and Genetics», 26, 2-3, March, pp. 93-97.
- Langlaude, S. (2007), Religious children, in Id. (Ed.), The Right of the Child to Religious Freedom in International Law, Leiden, Koninklijke Brill, pp. 3-35.
- Lapidus, I.M. (1976), Adulthood in Islam: Religious maturity in the Islamic tradition, in «Daedalus», 105, 2, Spring, pp. 93-108.
- La Sala, G.B., Gallinelli, A., Nicoli, A., Villani, M.T., and Nucera, G. (2006), Pregnancy loss and assisted reproduction: Preliminary results after the law 40/2004 in Italy, in «Reproductive BioMedicine», 13, 1, pp. 65-70.
- Lassen, E.M. (2007), Manoeuvring in the Turbulent Sea of Human Rights and Religion: Religious Communities Approaching Human Rights, in S. Lagoutte, H.-O. Sano, and P. Scharff Smith (Eds.), Human Rights in Turmoil. Facing Threats, Consolidating Achievements, Leiden, Koninklijke Brill, pp. 181-200.

- Lazdane, G., and Bryld, J. (Eds.) (2006), *Low fertility The future of Europe*, in «Entre Nous, The European Magazine for Sexual and Reproductive Health», No. 63, New York, United Nations Population Fund.
- Lenti, L. (1993), La procreazione artificiale. Genoma della persona e attribuzione della paternità, Padova, Cedam.
- Lenti, L., and Long, J. (2012), Rapporti familiari e interculturalità, in «Minori Giustizia», 2, pp. 7-13.
- Levi Setti, P., Albani, E., Cesana, A., Novara, P.V., Zannoni, E., Baggiani, A.M., Morenghi, E., Arfuso, V., and Scaravelli, G. (2011), *Italian Constitutional Court modifications of a restrictive assisted reproduction technology law significantly improve pregnancy rate*, in «Human Reproduction», 26, 2, pp. 376-378.
- Limiñana-Gras, R.M. (2017), Health and gender perspective in infertility, in M.P. Sánchez-López, and R.M. Limiñana-Gras (Eds.), The Psychology of Gender and Health: Conceptual and Applied Global Concerns, Amsterdam, Elsevier, pp. 364-400.
- Little, T.D. (Ed.) (2013), The Oxford Handbook of Quantitative Methods: Foundations, Oxford, OUP.
- Livi Bacci, M. (1977), A History of Italian Fertility during the Last Two Centuries, Princeton, PUP.
- Lloyd, C.B, and Serguey, I. (1988), *The Effects of Improved Child Survival on Family Planning Practice and Fertility*, in «Studies in Family Planning», 19, 3, pp. 141-161.
- Lombardi, L., and De Zordo, S. (Eds.) (2013), La procreazione medicalmente assistita e le sua sfide. Generi, tecnologie e disuguaglianze, Milano, Franco Angeli.
- Lo Scalzo, A., Donatini, A., Orzella, L., Cicchetti, A., Profili, S., and Maresso, A. (2009), *Italy: Health system review*, in «Health Systems in Transition», 11, 6, pp. 1-126.
- Lovat, T. (Ed.) (2012), Women in Islam. Reflections on Historical and Contemporary Research, Dordrecht, Springer.
- Lupton, D. (2013), The Social Worlds of the Unborn, Basingstoke, Palgrave.
- Lykeridou, K., Gourounti, K., Deltsidou, A., Loutradis, D., and Vaslamatzis, G. (2009), *The impact of infertility diagnosis on psychological status of women undergoing fertility treatment*, in «Journal of Reproductive and Infant Psychology», 27, 3, pp. 223-237.
- Mahmood, T. (1987), *Law in the Qur'ān: A draft code*, in «Islamic Comparative Law Quarterly», VII, 1, pp. 1-32.
- Mahmoud, F. (2012), Controversies in Islamic evaluation of assisted reproductive technologies, in M.C. Inhorn, and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 70-97.
- (2015), Practitioner perspective: Practising ARTs in Islamic context, in K. Hampshire, and B. Simpson (Eds.), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, New York, Oxford, Berghahn, pp. 83-91.
- Mahmoud Obeidat, H., Hamlan, A.M., and Callister, L.C. (2014), Missing Motherhood: Jordanian Women's Experiences with Infertility, in «Advances in Psychiatry», Article ID 241075, pp. 1-8.

