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Culture and Religious Beliefs in Relation to Reproductive Health

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[Abstract]

An increasing number of contemporary research publications acknowledge the influence of religion and culture on sexual and reproductive behavior and health-care utilization. It is currently hypothesized that religious influences can partly explain disparities in sexual and reproductive health outcomes. In this paper, we will pay particular attention to Muslims in sexual and reproductive health care. This review reveals that knowledge about devout Muslims' own experience of sexual and reproductive health-care matters is limited, thus providing weak evidence for modeling of efficient practical guidelines for sexual and reproductive health care directed at Muslim patients. Successful outcomes in sexual and reproductive health of Muslims require both researchers and practitioners to acknowledge religious heterogeneity and variability, and individuals' possibilities to negotiate Islamic edicts. Failure to do so could lead to inadequate health-care provision and, in the worst case, to suboptimal encounters between migrants with Muslim background and the health-care providers in the receiving country.

Keywords: Islam; Muslim patients; reproductive health; health care; health disparities; religion

Introduction

In this chapter, we will offer a review of theoretical and practical dimensions of sexual and reproductive health-care delivery within a health-care system characterized by an increased religious and cultural diversity. The review draws on recent contributions in sexual and reproductive health research. Accordingly, we will seek to illustrate salient tendencies and particular areas of controversy surrounding cultural and religious aspects of reproductive health care. Our contribution is far from exhaustive, but rather highlights current dimensions of interest.

The first part of this paper will provide a general overview of the implications of cultural and religious aspects for reproductive health patterns and disparities in health care. Following this, we will discuss the complexity and controversies in Islamic perspectives and Muslims' relation to reproductive health in particular, and their relevance for clinical practice, in detail. Based on these reflections, in the last section of the paper, some limitations in contemporary research on culture and religious beliefs in relation to reproductive health, which may result in less sufficient healthcare delivery, have been described. As will be shown, contemporary portrayals of Muslims are often skewed and simplified. There is, in addition, a notable lack of empirically based studies on the Muslim experience of sexual and reproductive health-care matters, thus weakening current evidence for improved efficient health-care delivery. Accordingly, we will propose that future research efforts must acknowledge religious heterogeneity and variability, as failure to do so could lead to inadequate health-care provision and insufficient outcomes in health.

Disparities in reproductive health care

Clinical and public health research across the world have continually reported on how patients, primarily women, with immigrant background face challenges in obtaining sufficient levels of health care in secular healthcare settings. Further, it is evident that women with migrant background face greater disparities in health [1], [2], [3], *[4], and [5] due to linguistic, cultural, and socioeconomic factors [3], *[4], [6], [7] and [8]. Yet, other studies suggest that, for example, increased perinatal and maternal morbidity among foreign-born women cannot be explained by cultural or specific religious factors [9], [10] and [11]. Although still an under-communicated aspect of health disparity research *[12] and [13], an increasing number of research publications acknowledge the influence of religion on sexual and reproductive behavior and health-care utilization [8], *[14], *[15], *[16], [17], [18], and [20]. Within all major religious traditions, Judaism, Christianity, Islam, Hinduism, Sikhism, and Buddhism, scholars have in one way or another reflected upon the meaning of sexuality, providing frameworks for good and bad sexuality, characteristics of male and female sexuality, and family planning strategies. Thus, religion cannot be easily separated from sexuality and reproductive health [21]. In common for all major religions is that they offer a distinct belief system, which aims to guide devout followers in sexual and reproductive health matters [22]. Yet, it is also acknowledged that religion may have a more or less profound influence on the real-life practice of devout people, a fact also illustrated in several research contributions showing that personal interpretations of any faith tend to vary from very liberal to conservative and traditional [23], *[24], [25], [26] and [27]. It is difficult to elaborate on sexual and reproductive health matters in light of all major religious traditions within the scope of one article. Hence, we will focus on the intersection between Islam and sexual and reproductive health care. Given various events around the world in the last decades, where Islam has been in the forefront of much international attention and media coverage, the interest in knowing and understanding the practice of Islam in different arenas has inevitably increased.

