Hymen ‘repair’: Views from feminists, medical professionals and the women involved in the middle east, North Africa and Europe

Sawitri Saharso
Dept. Sociology, VU Amsterdam/University of Humanistic Studies Utrecht, The Netherlands

Abstract
In Europe, hymen ‘repair’ is controversial because it is often seen as a concession to immigrant groups that do not respect women’s sexual autonomy. But how is hymen ‘repair’ viewed in societies in which the norm is that women should not have premarital sex? And why do women want hymen ‘repair’? Hymen ‘repair’ is also controversial in Middle Eastern and North African (MENA) countries because it is seen as undermining social mores about women and premarital sex. However, some Islamic leaders have defended the procedure. Women request hymen ‘repairs’ for a variety of reasons. Some have been sexually abused and may desire the surgery to overcome trauma. Some have had consensual sex and may fear sanctions, while others may see the surgery as a covert act of rebellion against the virginity rule. Still others may choose it to please their future husband. Hymen ‘repair’ is extensively discussed in MENA countries and in Europe. Feminists in MENA countries are divided over whether the surgery promotes sexual autonomy while, in the European debate, an important issue is whether the choice itself is an autonomous one that doctors should respect. Inspired by a relational approach to autonomy, I see the women involved as individuals with culturally informed identities and interests who may feel pressure to get the surgery yet are still capable of autonomy. I argue for a policy to stimulate debate in communities about the virginity norm and to make hymen ‘repair’ available to women. However, it should be combined with an attitude of sympathetic distrust, recognising that hymen ‘repair’ harms women’s dignity and authenticity.

Corresponding author:
Sawitri Saharso, Dept. Sociology, VU Amsterdam/University of Humanistic Studies Utrecht De Boelelaan 1105, 1081HV Amsterdam The Netherlands.
Email: s.saharso@vu.nl.
Introduction

Hymen ‘repair’ operations raise public controversy. In Europe, this is because they are seen as a concession to immigrant groups that do not respect women’s sexual autonomy. Illustrative of this are the questions two members of the Dutch liberal party asked the Minister of Public Health in November 2018: Was he aware that Dutch health institutions advertised hymen ‘repair’ and accommodated requests for the surgery? Did he know how many women received the operation each year and in how many cases they had requested the operation because of cultural pressure or even fear of violence? On 14 February 2019, the minister answered those questions: Yes, he was aware of the practice and considered it undesirable. No, he had no exact figures about the number of operations, but estimates suggested a few hundred per year. According to the minister, hymen ‘repair’ is requested because:

The broader community sometimes expects that a woman’s virginity should stay intact until marriage. ‘Bleeding’ during the wedding night is seen as proof of this. If that does not occur or if doubts about the woman’s behaviour exist before the wedding and she is being gossiped about in the community, the family experiences this as a violation of the family’s honour, which can result in being ostracised from the community. This can lead to women wanting to have their hymen repaired or, as a precaution, asking for a small intervention so they are sure to ‘bleed’ during the wedding night. (My translation)

He announced that he would start a conversation with the Dutch Association for Obstetrics and Gynaecology (NVOG) about the prevention of hymen ‘repair’. This fitted, he explained, within the framework of the program, Violence Does Not Belong Anywhere, a policy action program to ban family violence in the Netherlands, including what the policy called ‘harmful traditional practices’ (see Note 2). Hence, the minister considers hymen ‘repair’ as (an accommodation to) a harmful practice that should be discouraged.

Both the questions and the minister’s answers are based on three premises: (1) the virginity tradition is objectionable, (2) therefore, hymen ‘repair’ operations are undesirable, and (3) women request these operations due to pressure from their communities and a fear of sanctions, which makes the surgery even more undesirable.

This paper will discuss these premises, as I believe the minister is wrong; but it is also intended to make up for my own previous mistakes. When hymen ‘repair’ received a lot of media attention in the Netherlands several years ago, I analysed the Dutch public debate and opined that hymen ‘repair’ should be allowed and could actually be understood as an act of good culture-sensitive feminism (Saharso, 2003). In retrospect, my argument contained several unsubstantiated assumptions, which are also characteristic for much of the literature on the subject, as I will show. I had assumed that the medical professionals
involved (and not the women in question) experienced moral dilemmas about the procedure. Actually, I had hardly considered the young women’s motives, tacitly assuming that they regretted their digression from their culture’s morality and wanted the operation to be done. Thus, my argument basically reconstructed a debate between cultural outsiders, ignoring the fact that, in countries where unmarried women maintaining their chastity is the norm, the surgery is also a topic of social controversy.

After explaining my perspective and methodology and describing the surgery, I will first discuss views on hymen ‘repair’ and women’s experiences in the Middle East and North Africa (MENA). I will then focus on the views on hymen ‘repair’ and women’s experiences in Europe before finally returning to the minister’s and my initial assumptions. My aim is not only to correct those assumptions but also to discover how those corrections influence my views on hymen ‘repair’. Do I still consider hymen ‘repair’ a case of good, culture-sensitive feminism?

I have one disclaimer to make. Though hymen ‘repair’ is practiced in many countries, research on moral views of the procedure has been done mainly in MENA countries, while the research in Europe is mainly restricted to the views of the professional groups involved, such as gynaecologists, midwives and bioethicists. Hence, my discussion is limited by my sources.

A note on terminology: hymen repair or ‘repair’ is also described as hymenoplasty, hymenorrhaphy, revirgination and hymen (re)construction. There is no necessary relationship between the status of the hymen and virginity. It is therefore unclear whether there is something to be restored or reconstructed. Thus, I will use ‘repair’ throughout this paper.