- Mandaville, P. (2007), Globalization and the Politics of Religious Knowledge. Pluralizing Authority in the Muslim World, in «Theory, Culture & Society», 24, 2, pp. 101-115.
- Margaria, A. (2018), Nuove forme di genitorialità e filiazione. Leggi e giudici di fronte alle nuove realtà, Bologna, Il Mulino.
- Martin, E. (1987), The Woman in the Body: A Cultural Analysis of Reproduction, Boston, Beacon Press.
- Masud, M.K. (2013), Gender equality and the doctrine of wilāya, in Z. Mir-Hosseini, L. Larsen, C. Moe, and K. Vogt (Eds.), Gender and equality in Muslim family law. Justice and ethics in the Islamic legal process, London, I.B. Tauris, pp. 127-152.
- Masud, M.K., Messick, B., and Powers, D.S. (Eds.) (1996), Islamic legal interpretation: Muftis and their fatwas, Oxford, OUP.
- Mattson, I. (2005), Adoption and fostering, in S. Joseph, A. Nămābādī, J. Peteet, S. Shami, J. Siapno, and J.I. Smith (Eds.), Encyclopedia of Women and Islamic Cultures. Family, Law and Politics, vol. II, Leiden, Brill, pp. 1-3.
- Maxim, P.S. (1999), Quantitative Research Methods in the Social Sciences, Oxford, OUP.
- Mayer, A.E. (1990), The shari'ah: A methodology or a body of substantive rules?, in N. Heer (Ed.), Islamic law and jurisprudence, London, University of Washington Press, pp. 177-198.
- McAuliffe, J.D. (Ed.) (2007), The Cambridge Companion to the Qur'ān, Cambridge, CUP.
- McGoldrick, D. (2009), Accommodating Muslims in Europe: From Adopting Sharia Law to Religiously Based Opt Outs from Generally Applicable Laws, in «Human Rights Law Review», 9, 4, pp. 603-645.
- Meer, N. (2012), *Misrecognizing Muslim consciousness in Europe*, in «Ethnicities», 12, 2, pp. 178-196.
- Menonna, A. (2016), La presenza musulmana in Italia, in «Fact sheet ISMU», 1st-5th June.
- Mette, R., and Spinzi, C. (Eds.) (2013), Mediazione linguistica e interpretariato: regolamentazione, problematiche presenti e prospettive future in ambito giuridico, Bologna, CLUEB.
- Ministero della Salute (2005), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Anno 2004, Roma.
- (2006), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Anno 2005, Roma.
- (2007), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Anno 2006, Roma.
- (2009), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2007 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2008, Roma.
- (2010), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2008, Roma.

- (2011), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2009 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2010, Roma.
- (2012), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2010 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2011, Roma.
- (2013), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2011 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2012, Roma.
- (2014), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2012 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2013, Roma.
- (2015), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2013 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2014, Roma.
- (2016), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2014 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2015, Roma.
- (2017), Relazione del Ministro della Salute al Parlamento sullo stato di attuazione della legge contenente norme in materia di procreazione medicalmente assistita (Legge 19 febbraio 2004 n. 40, articolo 15). Attività anno 2015 centri procreazione medicalmente assistita. Utilizzo dei finanziamenti (artt. 2 e 18), anno 2016, Roma.

Mohamed, Y. (1998), Human nature in Islam, Kuala Lumpur, A.S. Noordeen.

- Mohsin Ebrahim, A.F. (1989), Abortion, birth control and surrogate parenting: An Islamic perspective, Indianapolis, American Trust Publications.
- Moran, L., and Gilad, J. (2007), From Folklore to Scientific Evidence: Breast-Feeding and Wet-Nursing in Islam and the Case of Non-Puerperal Lactation, in «International Journal of Biomedical Sciences», 3, 4, pp. 251-257.
- Mori, T. (1994), *Perspectives on Assisted Reproduction*, Rome, Ares-Serono symposia publications.
- Munné, S., Chen, S., Fischer, J., Colls, P., Zheng, X., Stevens, J., Escudero, T., Oter, M., Schoolcraft, B., Simpson, J.L., and Cohen, J. (2005), Preimplantation genetic diagnosis reduces pregnancy loss in women aged 35 years and older with a history of recurrent miscarriages, in «Fertility and Sterility», 84, 2, pp. 331-335.

- Murad, K. (2005), Inter-personal relations: An Islamic perspective, Markfield, Islamic Foundation.
- Musallam, B.F. (1986), Sex and Society in Islam: Birth Control before the Nineteenth Century, Cambridge, CUP.
- Naqvī, A.R. (1968), The family laws of Iran, in «Islamic Studies», 7, 2, pp. 129-163.
- Nargund, G. (2009), Declining birth rate in Developed Countries: A radical policy rethink is required, in «Facts, views and vision in obstetrics and gynaecology», 1, 3, pp. 191-193.
- Nasir, J.J. (2001), The Islamic law of personal status, London, Kluwer Law International, III ed.
- Nateghi, M.H., and Golestan, F. (2014), *The study of legal challenges of gamete* and embryo donation in Iranian comprehensive health system, in «Journal of Jahrom University of Medical Sciences», 11, 94.
- Nathan, C.N. (2009), Religion for Rights: The Success of Establishing Rights through Religion, in Id. (Ed.), The Changing Face of Religion and Human Rights: A Personal Reflection, Leiden, Boston, Brill, pp. 157-170.
- Nicolas-Maguin, M.-F. (2006), Droit de la filiation et procréation médicalisée: une coexistence difficile, in «Droit et Cultures», 51, pp. 123-132.
- Norris, P., and Inglehart, R.F. (2012), Muslim Integration into Western Cultures: Between Origins and Destinations, in «Political Studies», 60, pp. 228-251.
- O'Brien, G.V., and Molinari, A. (2011), Religious Metaphors as a Justification for Eugenic Control: A Historical Analysis, in M.J. Stoltzfus, and D. Schumm (Eds.), Disability in Judaism, Christianity, and Islam. Sacred Texts, Historical Traditions, and Social Analysis, Basingstoke, Palgrave, pp. 141-165.
- Ogan, C., Willnat, L., Pennington, R., and Bashir, M. (2014), *The rise of anti-Muslim prejudice: Media and Islamophobia in Europe and the United States*, in «International Communication Gazette», 76, 1, pp. 27-46.
- Olivieri, V. (2011), Il mediatore culturale linguistico: ponte tra le culture, Verona, Cortina.
- Omani, S.R., Ashrafi, M., Alizadeh, L., and Mozafari, M. (2008), *Posthumous assisted reproduction from Islamic perspective*, in «International Journal of Fertility & Sterility», 2, 2, pp. 96-99.
- Omran, A.R. (1992), Family planning in the legacy of Islam, London, New York, Routledge.
- Orlandi, M. (2005), La kafala islamica e la sua riconoscibilità quale adozione, in «Il Diritto di Famiglia e delle Persone», XXXIV, pp. 635-665.
- Osanloo, A. (2006), Islamico-civil «rights talk»: Women, subjectivity, and law in Iranian family court, in «American Ethnologist», 33, 2, pp. 191-209.
- Osborne, J.W. (Ed.) (2008), Best Practices in Quantitative Methods, Los Angeles, London, Sage.
- Ozdemir, R., Ak, M., Karatas, M., Ozer, A., Dogan, D.G., and Karadag, A. (2015), Human milk banking and milk kinship: Perspectives of religious officers in a Muslim country, in «Journal of Perinatology», 35, pp. 137-141.
- Ozkan, H., Tuzun, F., Kumral, A., and Duman, N. (2012), Milk kinship bypothesis in light of epigenetic knowledge, in «Clinical Epigenetics», 4, 14, pp. 1-3.