How does Islam influence devout Muslims' sexual and reproductive health?

Currently, there are different hypotheses on how Islamic devotion is believed to shape individuals' sexual and reproductive health and healthrelated behaviors. A first line of arguments, primarily expressed in epidemiological literature, focuses on risk factors for morbidities caused by Islamic practices [12]. For instance, a study conducted among pregnant Muslim women in the Netherlands revealed that women's adherence to Ramadan fasting during early pregnancy could lead to lower birth weight of newborns [18]. Researchers in the field subsequently urge for large-scale studies that could investigate the potential perinatal morbidity and mortality, as well as initiatives for health-care providers to gain access to researchdriven information on helping pregnant women to make well-informed decisions regarding fasting during the month of Ramadan [18] and [28]. Other risk factors that are argued to account for Islamic-specific morbidities, although not always related to sexual and reproductive health matters, include rituals during the "Hajj" pilgrimage; prohibition against intake of alcohol and pork meat, which may inhibit the intake of certain medicines; and lack of vitamin D among Muslim women wearing head scarfs [29]. In conclusion, there are suggestions and discussions about correlations between religious practices and low outcomes in health, yet little evidencebased material that can help formulate "best practice" recommendations.

A second line of arguments particularly focuses on how Islamic attitudes, norms, and value systems implicitly affect the individual's reproductive health. Moreau et al. recently reported on a complex relationship between individuals' religiosity and sexual and contraceptive behaviors in France [14]. Similar to other studies [26] and [30], Moreau and colleagues found that regular religious practice was associated with later sexual debut, but that sexually experienced adolescents, regularly practicing their religion, were less likely to use contraception. Social control executed by family members and social network, particularly salient for young women, could possibly act as a barrier for adopting preventive behaviors, and thus resulting in greater sexual risks among younger generations of devoted Muslims *[14] and [19]. Likewise, it is known that religious value systems involves risks for young Muslims to dishonor one's family by deviating from sexual norms or gender roles, or to be alienated from family or community networks if they are homosexual or sexually active before marriage [31]. In an interview study about attitudes toward cervical cancer screenings, it is also shown that Muslim women may resist health-care examinations or practices that may contest their religious or cultural values ^[6].

A third line of arguments seeks to explain that disparities occur primarily as a result of religious discrimination and "Islamophobia" ^[32]. Through a systematic, ethnographic content analysis of 2342 MEDLINE-indexed abstracts – dating from 1966 to 2005 and originating from a Boolean search for "islam or muslim or muslims" – Laird, de Marrais, and Barnes ^[12] conclude that the portrait of Muslim patients in contemporary medical and public health literature is skewed and lacks nuances, consequently disregarding the variability in Islamic norms. "Faith-blind" or "religion-

blind" health policies with an Islamophobic signature, believably influenced by negative portrayals of Muslims in contemporary public debate, are the predominant contributors to health disparities in the UK and the US, the authors argue *[12] and [31]. Qualitative research confirms that health-care practices may sometimes be insensitive to religious and cultural practices. A study investigating immigrant Muslim women's maternity health-care needs in a Canadian context reveals that informants experienced discrimination, insensitivity, and lack of knowledge about their religious practices in encounters with Canadian health-care providers [33]. Women explained that the staff seemed uninformed about specific religious practices with regard to maternal health-care delivery, and that their requests for particular healthcare accommodations based on religious observances were met with hostility and unfriendliness [33]. Accordingly, the authors argue that current practices in Canadian maternal health care lack the necessary flexibility to meet the health-care needs of immigrant Muslim women [33], a statement that reflects a broader concern in much sexual and reproductive health research on Muslim patients.