**Background and methodology**

My earlier article on hymen ‘repair’ was written as a contribution to the debate about feminism and multiculturalism. Some feminists, most notably Okin (1999), warned that multicultural commitments to tolerance and policies of cultural group rights might strengthen gender injustices in minority groups and thus might be followed at the expense of minority women. My take was that hymen ‘repair’ seemed to be one such case in which feminism and multiculturalism collide, as hymen ‘repair’ seemed to accommodate a patriarchal norm of female virginity that denies women sexual autonomy. However, I argued that the surgery actually makes the underlying value of chastity meaningless and is thus subverting the tradition. I viewed women who desired hymen ‘repair’ as people with culturally informed identities who might have an interest in being accepted by their communities. While recognising that constraining circumstances may restrict autonomy, I found it problematic to consider the women as mere cultural dupes and argued that we should respect their choices. Moreover, I suggested that refusing to perform the procedure does nothing to enhance their autonomy or equality; thus, it was wrong to be fighting an ideological battle in the interest of future generations while leaving out women who were suffering now. I therefore claimed that hymen ‘repair’ was a case of culture-sensitive, person-centred feminist health care (Andrist, 1997; Tucker et al., 2007) that should be
available to women who desired it and that should be combined with measures to encourage minority groups to transform their sexual morality.4

My refusal to view the women concerned as mere victims of oppression was informed by feminist relational accounts of autonomy that recognise that women are embedded in sometimes coercive relationships that may pose constraints on their choices, without this implying that the women have no autonomy (Friedman, 2003; Mackenzie and Stoljar, 2000). I was also inspired by the turn to agency in feminist theory (McNay, 2000; Narayan, 2001) that led to a greater perceptiveness of how women, even in constraining contexts, may exercise some autonomy and negotiate cultural constraints.

This current article is based on a narrative literature review (Jesson et al., 2011).5 With the help of an assistant, I reviewed publications from medical databases (PubMed and Medline) and sociologically, culturally and philosophically oriented databases, including the Social Sciences Citation Index, Academic Search Elite (EBSCOhost), Sociological Abstracts (Illumina) and PhilPapers. Our search terms were ‘hymen repair’, ‘hymenoplasty’, ‘hymen reconstruction’, ‘virginity testing’, ‘female genital plastic surgery’, ‘hymenorrhaphy’, ‘revirgination’, ‘Hymenrekonstruktion’ (hymen reconstruction) and ‘maagdenvliesherstel’ (hymen repair). Publications had to be: (1) published before September 2019 but after January 2006; (2) available as full text in English, German or Dutch; and (3) categorised as original empirical research on attitudes and experiences or as a discussion of ethical, legal, gender-related and cultural aspects. We stopped the literature search on 31 September 2019. Titles and abstracts were reviewed to verify they met the criteria. If all inclusion requirements were present, the articles were fully read. If the full text revealed that not all requirements were present, the paper was excluded. Thus, strictly anthropological descriptions of the tradition and technical medical explanations were excluded. This process resulted in 138 publications on hymen ‘repair’. Those publications referred to in this article are marked with an asterisk in the reference list. I also included one older article, because it was the only Dutch paper that argued against hymen ‘repair’ from a feminist perspective, and two other older publications (Cindoglu, 1997; Mernissi, 1982), because they were regularly referred to by other authors.

**Hymen ‘repair’**

The hymen is a small edge of mucosa surrounding the opening of the vagina. Because of its elasticity, it does not necessarily show signs of defloration after penetration, nor do all women bleed when they have intercourse for the first time (Van Moorst et al., 2012). It is, therefore, impossible to establish whether a woman is still a virgin. Nevertheless, it is widely believed that women bleed the first time they have intercourse, and hence, women who have reason to believe their hymen is ruptured may ask for hymen ‘repair’. The most common method of ‘repair’ is a temporary hymen suture (Loeber, 2015), that is, applying a few stitches in the remnants of the hymen to create a smaller opening. Because the stitches hold their tensile strength for only about a week, the method is only suited for women who intend to have the wedding, and presumed ‘defloration’, within that week. Another method, called the approximation method, is more lasting (Wei et al., 2015). However, neither method guarantees that women will bleed during their wedding night.
(Van Moorst et al., 2012). In the Netherlands, hymen ‘repair’ is performed in public hospitals and increasingly in private clinics. There are also several alternatives, including the ‘artificial hymen kit’, a piece of folded gelatin containing a blood-like paste (Loeber, 2015: 130). The kit is also known as ‘the Chinese method’ (Wynn, 2016: 548) because it can be ordered online from China. Mahadeen (2015) reports that the Jordanian government considered the kit a danger to Jordanian women’s purity and banned it from the country.

Public debates, medical views and guidelines, and women’s views and experiences in the Middle East and North Africa

Religious and public debates

In 2007, Su’ad Slih, a well-known female mufti (interpreter of Islamic jurisprudence), declared on Egyptian television that hymen ‘repair’ is permissible not only for rape victims but also for ‘women who had been seduced and repented their mistake’ (Eich, 2010: 756). Later, Grand Mufti Guma’a – one of the highest-ranking Islamic scholars in Egypt (Eich, 2010), who is well known because of his TV appearances – confirmed this view, stating that doctors are obliged to perform the surgery without asking questions and adding that a wife may even lie to her husband about her premarital sex life ‘in order to save her marriage’. Moreover, the husband does not have the right to ask his wife such questions because this is something between her and God (Eich, 2010: 756; Wynn, 2014: 41). Several of the highest religious authorities in Egypt publicly confirmed the other two mufti’s views (Hassanein and Wynn, 2017: 902). However, other muftis condemned hymen ‘repair’, even for rape victims (Rispler-Chaim, 2007; Wynn, 2016: 551–552). Eich (2010) analysed the public debate that followed Grand Mufti Guma’a’s pronouncement: four articles appearing on the homepage of the satellite broadcast news channel al-Arabbiyya and over 1200 comments, which he followed until the end of July 2007. The majority of the commentators were higher-educated males from Saudi Arabia and other Gulf countries and Egypt. Those against hymenoplasty believed the operation undermines the control of female sexuality. Moreover, female chastity was constructed as what differentiates ‘us’ from the ‘immoral West’. In this discourse, the virgin female body represented the national body. Those who approved of the procedure saw the woman as a victim: she had trusted her partner’s promise to marry her and he betrayed her, depriving her, as an unchaste woman, of the possibility of marrying and having children. The in-between camp found hymen ‘repair’ permissible only for women who had lost their virginity because they had been raped or because of nonsexual causes, such as an accident (Eich, 2010: 761–763). Thus, as Eich (2010: 763) observed, even those in favour of hymen ‘repair’ reasoned, from a patriarchal perspective, that denied women an autonomous sexuality. Other research also suggests that, in MENA countries, people tend to reject hymen ‘repair’ as deceit and morally wrong. For example, a survey of university students in Lebanon (n = 600) showed that 74.3% of the men and 80.9% of the women rejected the surgery, regardless of religious affiliation (Muslim or Christian) (Awwad
et al., 2013); see also Wynn (2016) (Egypt); Kaivanara (2016) (Iran); Wild et al. (2015) (Tunisia); Zeyneloğlu et al. (2013) (Turkey).