- Panforti, M.D. (1997), Waiting for the Law: Assisted Reproduction in Italy, in A. Bainham (Ed.), International Survey of Family Law, Hague, Boston, London, International Society of Family Law, pp. 183-192.
- Panter, T., and Sterba, S.K. (Ed.) (2011), Handbook of Ethics in Quantitative Methodology, New York, Routledge.
- Parkes, P. (2003), Fostering Fealty: A Comparative Analysis of Tributary Allegiances of Adoptive Kinship, in «Comparative Studies in Society and History», 45, 4, October, pp. 741-782.
- (2004), Fosterage, Kinship, and Legend: When Milk Was Thicker than Blood?, in «Comparative Studies in Society and History», 46, 3, July, pp. 587-615.
- (2005), Milk kinship in Islam. Substance, structure, history, in «Social Anthropology», 13, 3, pp. 307-329.
- Parniyan, F. (2014), *Iranian-Islamic culture and infertility treatments*, in «Journal of Jahrom University of Medical Sciences», 11, p. 226.
- Parsons, T., and Bales, R.F. (2001), Family socialization and interaction process, London, Routledge.
- Pavone, I.R. (2013), Medically Assisted Procreation and Internal Human Rights Law, in «Italian Yearbook of International Law», 22, pp. 155-186.
- Pawlikowski, J. (2018), Conscientious Objection of Health Care Workers in the Context of Genetic Testing, in M. Soniewicka (Ed.), The Ethics of Reproductive Genetics: Between Utility, Principles, and Virtue, Dordrecht, Springer, pp. 103-116.
- Pędziwiatr, K. (2011), How Progressive is «Progressive Islam»? The Limits of the Religious Individualization of the European Muslim Elites, in «Social Compass», 58, 2, pp. 214-222.
- Peirone, C.F. (2004), L'islàm: storia, dottrina, rapporti con il cristianesimo, Torino, Elledici.
- Peters, R., and Bearman, P. (Eds.) (2016), The Ashgate Research Companion to Islamic Law, Oxon, Ashgate, Routledge.
- Piela, A. (2013), «Women are Believers in Their Own Right»: One Muslim Woman's Challenge to Dominant Discourses Shaping Gender Relations in Islam, in «The Muslim World», 103, 3, Special Issue, Muslim Women and the Challenge of Authority, pp. 389-403.
- Pinnelli, A., Hoffmann-Nowotny, H.J., and Fux, B. (Eds.) (2001), Fertility and new types of households and family formation in Europe, Strasbourg, Council of Europe.
- (Eds.) (2004), *Fecondità e nuove forme di unione in Europa*, Roma, Sapere 2000.
- Präg, P., and Mills, M.C. (2017), Assisted Reproductive Technology in Europe: Usage and Regulation in the Context of Cross-Border Reproductive Care, in M. Kreyenfeld, and D. Konietzka (Eds.), Childlessness in Europe: Contexts, Causes, and Consequences. Demographic Research Monographs, Dordrecht, Springer, pp. 289-309.
- PRC, Pew Research Center's Forum on Religion & Public Life (2009), Mapping the Global Muslim Population. A Report on the Size and Distribution of the World's Muslim Population, Washington, Pew Research Center.
- (2011), The Future of the Global Muslim Population. Projections for 2010-2030, Washington, Pew Research Center.
- (2012), The Global Religious Landscape, Roma, Pew Research Center.