Research patterns and controversies in the field

Research on religious aspects of sexuality and reproductive health is value laden and reveals conflicting ideals. Many scholars have brought attention to possible controversies between Islamic jurisprudence (Sharia) and sexual and reproductive rights, oppression of Muslim women, and honor-related structures that limit primarily young women's and men's access to equal sexual and reproductive health care [34], [35], [36] and [37]. At the same time, Islam is sometimes described as having a positive effect on sexuality and health-care-seeking behavior and that practicing religious activities can enable Muslims to cope with difficult care-related situations and *[39]. The heated debate has generated a highly polarized research field where a substantial number of publications make sweeping and generalized statements about Muslim patients' sexual and reproductive health-care needs [12]. It is not uncommon that research contributions accentuate the author's own opinion about how Muslims should understand their religion [29]. To some extent, sexual and reproductive health-care provision must partly be understood in light of these broader political and rights-based discussions. However, this type of knowledge gives little support for practical health-care provision; evidence must ultimately be grounded in empirical data derived from believing Muslims' own experiences [40]. Hence, we will discuss four empirically driven themes that are considered in contemporary sexual and reproductive health-care research, and that could generate some reflections regarding health-care delivery for Muslim patients. We will focus on the complexity of sexual and reproductive health among Muslims, on antenatal malformation screening by ultrasound and decision for termination of pregnancy, on Muslim patients' gender preferences regarding their health-care providers, and on options for assisted reproductive technology for infertile couples.

The complexity of sexual and reproductive health among Muslims

An increasing amount of publications focus on the general complexity surrounding sexuality, reproductive health, and health outcomes among devout Muslims who balance Islamic norms with moral values in nonMuslim secular societies *[4], [17] and [27]. This suggests that individuals' religiousness with regard to sexuality and reproductive health is relative to a specific time and place, thus not following a coherent "Islamic pattern" *[14], [41], [42] and [43]. In the study by Meldrum and her colleagues among young Muslim women in Australia, informants who were strongly committed to Islamic ideas also exposed an apparent resistance to be too influenced by Australian culture in terms of expression of sexuality. Accordingly, informants said that it was important to maintain virginity norms and to value the sacredness of the female body. Some women reported abstinence from sexual behaviors because of feelings of guilt and fear of being found out. Conversely, informants also described difficulties in controlling discouraged behaviors because of "biological drives" that could prevent them from rational, that is, Islamic, reflection [17]. This shows that Muslims cannot always be assumed to act in accordance to Islamic dictates [44]. Wray et al. [4] have also reported on the complexity of sexuality and religiousness among young Australian Muslim women. Their qualitative study shows that women's communities played a central role in regulating sexual behavior in attempts to maintain women's purity. Informants stated that women practiced self-regulation to preserve their virginity until marriage, while deeming women who lost control as "fallen women." Another study, also conducted in an Australian context, has explored the meaning of sexuality among 51 Iranian Muslim women. Although confirming that it was a woman's duty to sexually satisfy her husband at all times, informants – with some exceptions – did not view themselves as subordinate in their married life. Rather, sexual obedience became a signifier for an idealized Muslim femininity, modesty, and self-respect [39].

Studies like the ones mentioned here, making attempts to capture devout Muslims' divergent and sometimes contesting ideas about the influence of Islamic ideas in their everyday life, are welcome contributions within the research field focusing on sexual and reproductive health. Yet, these types of studies are rare and there are still many aspects of sexual and reproductive health among Muslims that remain unexplored. In sum, current contributions call for increased awareness among health-care providers about the diversity of cultural and religious practices *[4], [17] and *[39].

Antenatal malformation screening by ultrasound and decision for termination of pregnancy