**Medical views and guidelines**

While in some Middle Eastern countries, hymen ‘repair’ is forbidden by law (Cook and Dickens, 2009), in Jordan, doctors are allowed to perform the procedure. The gynaecologists’ association advises that all reasons for hymen loss are legitimate if they were beyond the patient’s control. However, if the loss is caused by consensual sexual intercourse, doctors should refrain from operating (Mahadeen, 2013: 86). In Iran, premarital sex is a criminal offence, but surprisingly, hymen ‘repair’ is not. Ayatollah Rouhani, notably based in Qom (the heart of conservative religion in Iran), even issued a religious ruling on the subject in 2006 confirming this (Ahmadi, 2014). The article, unfortunately, does not explain why. Though the operation is widely believed to be illegal by the public, including physicians, some physicians do perform the surgery. It is a lucrative source of income in many Middle Eastern countries. Wild et al. (2015) report costs in Tunisia ranging between 200 and 600 dinars, which equals a school teacher’s monthly salary. Comparable prices were reported for Lebanon (Hajali, 2015) and Iran (Ahmadi, 2014; Kaivanara, 2016). However, physicians who were actually interviewed generally claimed that they do the surgery to help women who had lost their virginity due to rape or other reasons beyond their control. Some were also willing to do the surgery for women who had lost their hymens due to consensual sex. They saw it as part of their duty to look after the welfare of their patients, as these women might otherwise face severe repercussions. Some would therefore perform the procedure for free if the woman could not pay the fee. However, some doctors required that the woman showed sincere regret (Ahmadi, 2014; Wild et al., 2015; Wynn, 2014).

**Feminist views**

As early as 1982, the Moroccan author Mernissi (1982) described hymen ‘repair’ as a degrading practice that stems from patriarchal control over women’s bodies. Feminist authors from MENA countries generally place hymen ‘repair’ in the context of a modernising society, wherein traditional norms are becoming less accepted. A main focus of the debate is whether hymen ‘repair’ keeps the virginity norm in place or whether it empowers women by enabling them to have some control over their sexuality. Despite this difference, authors who see hymen ‘repair’ as empowering also recognise that the choice is made under constraints, while authors who believe the surgery upholds the virginity norm recognise that, for individual women, it can be a survival strategy (Cindoglu, 1997; Ellialti, 2008; Ghanim, 2015; Ozyegin, 2009; Sharifi, 2018; Shirazi, 2009; Wild et al., 2015). According to Ozyegin (2009), premarital sex is becoming more accepted among young, higher-educated, urban women in Turkey, even though many in their social environment still expect them to be virgins. ‘Virginal facades’, as Ozyegin aptly expresses it, ‘allow young women to navigate these complex ambiguities of the moving boundaries of permitted and prohibited’ (Ozyegin, 2009: 119).
The women directly involved: Views and experiences

Studies on women’s experiences support Ozyegin’s view. Some report that women who were open about their sexual past thereby ruined their chances for marriage (Ahmadi, 2016; Aytemiz, 2015; Ghanim, 2015; Kaivanara, 2016; Wild et al., 2015). Ellialti (2008) suggests that women feel humiliated by undergoing the surgery, but they see no other option. Still, this does not necessarily lead them to distance themselves from the tradition. The closest the women in a Tunisian study come to criticising the virginity norm is by saying, ‘Society is cruel with women; it does not accept them easily’ (Wild et al., 2015: 58). Others, however, reject the double standards implied by the virginity norm. Kai-vanara quotes 24-year-old Aida, a master’s student from a rich and non-religious family in Tehran, Iran, who had had sex with several boyfriends before she married, but her husband expected to marry a virgin. Defending her choice to get a hymen ‘repair’, she explained: ‘It was my right [emphasis in original] to marry. My husband had lots of girlfriends before our marriage but no one asks him for his virginity. This is not lying’ (Kaivanara, 2016: 9); see also (Ahmadi, 2016). Lastly, a study by Aytemiz (2015) sheds a different light on women’s motives to choose hymen ‘repair’. She quotes Ceyda, a 24-year-old Turkish woman, regarding her reason for getting a hymen ‘repair’:

I am marrying into a modern family … I am sure that my [fiancéd] would stay with me if he knew I was not a virgin … But my mother says … men will value you more if they think they are the only ones who have had you. A fresh product is better than a spoiled one. So, why not? My husband should value me, and I do not mind doing something this easy to make him happy. (Aytemiz, 2015: 105)

This sounds very much like what a woman might say who requests a breast enlargement because her husband prefers big breasts, as I will elaborate later.