- (2015), The Future of the Global Muslim Population. Projections for 2010-2050. Why Muslims Are Rising Fastest and the Unaffiliated Are Shrinking as a Share of the World's Population, Washington, Pew Research Center.
- Prunotto, F., and Martoglio, C. (2004), *Living in Piedmont. A guide to services* for foreign citizens, Torino, Regional Observatory of Immigration in Piedmont.
- Qadri, A.A. (1963), Islamic jurisprudence in the modern world. A reflection upon comparative study of the law, Bombay, N.M. Tripathi private Ltd.
- Quagliata, E. (Ed.) (2010), Essere genitori, Roma, Astrolabio.
- Rabello, A., Milani, D., and Atighetchi, D. (2013), Intorno alla vita che nasce: diritto ebraico, canonico e islamico a confronto, Torino, Giappichelli.
- Raday, F. (2003), *Culture, religion, and gender*, in «International Journal of Constitutional Law», 1, 4, pp. 663-715.
- Rafiq, A. (2014), Child Custody in Classical Islamic Law and Laws of Contemporary Muslim World (An Analysis), in «International Journal of Humanities and Social Science», 4, 5, pp. 267-277.
- Ragozzino, G. (1998), L'Islam e la bioetica. Principi di bioetica comune, Napoli, Edizioni Scientifiche Italiane.
- Rehman, J.D. (2007), The Sharia, Islamic Family Laws and International Human Rights Law: Examining the Theory and the Practice of Polygamy and Talaq, in «International Journal of Law, Policy and the Family», 21, pp. 108-127.
- Rehmann-Sutter, C., Düwell, M., and Mieth, D. (Eds.) (2006), *Bioethics in Cultural* Contexts: Reflections on Methods and Finitude, Dordrecht, Springer.
- Ricci, G., Cannovo, N., and Sirignano, A. (2015), *Medically Assisted Procreation, a Discussion Still Open in Italy*, in «Medicine and Law», 34, pp. 487-496.
- Riezzo, I., Neri, M., Bello, S., Pomara, C., and Turillazzi, E. (2016), *Italian law on medically assisted reproduction: Do women's autonomy and health matter?*, in «BioMed Central Womens Health», 16, pp. 44 ff.
- Righetti, P.L. (Ed.) (2010), Gravidanza e contesti psicopatologici. Dalla teoria agli strumenti di intervento, Milano, Franco Angeli.
- Ringer, F.K. (1997), Max Weber's methodology: The unification of the cultural and social sciences, Cambridge, Harvard University Press.
- Rippin, A. (Ed.) (1988), Approaches to the History of the Interpretation of the Qur'an, Oxford, Clarendon.
- RNPMA, Registro Nazionale della Procreazione Medicalmente Assistita (2007), I Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2005, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2008), II Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2006, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2009), III Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2007, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2010), IV Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2008, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.

- (2011), V Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2009, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2012), VI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2010, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2013), VII Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2011, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2014), VIII Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2012, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2015), IX Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2013, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2016), X Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2014, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- (2017), XI Report. Attività del Registro Nazionale della Procreazione Medicalmente Assistita. Dati 2015, Roma, Istituto Superiore di Sanità, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute.
- Rosen, N. (2013), The Milk Relationship: The Evolution and Significance of Wet-nurses, in «Anthropology Senior Theses», Paper 138, pp. 1-39.
- Rowlatt, J. (2005), *The risks of cousin marriage*, in «BBC Newsnight», November, 16, available online at http://news.bbc.co.uk/1/hi/programmes/newsnight/4442010. stm (last accessed 12.11.2012).
- Rumage, S.A. (1996), Resisting the West: The Clinton Administration's Promotion of Abortion at the 1994 Cairo Conference and the Strength of the Islamic Response, in «California Western International Law Journal», 27, 1, pp. 1-100.
- Russo, M., and Mack, G. (Eds.) (2005), Interpretazione di trattativa: la mediazione linguistico-culturale nel contesto formativo e professionale, Milano, Hoepli.
- Sabatello, M. (2009), Using International Human Rights Framework to Study Bioethics, in Id. (Ed.), Children's Bioethics. The International Biopolitical Discourse on Harmful Traditional Practices and the Right of the Child to Cultural Identity, Leiden, Boston, Brill, pp. 1-23.
- (2014), Posthumously Conceived Children: An International and Human Rights Perspective, in «Journal of Law and Health», 27, pp. 29-67.
- Sachedina, A. (2009), Islamic Biomedical Ethics: Principles and Application, Oxford, OUP.
- Saint-Blancat, C. (2004), La transmission de l'islam auprès des nouvelles générations de la diaspora, in «Social Compass», 51, 2, pp. 235-247.
- Salih, R. (2009), Muslim women, fragmented secularism and the construction of interconnected «publics» in Italy, in «Social Anthropology/Anthropologie Sociale», 17, 4, pp. 409-423.
- Samani, R.O., Dizaj, A.V.T., Moalem, M.R.R., Merghati, S.T., and Alizadeh, L. (2007), Access to Fertility Treatments for Homosexual and Unmarried Persons, through Iranian Law and Islamic Perspective, in «Royan Institute Iranian Journal of Fertility and Sterility», 1, 3, pp. 127-130.

Santosuosso, F. (1984), La fecondazione artificiale umana, Milano, Giuffrè.

- Santosuosso, A., Redi, C.A., Garagna, S., and Zuccotti, M. (Eds.) (2002), I giudici davanti alla genetica, Pavia, Collegio Ghislieri.
- Schacht, J. (1982), An introduction to Islamic law, Oxford, Clarendon Press.