Scholarly contributions on malformation screening by ultrasound are often linked to discussions on termination of pregnancies, as secular biomedical standards regarding termination of pregnancy and Islamic teachings on the same theme are found to be in conflict with each other. While Islamic scholars sometimes have diverging views on regulations regarding termination of pregnancy and screening procedures, a common suggestion is that Islam allows termination of pregnancy under certain circumstances until the 120th day of pregnancy, an occasion usually referred to as "the day of ensoulment." [45] As argued by Al-Matary and Ali [45], this is crucial for care providers to be aware of because if a scanning procedure and diagnosis would be delayed, a termination of pregnancy would become illegal according to Islamic law. This could, in turn, make women suffer from guilt due to an assumption that termination of pregnancy is not permissible according to Islamic law, and severe fetal anomalies could consequently lead to psychological trauma, pain, and serious medical problems [45]. The problem of competing medical standards in Islamic law on the one hand and in secular biomedical regulations on the other has also been raised elsewhere. In the Netherlands, for example, scanning for anomalies is offered around the 20th week of gestational age, and termination of pregnancy is legal until the 24th week [15]. Obviously, late scanning procedures may pose problems for Muslims who strictly adhere to Islamic edicts prohibiting termination of pregnancies after a gestation period of 19 weeks and 1 day; therefore, revising the timing of the second-trimester ultrasound might be necessary [15].

Current recommendations regarding scanning procedures possibilities for termination of pregnancies in the case of severe fetal anomalies are, thus, divergent. Some scholars argue for Muslim law makers to consider termination of pregnancies after the 120th day in order to avoid health-care risks and psychological hardship to women [45], whereas others propose that the timing for antenatal scanning is made more flexible, in order to allow for scanning between weeks 18 and 20 [15]. There is, however, weak empirical evidence of how Muslims incorporate Islamic postulates about anomaly screenings and abortion in real-life decisions. A few recent empirically based studies have explored individual attitudes to antenatal screenings and possibilities for abortion in relation to Islam and health-care provision. Some findings suggest that religious conviction can play a role for some devout Muslims in decision making on abortion after antenatal anomaly screenings [15], whereas other results point at individuals' scattered and selective attitude to the authority of Islamic teachings [46]. In sum, the existing empirical evidence indicates a variability in the interpretation of Islamic value systems and courses of action. However, due to the lack of more comprehensive empirical material, it is difficult to foresee what consequences a synchronization of Islamic edicts and secular, biomedical regulations would have for individual Muslims. More research capturing the variability in devout Muslims' Islamic beliefs on screening procedures and decision for termination of pregnancy is therefore warranted.

Muslim patients' gender preferences regarding their health-care providers

Sexual and reproductive health-care research often focuses on gender aspects in care of Muslim patient groups, a tendency that is reflected in a general assumption that Muslim women might feel uncomfortable if forced to reveal parts of their body for outsiders or to be examined by physicians of the opposite sex ^[47]. As a solution, it is recommended that health workers carefully announce their arrival before entering the room, minimize the exposure of women's bodies, and always try to offer female doctors, and find solutions together with the patient when it is not possible to do so ^[48].

Recent empirical evidence supports this type of recommendations. In a study aiming at investigating gender preferences regarding obstetricians/gynecologists among Muslim Israeli-Arab women, it is shown that some women did prefer a female gynecologist for family physician visits, pelvic examinations, as well as pregnancy follow-ups [49]. The reasons were embarrassment, that women would feel more comfortable, and a belief that female gynecologists are gentler. By contrast, however, newer evidence support that although some female Muslim patients reveal a certain degree of gender biases in the choice of health provider, health providers' professionalism, level of knowledge, and personal skills are important factors in choosing a provider. In some cases, providers' professional and personal profiles seem to overshadow other provider characteristics, such as gender [49] and [50]. In a qualitative study conducted in Greater London, Binder et al. showed a notable discrepancy between providers' assumptions about patients' gender preferences and patients' actual attitudes. While providers perceive that immigrant women prefer female providers for religious reasons, patients revealed that providers' professionalism and respectfulness were far more important, an observation that makes the authors question if patients' free choice is unintentionally being overlooked [51]. Further, the existing studies on Muslim patients' gender preferences reveal an interesting pattern: results from Israel and Saudi Arabia, countries with a substantial proportion of Muslims, indicate that providers' competence and professional characteristics often outweigh patients' preferences regarding providers' gender [49] and [50], whereas arguments from researchers in non-Muslim countries often imply that providers' gender is of significant importance for Muslim patients [48] and [48]. Is it possible that providers' gender is more important for Muslims in a non-Muslim healthcare setting and, if so, why? Currently, there is no evidence indicating how migration processes shape Muslim patients' gender preferences; however, the existing literature raises questions about how religious attitudes are constructed and negotiated in processes of migration.