In summary, the sources I consulted suggest that the dominant view in MENA countries is that women should abstain from premarital sex and that hymen ‘repair’ is deceit that undermines the dominant morality. Women who engage in premarital sex still have serious repercussions to face. It may, for example, endanger their marriage chances. Thus, physicians willing to perform the surgery do so mainly to help the woman in question. Some religious leaders view hymen ‘repair’ as permissible, even for women who lost their virginity due to consensual sex. Grand Mufti Guma’a’s view that a woman’s sex life is a private matter in which others should not interfere comes close to being a recognition of women’s sexual autonomy. Feminists in MENA countries hold different views on hymen ‘repair’. Some see it as maintaining patriarchal control over women’s sexuality, while others see it as increasing women’s sexual autonomy. They agree, however, that hymen ‘repair’ is sought by women who are exploring the boundaries of what is sexually permitted and that it is a choice made within cultural and social constraints. Empirically, women who choose to have a hymen ‘repair’ appear to be young, urban, upper class and higher educated.
Public debates, medical views and guidelines, and women’s experiences in Europe

Medical practitioners’ views and guidelines

Professional organisations have developed medical guidelines in several European countries. In Sweden, the official stance follows that of the National Centre for Knowledge on Men’s Violence against Women. Generally, their position is that the surgery should not be performed, as it accommodates cultural practices of control over female sexuality that should be rejected. The most lenient view is that of the Dutch NVOG, which states that hymen ‘repair’ is allowed if, after counselling and clinical education, including a discussion of alternative solutions, the young woman still wants the surgery.

Several studies measure the attitudes of health care professionals, especially gynaecologists and midwives. In Belgium, 73.4% of the 109 gynaecologists in the study had received requests for a hymen ‘repair’ and about half of those had agreed to perform the procedure. For the latter group, respecting the woman’s autonomy was the main argument in favour of surgery. A total of 60% agreed that it is the patient’s decision to make about her own body, irrespective of the doctor’s opinion on the subject. In a Swedish study of gynaecologists and general practitioners, 58% had a more permissive attitude than the restrictive Swedish policy. They disagreed with the statement that they would never perform a hymen restoration. Their main motive was wanting to help patients in distress. Another Swedish study surveyed gynaecologists, midwives, welfare officers in a youth clinic, and school nurses and physicians. The vast majority had an accommodating attitude.

Feminist arguments against hymen ‘repair’

Some feminist authors have explicitly rejected hymen ‘repair’. Bekker et al. (1996) recognise the difficult situation that women who request hymen ‘repair’ are in, but they...
doubt the surgery is the solution, because it does not address the underlying inequalities that create the need for it. Christianson and Eriksson (2015: 191) argue that hymen ‘repairs’ ‘are elements of patriarchy, whereby violence and control are employed to subordinate women’. They contrast this with my 2003 article and suggest that I wrongly conceived of the women requesting hymen ‘repair’ as agents who should decide what is best for themselves (Christianson and Eriksson, 2014: 349). Likewise, Jeffreys believes my position represents a liberal individualistic feminism that is ‘fetishing choice’ (2005: 37) and ‘finding it in the most unlikely places’ (2005: 36). These scholars see requests for hymen ‘repair’ as stemming from the virginity norm, which they consider a harmful tradition that feminists should oppose, and hence, hymen ‘repair’ should be opposed. Moreover, their critique suggests that they do not see requests for hymen ‘repair’ as an autonomous choice because such requests are made under oppressive circumstances.

**Bioethical and feminist arguments for hymen ‘repair’**

Common bioethical arguments against hymen ‘repair’ are that there is no medical indication for the procedure, that by performing the operation one becomes an accomplice in deceit and that the operation contributes to the myth that all women have a hymen that bleeds with the first coitus. However, authors who mention all or some of these cons do so as a lead-in to counter-arguments for why the procedure should be permitted. Likewise, they do not dispute that requests for hymen ‘repair’ come from patriarchal norms that discriminate against women, but they prioritise other concerns. Cook and Dickens (2009) note that requests for hymen ‘repair’ are made by mentally competent adult (or almost adult) women who have a right to make decisions about their own bodies and medical treatments (see also Renteln, 2017). Others argue that a social battle over unjust cultural norms should not come at the expense of individual women (Earp, 2014; Vermeirsch et al., 2013; Wild, 2012). While hymen ‘repair’ is an invasive procedure, Vande Putte (2015) argues it is not a violation of a woman’s bodily integrity, because it is done by her request and with her informed consent. De Lora (2015) considers whether hymen ‘repair’ contributes to discrediting the profession. The patient is not ill. The doctor does not use their skills to cure but merely delivers a service that the patient asks for. Yet, as de Lora argues, this view of doctors as good Samaritans ignores how, in many countries, medicine has become a for-profit enterprise. Hymen ‘repair’ is not exceptional in this respect (De Lora, 2015: 151). Many authors note that, first, performing a hymen ‘repair’ does not mean the physician agrees with the virginity norm and, second, performing the surgery on a large scale would undermine the norm. Most authors consider hymen ‘repair’ as deceitful surgery and therefore violating bioethical guidelines, but they let other concerns prevail. As Vande Putte (2015: 62) argues, showing respect for the autonomy and bodily integrity of the patient ‘may override considerations of truthfulness towards third parties interested in controlling these aspects of the patient’s life’. Many authors also state that physicians have a duty to act in the best interest of the patient. Hymen ‘repair’, although deceitful, is permitted in order to prevent great harm to the woman, such as when her life is at stake (De Lora, 2015; Vermeirsch et al., 2013). In such circumstances, it may even be unjust to withhold the surgery (Khoo and Senna-Fernandes, 2015). Hence, these authors
work from a social understanding of patients’ interests in accordance with the World Health Organization’s (1948) definition of what constitutes health: ‘A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’.10 In line with this view, Khoo and Senna-Fernandes maintain that physicians should refrain from moral judgment: ‘We have to understand the human need to belong, to be accepted and loved by their subcultural group with their own values and beliefs. We cannot attack others’ religious beliefs even if they conflict with our own and cannot violate basic human rights by withholding medical or surgical treatment’ (2015: n. p.).