- Schattman, G.L., Esteves, S.C., and Agarwal, A. (Eds.) (2015), Unexplained Infertility: Pathophysiology, Evaluation and Treatment, Dordrecht, Springer.
- Schellekens, J., and Eisenbach, Z. (2010), *Religiosity and Marital Fertility: Israeli* Arab Muslims, 1955-1972, in «Journal of Family History», 35, 2, pp. 147-163.
- Schenker, J.G. (2005), Assisted reproductive practice: Religious perspectives, in «Reproductive BioMedicine Online», 10, 3, pp. 310-319.
- (2008), Islamic perspectives in human reproduction, in «Reproductive BioMedicine Online», 17, 3, pp. 34-38.
- (Ed.) (2011), Ethical Dilemmas in Assisted Reproductive Technologies, Berlin, DEG.
- Schimmel, A. (1989), Islamic Names: An Introduction, Edinburgh, Edinburgh University Press.
- Schumm, D., and Stoltzfus, M.J. (2011), Introduction, in M.J. Stoltzfus, and D. Schumm (Eds.), Disability in Judaism, Christianity, and Islam. Sacred Texts, Historical Traditions, and Social Analysis, Palgrave, Basingstoke, pp. XI-XXII.
- Seedat, F. (2013), When Islam and Feminism Converge, in «The Muslim World», 103, 3, Special Issue, Muslim Women and the Challenge of Authority, pp. 404-420.
- Selin, H., and Shapiro, H. (Eds.) (2003), Medicine across cultures. History and Practice of Medicine in Non-Western Cultures, New York, Boston, Dordrecht, London, Moscow, Kluwer.
- Semerdjian, E. (2009), Zinah, in J.L. Esposito (Ed.), The Oxford Encyclopedia of the Islamic World, Oxford, OUP.
- Serour, G.I. (Ed.) (1997), Proceedings of a Seminar on ethical implications of use of assisted reproductive technologies for treatment of human infertility. Rabei Akhar 21st-23rd, 1418 August 25th-27th, 1997, Cairo, al-Azhar University.
- (2005), *Religious perspectives of ethical issues in ART*, in «Middle East Fertility Society Journal», 10, 3.
- (2008), Islamic perspectives in human reproduction, in «Reproductive BioMedicine Online», 17, 3, pp. 34-38.
- (2011), Islamic laws and reproduction, in J.G. Schenker (Ed.), Ethical Dilemmas in Assisted Reproductive Technologies, Berlin, DEG, pp. 333-342.
- (2013), Ethical issues in human reproduction: Islamic perspectives, in «Gynecological Endocrinology», 29, 11, pp. 949-952.
- Serour, G.I., Aboul-Ghar, M., and Mansour, R.T. (1991), Infertility: A health problem in the Muslim world, in «Population Sciences», 10, pp. 41-58.
- (1995), Bioethics in medically assisted conception in the Muslim World, in «Journal of Assisted Reproduction and Genetics», 12, 9, pp. 559-565.
- Serour, G.I., and Hassanein, M.K. (Eds.) (1998), The international conference on Population and Reproductive Health in the Muslim World, Shawal (24^{tb}-27^{tb}), 1418 A.H., February (21st-24^{tb}), 1998 A.D., Cairo, Egypt, Cairo, Al-Azhar University, International Islamic Center for Population Studies and Research.
- Serour, G.I., Omran, A.R., and Barzelatto, J. (Eds.) (1992), International Conference on «Bioethics in Human Reproduction Research in the Muslim World» (1st 1991

^{- (1995),} Introduzione al diritto musulmano, Torino, EFGA.

Cairo Egypt), Markaz al-Dawlī al-Islāmī lil-Dirāsāt wa-al-Buḥūth al-Sukkānīyah. Ethical guidelines for human reproduction research in the Muslim world: Based on highlights, papers, discussions, and recommendations of the the [sic] First International Conference on Bioethics in Human Reproduction Research in the Muslim World, Cairo 10th-13th December 1991, Cairo, Al-Azhar University, International Islamic Center for Population Studies and Research.

- Servizio Studi Senato della Repubblica e Camera dei Deputati (2016), Definizione e aggiornamento dei livelli di assistenza (LEA). Atto del Governo n. 358. Schede di lettura. Dossier XVII Legislatura, Roma, Senato della Repubblica e Camera dei Deputati.
- SGIM, Society of General Internal Medicine (2013), Abstracts from the 36th Annual Meeting of the Society of General Internal Medicine, in «Journal of General Internal Medicine», 28, 1, pp. 1-489.
- Shabana, A. (2015), Foundations of the Consensus against Surrogacy Arrangements in Islamic Law, in «Islamic Law & Society», 22, 1/2, pp. 82-113.
- Shah, S.S. (1994), Fosterage as a Ground of Marital Prohibition in Islam and the Status of Human Milk Banks, in «Arab Law Quarterly», 9, 1, pp. 3-7.
- Sharara, F.I. (Ed.) (2013), Ethnic Differences in Fertility and Assisted Reproduction, London, Springer.
- Sharif, K., and Coomarasamy, A. (Eds.) (2012), Assisted Reproduction Techniques: Challenges and Management Options, Chichester, Wiley-Blackwell.
- Sharma, K.M. (1997), What's in a Name: Law, Religion, and Islamic Names, in «Denver Journal of International Law and Policy», 26, 2, pp. 151-208.
- Shaw, A. (2001), Kinship, cultural preference and immigration: Consanguineous marriage among British Pakistanis, in «The Journal of the Royal Anthropological Institute», 7, 2, June, pp. 315-334.
- (2011), Risk and reproductive decisions: British Pakistani couples' responses to genetic counselling, in «Social Science & Medicine», 73, 1, pp. 111-120.
- (2012), They say Islam has a solution for everything, so why are there no guidelines for this? Ethical dilemmas associated with the births and deaths of infants with fatal abnormalities from a small sample of Pakistani Muslim couples in Britain, in «Bioethics», 26, 9, pp. 485-492.
- (2014), *Rituals of infant death: Defining life and Islamic personhood*, in «Bioethics», 28, 2, pp. 84-95.
- Simpson, B., and Hampshire, K. (2015), Assisted reproductive technologies: A third phase?, in K. Hampshire, and B. Simpson (Eds.), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, New York, Oxford, Berghahn, pp. 1-17.
- Sona, F. (2014), Defending the family treasure-chest: Navigating Muslim families and secured positivistic islands of European legal system, in P. Shah, M.C. Foblets, and M. Rohe (Eds.), Family, Religion, and Law: Cultural Encounters in Europe, Farnham, Ashgate, pp. 115-141.
- (2016), Griglie di lettura ed analisi dell'islam europeo. Diritto interculturale e relazioni sciaraitiche, in «Stato, Chiese e pluralismo confessionale», 40, pp. 1-33.
- Soniewicka, M. (Ed.) (2018), The Ethics of Reproductive Genetics: Between Utility, Principles, and Virtue, Dordrecht, Springer.
- Springer, P.R., Abbott, D.A., and Reisbig, A.M.J. (2009), Therapy with Muslim Couples and Families: Basic Guidelines for Effective Practice, in «The Family Journal: Counselling and Therapy for Couples and Families», 17, 3, pp. 229-235.