Assisted reproductive technology for infertile couples

There are several publications that accentuate the permissibility of assisted reproductive technologies (ART) in Islamic law [52], [53] and [54]. Scholars have argued that ART is acceptable and even commendable within the branch of Sunni Islam, as long as it is practiced within marriage between man and woman [52]. There are, however, notable divergences between Sunni and Shia Islam with regard to Islamic jurisprudence. While Sunni Islam clearly permits in vitro fertilization (IVF), that is, when the fertilized embryo is transferred back to the same wife the egg is being taken from, it is generally argued that no third party should interfere in a married couple's sexual life and procreating. Consequently, a third-party donor is not permissible, thus excluding possibility of, for example, sperm and egg donation as well as surrogacy in a strict interpretation of Sunni Islam [55]. Interviews with large groups of Sunni Muslims have confirmed that individuals strongly agree with the Sunni prohibition of third-party involvement in a married couple's procreating strategies, arguing that it would be comparable to adultery, that it increases risks for future halfsibling incest, and that it confuses notions of kinship and parenthood [44]. However, Islamic scholars within the Shia branch of Islam have provided greater flexibility in Islamic jurisprudence. While many Shia Islamic scholars support the view that third-party donation is not permissible, influential authorities have stated that it could be allowed under certain conditions [44]. In addition, Shia Muslims are encouraged to practice a certain form of individual religious reasoning (ijtihad) which has led to several disagreements about the permissibility and prohibition of diverse assisted reproductive strategies [55].

Islamic edicts on ARTs reveal a possible limitation of reproductive rights for infertile Muslim couples, as Islamic edicts postulate certain reproductive restrictions. Yet, it is unclear how Islamic authoritative mandates will be realized, accepted, or contested in the practical life of devout Muslims [44]. Empirical material reflecting Muslims' own attitudes and strategies regarding ART are still scarce, and the existing evidence is largely from Muslim majority countries. More research would be needed in order to reveal the impact of Islamic reproductive recommendations on devout Muslims' real-life decisions [56].

Current strategies for improved health-care consultations

Given the continuous reports on inequalities faced by immigrant groups in terms of sexual and reproductive ill-health, significant efforts are being made to reduce disparities in health. Here, we will focus on two care strategies that have been influential in the health care of Muslim patients during the past decades. Firstly, we will conceptualize some common features and current recommendations from research contributions arguing for cultural sensitiveness, as this model has been widely referred to for many years. Secondly, we will discuss what person-centered care approaches might entail in health-care provision of the Muslim patient group. Person-centered care approaches seem to gain popularity and have further been said to offer a fundamentally different view with the potential to positively develop efficient health-care provision. Arguments put forward by advocates for the two models are complementary at times and contrasting at others.

Cultural sensitiveness

Emphasizing cultural competency—variously defined as "the on-going process in which the healthcare provider continuously strives to achieve the ability to effectively work with the cultural context of the client" [57] or the art of using culture-specific knowledge and tailoring it to the client's needs, values, and desires for cultural and health-care reasons [58] and [59] – in the care of Muslim patients has become a mainstream approach in research contributions across the West. This trend has been boosted by various arguments, such as increased diversity in health care, risks of stereotyping and biases due to inadequate awareness about religious and cultural particularities, and a fear of not providing Muslim minority groups a sufficient level of health care due to cultural and religious miscommunication [48], [60], [61], [62], [63] and [64]. Empirically based recommendations suggest that it would be helpful if providers and policy makers in secular health-care settings would be aware of the complexity, variability, and heterogeneity in Islamic beliefs, as well as acknowledging that religious factors can be influential in some Muslims' sexual and reproductive health-care decisions and health-care-seeking behavior [17], *[33] and [45]. This type of cultural sensitiveness approach should, as we propose, be encouraged.