Juth and Lynøe (2014) also discuss whether the medical profession should consider patients’ culturally or religiously informed desires. They compare hymen ‘repair’ and bloodless treatment for Jehovah’s Witnesses. Bloodless treatment is a medical treatment without the use of (donated) blood transfusions. Because their religious beliefs prohibit that blood which has left the body is transferred to others, Jehovah’s Witnesses who need a life-saving operation that would normally require blood transfusion, are offered alternative interventions, like storage of their own blood that can be given back later (Juth and Lynøe 2014: 6–7). These medical interventions, that are not routinely offered to patients, thus enable bloodless operation. The authors consider 13 potential differences between hymen ‘repair’ and bloodless treatment, including whether religious norms should be treated differently than cultural norms and conclude that there is no relevant difference and that, in any case, it is not obvious that social problems cannot be solved through medical interventions. This is qualified by Kopelman (2014). She presents the case of a mother from Yemen, now living in the USA, who requested hymenoplasty for her minor daughter to enable an overseas, forced marriage and protect her from an honour killing. This case illustrates that physicians are not always able to factor in the social consequences of their intervention (cf. De Lora, 2015). One could infer from this, as Kopelman does, that physicians should be reticent to comply with their patients’ wishes. Indeed, Kopelman believes the case should be reported to the Child Protection Services. However, other authors (Khoo and Senna-Fernandes, 2015; Renteln, 2017) would see the case (provided it did not concern a minor) as supporting their argument that physicians should abstain from moral judgment and respect the woman’s autonomy.11 Thus, in both Europe and the USA, autonomy plays a central role in the discussion. The arguments predominantly suggest that hymen ‘repair’ should be allowed.

The women directly involved: Views and experiences

When women in Europe visit the hospital to obtain a hymen ‘repair’, they are routinely asked to explain their motives. The majority of these women are of Islamic background. Dutch and Belgian publications based on these consultations report that the women are usually in great distress because they are going to get married soon and expect that on their wedding night, their husband will find out that they have already had sex. Their motives are comparable to those reported by women in MENA countries. They fear severe sanctions and are reported to suffer from severe mental health concerns, including depression, despair and suicidality, because of the accompanying stress (Bekker et al., 1996; Heyerick and Van De Wiele, 2012; Loeber, 2015; Van Moorst et al., 2012; Wild, 2012;
Wild et al., 2010). While the above might suggest that women who ask for a hymen ‘repair’ lost their virginity through voluntary sex, Van Moorst et al. (2012), who work in a Dutch hospital, report that two-thirds of the women who consulted them for a hymen ‘repair’ had lost their virginity because of non-consensual sex. Most of the women had a history of sexual violence (Van Lunsen and Van Moorst, 2012: 372; Loeber, 2015). For them, hymen ‘repair’ was a way of coping with trauma and feeling ‘whole and pure’ again (Van Moorst et al., 2012: 100). Wei et al. (2015) report similar findings for women in China. Yet, even women who are very unlikely to be virgins, such as widows or divorced women, may ask for hymen ‘repairs’. Loeber (2015: 131) reports about a divorced woman with a son requesting a hymen ‘repair’ because her future husband expected that after 10 years of supposed sexual abstinence, she had become a virgin again.

In comparing the experiences of women in MENA countries and Europe who lost their virginity through consensual sex, I am inclined to understand their choice for hymen ‘repair’ as being part of their attempts to negotiate sexual autonomy within constraining cultural and family contexts. In MENA countries, these women appear to be a vanguard of women living in a society whose morality is in transition. It is therefore not surprising that they comprise the young, higher-educated, urban elite. They can afford the expensive surgery, and they appear to be the ones who, by background and education, are more critical of the virginity norm and more inclined to explore the boundaries of what is permitted. The situation in Europe might be comparable. According to a recent survey in the Netherlands, 83% of young women of Moroccan and Turkish origin had had no sex partners, and the vast majority rejected the idea of sexual intercourse before marriage (De Graaf et al., 2017: 63). Hence, even among the younger generation, the virginity norm is still strongly in place. It is a minority that tests the boundaries of what is culturally permitted, some of whom may later desire a hymen ‘repair’.

**Discussion**

Hymen ‘repair’ is extensively discussed, both in MENA countries and in Europe. Autonomy plays a central yet ambiguous role in these debates. While some feminists argue the surgery upholds a social norm that denies women sexual autonomy, some proponents claim that doctors should respect the women’s autonomy to choose that surgery. It may help here to observe that autonomy is a multidimensional concept. Proponents and opponents appear to refer to different dimensions. Opponents refer to autonomy as the ideal of a self-determined life and to women’s right to autonomy that is curtailed by the virginity norm. In contrast, when proponents consider women’s desire to have a hymen ‘repair’ as an autonomous choice, they are referring to the capacity to be self-governing. However, their choice is made under constraints and could reflect a preference that is harmfuly adapted to those constraints. Still, according to some relational accounts of autonomy, if women are capable of critical reflection or are able to imagine and weigh alternative options, their choice should be respected irrespective of its content (Friedman, 2003; Mackenzie, 2007). The empirical studies on women’s motives for desiring hymen ‘repair’ suggest that their capacity for autonomy is not impaired, and thus their choice is autonomous. However, the views of feminists from MENA countries taught me that
women’s choices can be better perceived as strategic trade-offs: the women choose what they believe is the best option for their circumstances. The surgery gives women leverage to privately challenge virginity norms. Their choices remind me, as Narayan phrases it, that ‘women’s responses to patriarchal cultural practices involve constraints on choices, but also choice within constraints’ (Narayan, 2001: 422). Moreover, the contributions by feminists from MENA countries made me realise that, although hymen ‘repair’ is a procedure with few physical risks, it does cause harm to women. It harms their dignity and authenticity: women feel they must pose as conforming to a constraining sexual norm based on a value of female sexual purity, one that they themselves reject.