- Stanzione, P., and Sciancalepore, G. (Eds.) (2004), Procreazione assistita. Commento alla legge 19 febbraio 2004, n. 40, Milano, Giuffrè.
- Stark, B. (1989), International Human Rights and Family Planning: A Modest Proposal, in «Denver Journal of International Law and Policy», 18, 1, pp. 59-82.
- Steinbock, B. (Ed.) (2007), The Oxford Handbook of Bioethics, Oxford, OUP.
- Steiner, E., and Rosu, A.M. (2016), Assisted Human Reproductive Technologies (Art), and Human Rights. The European Perspective, in «Frontiers of Law in China», 11, 2, pp. 339-369.
- Stewart, J. (1997), 1,001 African Names: First and Last Names from the African Continent, New York, Citadel Press.
- Storrow, R.F. (2005a), Quests for Conception: Fertility Tourists, Globalization and Feminist Legal Theory, in «Hastings Law Journal», 57, 2, pp. 295-330.
- (2005b), Handmaid's Tale of Fertility Tourism: Passports and Third Parties in the Religious Regulation of Assisted Conception, in «Texas Wesleyan Law Review», 12, 1, pp. 189-212.
- (2006), Marginalizing Adoption through the Regulation of Assisted Reproduction, in «Capital University Law Review», 35, 2, pp. 479-516.
- Svitnev, K. (2011), Legal control of surrogacy. International perspectives, in J.G. Schenker (Ed.), Ethical Dilemmas in Assisted Reproductive Technologies, Berlin, Boston, De Gruyter, pp. 149-163.
- Swinford, A.E., and el-Fouly, M.H. (1987), Islamic religion and culture: Principles and implications for genetic counselling, in «Birth defects original article series», 23, 6, pp. 253-257.
- Tabiu, M. (1992), Unlawful marriages and their effect in Islamic law of the Maliki school, in «Islamic Studies», 31, 3, pp. 319-337.
- Talhami, G.H. (2004), *European, Muslim and Female*, in «Middle East Policy», XI, 2, pp. 152-168.
- Tappan, R. (2012), More than Fatwas: Ethical Decision Making in Iranian Fertility Clinics, in M.C. Inhorn, and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 103-129.
- Tapper, R. (1995), Islamic anthropology and the anthropology of Islam, in «Anthropological Quarterly», 68, 3, July, pp. 185-193.
- Teeuw, M.E., Hagelaar, A., ten Kate, L.P., Cornel, M.C., and Henneman, L. (2012), Challenges in the care for consanguineous couples: An exploratory interview study among general practitioners and midwives, in «BioMed Central Family Practice», 13, 105, pp. 1-7.
- Teichman, J. (1982), Illegitimacy: An Examination of Bastardy, Ithaca, Cornell University Press.
- Tesarik, J. (Ed.) (1994), *Male factor in human infertility*, Rome, Ares-Serono Symposia Publications.
- Tham, J., Garcia, A., and Miranda, G. (Eds.) (2014), Religious Perspectives on Human Vulnerability in Bioethics, Dordrecht, Springer.
- Thorley, V. (2014), Milk siblingship, religious and secular: History, applications, and implications for practice, in «Women and Birth», 27, pp. 16-19.
- Tibi, B. (2010), Ethnicity of Fear? Islamic Migration and the Ethnicization of Islam in Europe, in «Studies in Ethnicity and Nationalism», 10, 1, pp. 126-157.

- Tonkin, H., and Esposito, F.M. (Eds.) (2010), *The Translator as Mediator of Cultures*, Amsterdam, John Benjamins Publishing Company.
- Torbica, A., and Fattore, G. (2005), *The «Essential Levels of Care» in Italy: When being explicit serves the devolution of powers*, in «The European Journal of Health Economics», 6, I, pp. 46-52.
- Trabucchi, A. (1962), Inseminazione artificiale. Diritto civile, in Novissimo Digesto Italiano, Torino, UTET, pp. 732 ff.
- (1982), La procreazione e il concetto giuridico di paternità e maternità, in «Rivista di Diritto Civile», I, pp. 597 ff.
- Tremayne, S. (2009) Law, Ethics, and Donor Technologies in Shia Iran, in D. Birenbaum-Carmeli, and M.C. Inhorn (Eds.), Assisting Reproduction, Testing Genes: Global Encounters with the New Biotechnologies, NY, Oxford, Berghahn, pp. 144-163.
- (2012), The «Down Side» of Gamete Donation: Challenging «Happy Family» Rhetoric in Iran, in M.C. Inhorn, and S. Tremayne (Eds.), Islam and Assisted Reproductive Technologies: Sunni and Shia Perspectives, New York, Oxford, Berghahn, pp. 130-156.
- (2015), Whitherkinship? Assisted reproductive technologies and relatedness in Islamic Republic of Iran, in K. Hampshire and B. Simpson (Eds.), Assisted reproductive technologies in the third phase. Global encounters and emerging moral worlds, New York, Oxford, Berghahn, pp. 69-82.
- Tripodina, C. (2014), Il «diritto» a procreare artificialmente in Italia: una storia emblematica, tra legislatore, giudici e corti, in «Rivista di BioDiritto», 2, 2, pp. 67-87.
- Turillazzi, E., Frati, P., Busardo, F.P., Gulino, M., and Fineschi, V. (2015), The European Court Legitimates Access of Italian Couples to Assisted Reproductive Techniques and the Pre-Implantation Genetic Diagnosis, in «Medicine, Science and the Law», 55, 3, pp. 194-200.
- Turkmendag, I. (2012), Home and Away: The Turkish Ban on Donor Conception, in «Law, Innovation and Technology», 4, 2, pp. 144-164.
- Turone, F. (2004), Italy to pass new law on assisted reproduction, in «British Medical Journal», 328, 9.
- Valli, R. (1993), Islam's solution to abortion, contraception, organ transplants, test tube babies, gestation, surrogacy, prosthetic surgery, Oshodi, Lagos, Al-Waseelat Publishers.
- van Balen, F., and Inhorn, M.C. (2002), *Interpreting infertility*, in M.C. Inhorn, and F. van Balen (Eds.), *Infertility around the Globe. New Thinking on Childlessness, Gender, and Reproductive Technologies*, Berkeley, University of California Press, pp. 3-32.
- Various Authors (1993), Symposium on Religious Law: Roman Catholic, Islamic, and Jewish Treatment of Familial Issues, Including Education, Abortion, In Vitro Fertilization, Prenuptial Agreements, Contraception, and Martial Fraud, in «Loyola of Los Angeles International and Comparative Law Journal», 16, 1, pp. 9-106.
- (1997), The Qur'an: Saheeh International, Jeddah, Abul Qasim Publishing House.
- (2004), The Qur'an: Saheeh International, London, Umm Muhammed Al-Muntada al-Islami.
- (2010), The Qur'an: Saheeh International, Jeddah, Dar Qiraat.