Research publications thus urge health-care providers to be aware and respond to Muslim patients' particular health-care needs in various ways. Although arguments are increasingly based on empirical material revealing Muslims' narrations and therefore enabling a more nuanced description of religious concerns in sexual and reproductive health care, most of the existing publications take Islamic jurisprudence as the starting point for recommending how best practice health-care delivery to Muslim patients should be designed. This fraction of the cultural sensitiveness approach is problematic, as it tends to assume some behaviors or "traits" to be valid for large groups of individual, devout Muslims. For example, recent publications encourage the development of a primer on religion and sexuality, subsequently offering an abbreviated guideline for delivery of health care to Muslim patients including Islamic aspects of birth control, abortion, dress code for Muslim women, homosexuality, premarital sex, extramarital sex, and limitations regarding sexual practices (such as anal sex and vaginal sex after childbirth) [65]. Some guidelines provide detailed instructions to providers, for example, nurses should serve food with their right hand, avoid shaking hands or hugging patients or family members of the opposite sex, be aware that Muslims must pray five times a day, and preferably avoid medical and nursing intervention during prayer times. It is also acknowledged that efficient health-care delivery to Muslim patients involves participation of family members, both as support and as giving voice to the patient [66]. The distinct feature about this type of cultural sensitiveness literature, which also seems to dominate the field, is the recurrent references to Islamic jurisprudence and authoritative decisions on sexual and reproductive health matters. Rather than being based on devout Muslims' own experiences, conclusions are based on authors' own opinions about how Muslims can and should behave in accordance to religious edicts

[29]. For sufficient health-care delivery of devout Muslims, we believe that cultural sensitiveness must be understood in terms of religious variability, heterogeneity, and flexibility – and not by assigning individuals a uniform set of characteristics given a shared, religious devotion. This also implies a curiosity to understand individual Muslims' negotiations of Islamic edicts.

Person-centered care

Person-centered care approaches seem, on the one hand, to have emerged as a reaction on the fraction of cultural sensitiveness that tends to describe devout Muslims as one uniform group [67]. Stakeholders across the world now emphasize the need of shifting paradigms, away from a view of cultural and religious minorities as homogeneous entities toward a person-centered, individualized approach that manages to acknowledge the individual healthcare needs behind group-based categories and assumptions [68]. On the other hand, nevertheless, person-centered care strategies seem to be inevitably intervened with cultural sensitiveness concerns. In order to reduce healthcare disparities, some researchers urge for "patient-centered culturally sensitive health-care," also coined as "cultural competence plus" [69] to highlight the complementary and interchangeable relation between the two concepts [70]. Person centeredness implies recognition of each individual patient as bearers of unique requirements and needs, thus calling for a holistic approach that is successful with open patient-provider communication [71]. While some define cultural sensitiveness as a prerequisite for person centeredness (i.e., care providers must have professional and personal tools to communicate effectively with patients across religious and cultural groups) [70], others imply that a genuine personcentered dialog will enable patients to reveal their cultural concerns, thus making the care encounter culturally sensitive [67]. Although definitions still seem to be fluid and sometimes unclear [68], the efforts to conceptualize an alternative agenda for health-care delivery result in a desire to emphasize the universality of human behaviors, needs, and traits, thus focusing on cultural and social issues that are present across cultures and religions [67] without falling short on acknowledging cultural and religious matters of importance for health and health-care delivery.

Are cultural sensitiveness and person-centered care approaches effective?

There is no uniform evidence that gives support for either cultural sensitiveness care strategies or person-centered care approaches in sexual and reproductive health care of religiously observant patients. Publications focusing on cultural sensitiveness strategies for minority immigrant groups in general have, however, reported on moderate evidence in provider outcomes, yet showing weaker evidence for actual improvements in patient outcomes [72]. Likewise, a systematic review of the effectiveness of person-centered care approaches that incorporate a cultural sensitiveness perspective has shown that such strategies might increase care providers' knowledge base; still, there is no evidence that the acquired cultural awareness among practitioners leads to improved patient health and reduced health-care disparities [70].