Comparing hymen ‘repair’ with other medically nonindicated cosmetic surgeries, such as breast implants or labiaplasty, suggests double standards at work. The main argument to ban hymen ‘repair’ is that the surgery would contribute to the maintenance of an unjust social norm. Similar criticism has been formulated against cosmetic surgery more generally (Chambers, 2019; Davis, 1995; Earp, 2014; Jeffreys, 2005). Yet, for hymen ‘repair’, this effect is questionable. In MENA countries, the surgery is considered as undermining the norm and for individual women it is also a way to negotiate the norm. Another argument against hymen ‘repair’ is that women are pressured to undergo the surgery. However, also women who decide to undergo cosmetic surgery can experience considerable pressure, and suffering is involved (Chambers, 2019; Davis, 1995; Earp, 2014; Jeffreys, 2005). While hymen ‘repair’ is a low-risk procedure, labiaplasty and breast implant surgery involve more medical risks and the latter in particular can cause serious physical harm. These are not seen by policymakers in the Netherlands and elsewhere as practices that warrant banning. Still, rather than advocating the unconditional acceptance of hymen ‘repair’, I would favour an attitude of ‘sympathetic distrust’ (Prins, 2008). When women choose to undergo procedures that others may reasonably assume are harmful to them, they should not be forced to make other choices; instead, they should be helped to realise that their choices are harmful and that they can make other choices. Sympathetic distrust recognises, as do authors such as Chambers (2019) and Widdows (2013), that women may choose practices that are harmful. Chambers, Widdows and I all disagree with the view, dominant in liberal philosophy, that provided conditions of autonomy are met, if people choose to participate in a practice that does not harm others, they should be free to do so. We differ, however, on the implications this should have for intervention. As mentioned above, I advocate a policy of sympathetic distrust that helps but does not force women to make other choices. Widdows (2013: 163), however, argues that, although a woman may choose an action, such as entering prostitution or selling her eggs (for reproduction), choice cannot make an unethical act ethical. A wrong practice should not be an available option but should be forbidden. Chambers considers both a ban on female genital cosmetic surgery – her example – and using education or media and marketing changes to remove the pressure to undergo such surgeries as possible remedies (2019: 77). While one could qualify all three positions as variations on ‘benign paternalism’, sympathetic distrust allows women more space to decide for themselves.
Conclusion

In Europe, hymen ‘repair’ is sought by migrant women who come from cultural communities in which premarital sex for women is morally not accepted. The European discussion generally ignores that the surgery is also a subject of public controversy in these women’s countries of origin. My comparison showed that the surgery is also contested in MENA countries, where it is viewed as deceit that undermines societal values; thus, it is seen as the very opposite of an accommodation to their culture. However, some Islamic leaders have defended hymen ‘repair’, and one of them even recognised women’s sexual autonomy by stating that a woman’s sex life is a private matter about which a husband has no right to ask questions.

In addition, I showed that the motives of women who desire hymen ‘repair’ are generally ignored. The medical debate is about doctors’ dilemmas. The women’s motives appear to be varied. Some women lost their virginity through sexual abuse; for them, hymen ‘repair’ is a way to overcome trauma. For others, it is an act of covert rebellion against the virginity norm or just a way to please their future husband. For many who had premarital sex, the motive is a fear of sanctions. For gynaecologists willing to perform the surgery, the main reason for doing so is to prevent harm and, in Europe, to respect the woman’s autonomy.

In the discussion, I show that hymen ‘repair’ raises the question of how to conceive of women’s autonomy in autonomy-constraining contexts. The focus of the debate among feminists from MENA countries is whether or not hymen ‘repair’ promotes sexual autonomy, an issue over which they are divided. The argument that women choose to have the surgery and that doctors should respect that choice gets less attention. In the European debate, it is the other way around. An important argument, proposed mainly by medical professionals, is that doctors should respect women’s autonomous choice. This, however, ignores that the choice is often made under constraint. I argue that this has not impaired women’s capacity for autonomy and that there are many legitimate reasons why women may want a hymen ‘repair’.

Coming back to the three premises I started with, I would modify them as follows: (1) while many may find the virginity norm objectionable, (2) it does not follow that hymen ‘repair’ is therefore undesirable. Also (3), I consider the fear of sanctions a legitimate reason for wanting a hymen ‘repair’. While I would welcome it if women could freely make their own decisions about their own sexuality and would also hope that women who lost their virginity through sexual abuse could heal through trauma therapy and would not need a hymen ‘repair’ to feel at peace again with their bodies, neither is reason enough to withhold the surgery from them. However, I also recognise that hymen ‘repairs’ harm women’s dignity and authenticity. Therefore, I propose that hymen ‘repair’ should be made available to women, but it should be combined with an attitude of sympathetic distrust, thus qualifying my earlier position that hymen ‘repair’ is a case of good culture-sensitive feminism.

The Dutch NVOG’s guidelines prescribe that hymen ‘repair’ should only be performed after extensive counselling and clinical education. I believe this is a policy consistent with the notion of sympathetic distrust: it does not unconditionally accept a woman’s request
but gives her greater knowledge about her body, asks her about her reasons and presents her with alternative options; then, if she still desires the surgery, she can have it. However, the Dutch Minister of Public Health decided to take a different course of action. In February 2020, he announced that in the Netherlands, women make their own decisions about their bodies. Therefore, he said, he had agreed with the NVOG that physicians should no longer perform the surgery. This will be formalised in a guideline. The agreement was apparently made one-sidedly, as the NVOG objected. It is against a prohibition because that does not help the women concerned. The feminist advocacy group Femmes for Freedom reacted with disappointment because it had wanted a ban and not just a guideline (Van de Wier, 2020). The women concerned could, of course, not speak out. All other cosmetic surgery is still allowed.