- (2017), Salute e identità religiose. Per un approccio multiculturale nell'assistenza alla persona, Milano, Biblioteca Ambrosiana, CoReIs, and Collegio IPASVI.
- Vayena, E., Rowe, P.J., and Griffin, P.D. (Eds.) (2002), Current Practices and Controversies in Assisted Reproduction Report of a meeting on «Medical, Ethical and Social Aspects of Assisted Reproduction» held at WHO Headquarters in Geneva, Switzerland; 17-21 September 2001, Geneva, World Health Organization.
- Ventura, A. (2007), Confessioni scismatiche, eterodossie e nuove religioni sorte nell'islam, in G. Filoramo (Ed.), Islam, Roma-Bari, Laterza, pp. 309-401.
- Vesey-Fitzgerald, S.G. (2008), Nature and sources of the Shari'a, in M. Khadduri, and H.J. Liebesny (Eds.), Origin and development of Islamic law, Clark, NJ, The Lawbook Exchange, pp. 85-112.
- Vigneri, M. (2011), I bambini che vengono dal freddo. Sulla donna infertile e le nuove frontiere procreative, in «Rivista di Psicoanalisi», LVII, January-March, pp. 655-670.
- Vogt, P.W. (Ed.) (2011), Sage Quantitative Research Methods, Los Angeles, Sage.
- Wakley, G., Fuller, J., and Qureshi, B. (2000), A Muslim woman with infertility, in «Practitioner», 244, pp. 1005-1008, 1013-1014.
- Waldron, J. (2010), Questions about the reasonable accommodation of minorities, in R. Ahdar, and N. Aroney (Eds.), Shari'a in the West, New York, OUP, pp. 103-113.
- Walliman, N.S.R. (2006), Social research methods, London, Sage.
- Wang, J.X., Norman, R.J., and Wilcox, A.J. (2004), Incidence of spontaneous abortion among pregnancies produced by assisted reproductive technology, in «Human Reproduction», 19, 2, pp. 272-277.
- Wardle, L.D. (2006), *Global Perspective on Procreation and Parentage by Assisted Reproduction*, in «Capital University Law Review», 35, 2, pp. 413-478.
- Watzlawik, M., and Aristi, B. (Eds.) (2007), *Capturing Identity: Quantitative and Qualitative Methods*, Plymouth, University Press of America.
- Weber, A.S. (2010), Bioethical Reasoning in Islam, in «International Journal of Arts and Sciences», 3, 15, pp. 607-617.
- Weber, M. (1949), The methodology of the social sciences, New York, Free Press.
- Weinberg, D. (Ed.) (2002), Qualitative research methods, Oxford, Blackwell.
- Weiss, B.G. (1978), Interpretation in Islamic law: The theory of ijtihad, in «American Journal of Comparative Law», 26, 2, pp. 199-212.
- Weisz, G. (Ed.) (1990), Social Science Perspectives on Medical Ethics, Dordrecth, Kluwer.
- Werber, S.J. (2000), Cloning: A Jewish Law Perspective with a Comparative Study of Other Abrahamic Traditions, in «Seton Hall Law Review», 30, 4, pp. 1114-1181.
- Wilcox, A.J., Treloar, A.E., and Sandler, D.P. (1981), Spontaneous abortion over time: Comparing occurrence in two cohorts of women a generation apart, in «American Journal of Epidemiology», 114, pp. 548-553.
- Wintle, M. (2016), Islam as Europe's «Other' in the Long Term: Some Discontinuities, in «History», 101, 344, pp. 42-61.
- Wojcieszak, M., Azrout, R., Boomgaarden, H., Alencar, A.P., and Sheets, P. (2015), Integrating Muslim Immigrant Minorities: The Effects of Narrative and Statistical Messages, in «Communication Research», 44, 4, pp. 1-26.