Challenges in research and practice

In short, both researchers and clinicians providing care for a culturally and religiously diverse patient group tend to face the same dilemma: How do we manage to acknowledge religious and cultural practices with importance for individuals' health outcomes, without falling into the trap of stereotyping and negative discrimination? [73] Contemporary publications provide evidence that religious aspects can influence individuals' sexual and reproductive health *[4], [17], [19], *[24], *[39] and [74]. These aspects are also acknowledged in both cultural sensitiveness and person-centered care models and their urge for clinicians to understand the complex intersection among religion, culture, and sexual and reproductive health [18], *[33], [67], [75] and [76]. At its best, this type of publications can increase providers' and policy makers' awareness about sexual and reproductive health among Muslims as a highly complex, diverse, and changeable matter *[4] and [31]. At its worst, however, publications that do not take the fluidity and flexibility in Islamic beliefs into account might inform medical practice with simplified and skewed constructs of "culture" [20], [77], [78], [79], [80] and [81].

The results of this review highlight the need for research and clinical practice to move beyond simplified and generalized descriptions of Muslims as "one group." Successful outcomes in sexual and reproductive health care for Muslims require research and practice to acknowledge religious heterogeneity, to be aware of individuals' possibility to negotiate Islamic edicts, and to show interest in how Muslims practice religious ideals in real-life situations. To find ways to describe, understand, and respond to religious variability and the possible influence of religious ideas in regard to devout Muslims' sexual and reproductive health – in both research and medical practice – is, we believe, a great but necessary challenge for future effort.

Summary

Current evidence suggests that certain Islamic practices and attitudes make some Muslims vulnerable to sexual and reproductive ill-health, and that negative stereotypes about Muslims in medical settings can generate "faith-blind" or "religion-blind" health-care delivery. This review further reveals the necessity of acknowledging devout Muslims' individual concerns in terms of sexual and reproductive health-care matters, as personal opinions tend to vary.

Cultural sensitiveness and person-centered care models urge for improved health-care delivery through providers' increased familiarity about Islamic practices and sexual and reproductive health matters. Although these models have been shown to increase providers' knowledge base, there is no evidence that the acquired awareness leads to improved patient health and reduced health-care disparities.

Sexual and reproductive health research addressing Muslim patients is characterized by a significant empirical deficit. Very little is known about devout Muslims' attitudes, negotiations, and contestations of sexual and reproductive health matters with regard to their Islamic belief. In order to gain a deeper practical and theoretical understanding of religious aspects in reproductive health, attention must be directed toward religious heterogeneity among devout Muslims. Failure to do so could result in inadequate health-care provision.

Conflict of Interest
The authors have declared that no conflict of interest exists.

Practice points

This review has highlighted the variability of empirical evidence regarding Muslim patients' sexual and reproductive health-care matters. This variability can partly be explained by that Islamic edicts are under constant reconstructions and renegotiations, both by Islamic authorities and by individual Muslims. This awareness calls for clinical alertness about the flexibility and fluidity in Islamic interpretations.

There is no evidence that sexuality among Muslims is taboo, or that religious belief guarantees abstinence from premarital sex. Well-functioning contraception and contraceptive counseling must be available for all, regardless of age and marital status.

Religious edicts on ARTs reveal a limitation of reproductive rights for infertile Muslim couples, as Islam discourages third-party donation. Whether this has a clinical effect on Muslim childless couples is not studied.

Research agenda

Further empirically driven research is urgently required for insight into Muslims' various attitudes in sexual and reproductive health matters and how Muslims practice religious ideals in real-life situations

Efforts must be taken to develop a theoretical framework on how to conceptualize the influence of religion on sexual and reproductive health matters and health care encounters when needed. This effort could lead to more hypothesis-testing studies and intervention studies, a prerequisite for more evidence-based practice for the variety of patients disclosing their religious beliefs in Islam.

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