Acknowledgements

I want to thank Michiel de Proost for his help with the search for literature, Mieke Aerts and Baukje Prins and also my colleagues at the University of Humanistic Studies for their helpful comments on an earlier version of this article.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Saharso Sawitri https://orcid.org/0000-0002-9729-0467

Notes

1. Kamervragen zonder antwoord (Parliamentary questions without answers) nr. 2018Z22262, 27 November 2018. https://zoek.officielebekendmakingen.nl/kv-tk-2018Z22262.html (accessed 30 November 2018).
2. https://www.rijksoverheid.nl/documenten/kamerstukken/2019/02/14/beantwoording-kamervragen-over-het-adverteren-voor-en-het-meewerken-aan-maagdenvliesherstel-in-nederland (answering parliamentary questions about advertising for and cooperating in hymen repair in the Netherlands) (accessed 18 February 2019).
3. Besides occurring in MENA countries and Western Europe, the practice is reported to occur in countries as varied as China (Steinmüller and Tan, 2015), India (Raveenthiran, 2009), Brazil and Guatemala (Roberts, 2006) and the USA (Kopelman, 2014).
4. Person-centred health care treats patients with dignity and respect and involves them in decisions about their health on a basis of equality. Culturally sensitive health care shows understanding and respect for culturally diverse patient groups (Tucker et al., 2007). Feminist
health care also conceptualises the patient–health care provider relationship as an equal partnership and is, like culturally sensitive care, oriented towards empowering the patient (Andrist, 1997).

5. Narrative reviews aim to survey the state of knowledge on a particular topic, drawing from a variety of academic disciplines and research methods. The search for sources can be (and in my case was) extensive, but the ambition is not to locate all of the relevant literature. In contrast, a systematic review is far more structured and protocol driven. It is a rigorous and comprehensive search aimed at identifying all relevant studies on the topic under investigation (Jesson et al., 2011).

6. Prices vary (in 2018) from €250 ($283) in a public clinic to €1100 ($1248) in a private clinic (Herderschee, 2020).

7. Another legal scholar who claimed that hymen ‘repair’ is permitted by Islam is Muhammad Nai’im Yasin from Kuwait (Rispler Chaim, 2007).

8. For guidelines in the Netherlands, see Coene and Saharso, 2019; for Sweden’s Nationellt Centrum för Kvinnofrid (National Centre for Knowledge on Men’s Violence against Women), see the NCK Report 2011 (2) referred to in Juth and Lynøe (2015): 219; for France and the UK, see Renteln (2017).

9. NVOG. Hymen reconstructie. Voorgestelde gedragslijn. (Hymen reconstruction. Proposed course of action.) Datum Goedkeuring (Approval Date): 2004–05-01, Versie: 1.0, http://nvog-documenten.nl/ (accessed 26 February 2018).

10. Preamble to the Constitution of the WHO, as adopted by the International Health Conference, New York, 19 June–22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of WHO, no. 2, p. 100) and entered into force on 7 April 1948.

11. I would argue that individual physicians have the right to refuse the surgery, especially if they do not want to engage in deceit, and refer the patient to a colleague who is willing to operate. However, banning the procedure is not warranted.

12. The argument about double standards is even stronger when one compares hymen ‘repair’ with non-therapeutic male circumcision, which is a more invasive and irreversible practice that is usually done on children too young to give consent. See Coene and Saharso, 2019.

13. Actieagenda Schadelijke Praktijken (Agenda for action Harmful Practices): 8. Available at https://www.rijksoverheid.nl/documenten/beleidsnotas/2020/02/18/actieagenda-schadelijke-praktijken (accessed 19 February 2020).

References
Ahmadi A (2014) Ethical issues in hymenoplasty: views from Tehran’s physicians. Journal of Medical Ethics 40(6): 429–430. *

Ahmadi A (2016) Recreating virginity in Iran: Hymenoplasty as a form of resistance. Medical Anthropology Quarterly 30(2): 222–237. *

Andrist L (1997) A feminist model for women’s health care. Nursing Inquiry 4(4): 268–274.

Awwad J, Nassar A, Usta I, et al. (2013) Attitudes of Lebanese university students towards surgical hymen reconstruction. Archives of Sexual Behavior 42(8): 1627–1635. *

Aytemiz P (2015) Lost and found virginity: a critical look to the “reappearing hymen.” Ileti-s-im Consumer Culture 23*.
Bekker MH, Rademakers J, Mouthaan I, et al. (1996) Reconstructing hymens or constructing sexual inequality? Service provision to Islamic young women coping with the demand to be a virgin. *Journal of Community & Applied Social Psychology* 6(5): 329–334.

Chambers C (2019) Choice and female genital cosmetic surgery. In: Creighton SM and Liao LM (eds), *Female genital cosmetic surgery: Solution to what problem?* Cambridge: Cambridge University Press, pp. 72–89.

Christianson M and Eriksson C (2014) Acts of violence: virginity control and hymen (re)construction. *British Journal of Midwifery* 22(5): 344–352. *

Christianson M and Eriksson C (2015) Promoting women’s human rights: a qualitative analysis of midwives’ perceptions about virginity control and hymen ‘reconstruction. *The European Journal of Contraception & Reproductive Health Care* 20(3): 181–192. *

Cindoglu D (1997) Virginity tests and artificial virginity in modern Turkish medicine. In: *Women’s Studies International Forum*. Amsterdam, Netherlands: Elsevier, pp. 253–261. *

Coene G and Saharso S (2019) Gender and cultural understandings in medical nonindicated interventions: A critical discussion of attitudes toward nontherapeutic male circumcision and hymen (re)construction. *Clinical Ethics* 14(1): 33–41.