- Wright, J., Allard, M., Lecours, A., and Sabourin, S. (1989), Psychosocial distress and infertility: A review of controlled research, in «International Journal of Fertility», 34, 2, pp. 126-142.
- Wright, J., Duchesne, C., Sabourin, S., Bissonnette, F., Benoit, J., and Girard, Y. (1991), Psychosocial distress and infertility: Men and women respond differently, in «Fertility and Sterility», 55, 1, pp. 100-108.
- Yamani, M.A.Z. (2008), Polygamy and law in contemporary Saudi Arabia, Reading, Ithaca.
- Yanow, D., and Schwartz-Shea, P. (Eds.) (2006), Interpretation and method: Empirical research methods and the interpretive turn, New York, Armonk, London, M.E. Sharp.
- Yeprem, M.S. (2007), Current assisted reproduction treatment practices from an Islamic perspective, in «Reproductive BioMedicine Online», 14, 1, pp. 44-47.
- Yin, R.K.Y. (2009), Case Study Research: Design and Method, Thousand Oaks, Sage, IV ed.
- Yong, A. (2011), Disability and the Love of Wisdom: De-forming, Re-forming, and Per-forming Philosophy of Religion, in M.J. Stoltzfus, and D. Schumm (Eds.), Disability in Judaism, Christianity, and Islam. Sacred Texts, Historical Traditions, and Social Analysis, Basingstoke, Palgrave, pp. 205-227.
- Zagrebelsky, V. (2008), Violazioni «strutturali» e Convenzione europea dei diritti umani: interrogativi a proposito di Broniowski, in «Rivista di diritti umani e diritto internazionale», 1, pp. 5-19.
- (2012), La irragionevolezza della legge italiana sulla procreazione assistita nel giudizio della Corte europea dei diritti umani, in «Diritti umani e diritto internazionale», 3.
- Zahraa, M., and Malek, N.A. (1998), The Concept of Custody in Islamic Law, in «Arab Law Quarterly», 13, pp. 155-177.
- Zahraa, M., and Shafie, S. (2006), Islamic Perspective on IVF and PGD, with Particular Reference to Zain Hashmi, and Other Similar Cases, in «Arab Law Quarterly», 20, 2, pp. 152-180.
- Zaidi, A.H. (2007), A Critical Misunderstanding. Islam and Dialogue in the Human Sciences, in «International Sociology», 22, 4, pp. 411-434.
- Zanini, G. (2011), Abandoned by the State, betrayed by the Church: Italian experiences of cross-border reproductive care, in «Reproductive BioMedicine», 23, 5, pp. 565-572.
- Zatti, P. (2006), Le problème des limites à la procréation assistée dans les lois des principaux pays européens, in «Droit et Cultures», 51, pp. 133-143.
- Zawawi, S.M. (1998), African Muslim names: Images and identities, Trenton, NJ, Africa World Press.
- Zegers-Hochschild, F., Adamson, G.D., de Mouzon, J., Ishihara, O., Mansour, R., Nygren, K., Sullivan, E., and Vanderpoel, S. (2009a), *International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009*, in «Fertility and Sterility», 92, 5, pp. 1520-1524.
- (2009b), International Committee for Monitoring Assisted Reproductive Technology (ICMART), and the World Health Organization (WHO), revised glossary of ART terminology, 2009, in «Human Reproduction», 24, 11, pp. 2683-2687.

- Zimmerman, D.D. (2015), Young Arab Muslim Women's Agency Challenging Western Feminism, in «Affilia: Journal of Women and Social Work», 30, 2, pp. 145-157.
- Zubaida, S. (2003), Law and Power in the Islamic World, London, I.B. Tauris.
- Zubair, S., Mustafa, A.S., Badri, A.A., Lari, A.R., Daroonparvar, M., and Hussin, F. (2013), A revisit of assisted reproduction technology and the humanisation paradigm, in «Perintis, e-journal», 3, 1, pp. 1-16.

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ERRATA CORRIGE

-> Page 46, Section 1

[...] Whereas a child born as result of the application of MAR immediately acquires the status of either legitimate or recognised child, children born to non-married cohabiting partners **not** relying upon MAP are not automatically recognised. [...]

-> *Page* 48, *Section* 2

[...] Furthermore, it should be stressed that medical staff and health care ancillary operators are not required to take part in MAP procedures in the case of conscientious objection that has been previously notified to the hospital or clinic (art. <u>16</u>). [...]

-> Page 113, Section 7.2

[...] Building upon Islamic rules preserving Muslim women's modesty and prohibiting the exposure of bodily parts to <u>marriageable (non-maḥārim)</u> people, female healthcare practitioners are therefore to be favoured by Muslim patients. [...]

NEW PARENTHOOD AND CHILDHOOD PATTERNS PRINCIPLES AND PRAXES IN MUSLIM REALITIES

by Federica Sona

Against the backdrop of a broader discourse on bioethics, the volume investigates the Muslim prospective parents' right to a private family life as enacted within the boundaries of Islamic provisions, on the one hand, and Italian domestic law, on the other hand. Exploring (potentially) shartah compliant remedies to involuntary childlessness, reproductive and procreative technologies -i.e. ARTs and MAPs- are brought into focus as alternative routes to parenting and creative forms of filiation. Carefully examining the relationships between fertility centres' personnel and prospective Muslim parents, the study documents and evaluates healthcare providers' perceptions and Muslim patients' distinct -sometimes unspoken- specificities. In point of fact, staff members of clinics providing reproductive and biotechnological medical treatments are increasingly addressing religiously and culturally sensitive issues, as raised by intended mothers and fathers. Relying upon legal, scholarly and empirical data, the present work offers decoding tools for academic purposes as well as for healthcare providers and religious figures, who are coping with the progressive pluralisation of filiation patterns, on a daily basis. Paying specific attention to principles and praxes as understood and implemented in local Muslim realities, light is also shed on possibly partially concealed «old-new» kindred dynamics leading to imaginative family constellations.

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