Cook RJ and Dickens BM (2009) Hymen reconstruction: ethical and legal issues. *International Journal of Gynecology & Obstetrics* 107(3): 266–269. *

Davis K (1995) Reshaping the female body. In: *The Dilemma of Cosmetic Surgery*. New York: Routledge.

de Graaf H, van den Borne M, Nikkelen S, et al. (2017) Seksuele Gezondheid Van Jongeren in Nederland Anno 2017. (Sexual Health of youth in the Netherlands Anno 2017). Delft, The Netherlands: Rutgers and Soa Aids Nederland.

de Lora P (2015) Is multiculturalism bad for health care? The case for re-virgination. *Theoretical Medicine and Bioethics* 36(2): 141–166. *

Earp BD (2014) Hymen ‘restoration’ in cultures of oppression: how can physicians promote individual patient welfare without becoming complicit in the perpetuation of unjust social norms? *Journal of Medical Ethics* 40(6): 431. *

Eich T (2010) A tiny membrane defending ‘us’ against ‘them’: Arabic Internet debate about hymenorrhaphy in Sunni Islamic law. *Culture, Health & Sexuality* 12(7): 755–769. *

Ellialti T (2008) *The Stomachache of Turkish Women: Virginity, Premarital Sex and Responses to Ongoing Vigilance over Women’s Bodies*. Sabancı University, Istanbul.*

Essén B, Blomkvist A, Helström L, et al. (2010) The experience and responses of Swedish health professionals to patients requesting virginity restoration (hymen repair). *Reproductive Health Matters* 18(35): 38–46. *

Friedman M (2003) *Autonomy, Gender, Politics*. Oxford, UK: Oxford University Press.

Ghanim D (2015) *The Virginity Trap in the Middle East*. Heidelberg, Germany: Springer. *

Hajali M (2015) Reproducing violence through reconstructing the hymen? In: *Gender-Based Violence against Women in Lebanon*. UiT Norges arktiske universitet, p. *

Hassanein S and Wynn L (2017) Hymenoplasty, virginity testing, and the simulacrum of female respectability.*

Herderscheé G (2020) *Deal Ministers en Artsen: Verbod Hersteloperaties Maagdenvlies.(Deal Ministers and Doctors: Ban Reconstruction Operations Hymen)* de Volkskrant, 2.
Heyerick M and Van De Wiele B (2012) Kennis, attitude en Praktijken van Vlaamse Gynaecologen ten aanzien van Maagdenvliesherstellingen. (Knowledge, attitudes and practices of Flemish Gynaecologists regarding hymen reconstructions) Universiteit Gent: Faculteit Geneeskunde en Gezondheidswetenschappen.*

Jeffreys S (2005) Beauty and Misogyny: Harmful Cultural Practices in the West. Routledge.

Jesson J, Matheson L and Lacey FM (2011) Doing your Literature Review: Traditional and Systematic Techniques. Sage.

Juth N and Lynøe N (2014) Are there morally relevant differences between hymen restoration and bloodless treatment for Jehovah’s Witnesses? BMC Medical Ethics 15(1): 1–7. *.

Juth N and Lynøe N (2015) Zero tolerance against patriarchal norms? A cross-sectional study of Swedish physicians’ attitudes towards young females requesting virginity certificates or hymen restoration. Journal of Medical Ethics 41(3): 215–219. *.

Kaivanara M (2016) Virginity dilemma: Re-creating virginity through hymenoplasty in Iran. Culture, Health & Sexuality 18(1): 71–83. *

Khoo LS and Senna-Fernandes V (2015) Hymenoplasty and virginity—an issue of socio-cultural morality and medical ethics. PMFA News 3. *

Kopelman LM (2014) Make her a virgin again: when medical disputes about minors are cultural clashes. Journal of Medicine and Philosophy 39(1): 8–25. *.

Loeber O (2015) Wrestling with the hymen: consultations and practical solutions. The European Journal of Contraception & Reproductive Health Care 20(2): 128–135. *

Mackenzie C (2007) Relational autonomy, sexual justice and cultural pluralism. In: Arneil B, Dhamoon R and Eisenberg A (eds), Sexual Justice/Cultural Justice: Critical Perspectives on Political Theory and Practice. New York: Routledge, pp. 103–121.

Mackenzie C and Stoljar N (2000) Relational Autonomy: Feminist Perspectives on Autonomy, Agency, and the Social Self. Oxford, UK: Oxford University Press.

Mahadeen E (2013) Doctors and Sheikhs: "truths" in virginity discourse in Jordanian media. Journal of International Women’s Studies 14(4): 80–94. *

Mahadeen E (2015) Media, state, and patriarchy: discourses of state control in Jordanian discussions of virginity. Feminist Media Studies 15(5): 763–778. *

McNay L (2000) Gender and Agency: Reconfiguring the Subject in Feminist and Social Theory. Cambridge: Polity Press.

Mernissi F (1982) Virginity and patriarchy. In: Women’s Studies International Forum. Amsterdam, Netherlands: Elsevier, pp. 183–191.

Narayan U (2001) Minds of their own: choices, autonomy, cultural practices, and other women. In: Anthony Louise and Witt Charlotte (eds), A Mind of One’s Own: Feminist Essays on Reason and Objectivity. Boulder, Col: Westview Press.

Okin SM (1999) Is Multiculturalism Bad for Women? New Jersey, USA: Princeton University Press.

Ozyegin G (2009) Virginal facades: Sexual freedom and guilt among young Turkish women. European Journal of Women’s Studies 16(2): 103–123. *

Prins B (2008) Sympathetic distrust: liberalism and the sexual autonomy of women. Social Theory and Practice 34(2): 243–270.

Raveenthiran V (2009) Surgery of the hymen: from myth to modernisation. The Indian Journal of Surgery 71(4): 224. *.
Renteln AD (2017) The human rights dimensions of virginity restoration surgery. In: Foblets MG and Renteln AD (eds), *Personal Autonomy in Plural Societies: A Principle and Its Paradoxes*. New York: Routledge, pp. 206–219. *.

Rispler-Chaim V (2007) The Muslim surgeon and contemporary ethical dilemmas surrounding the restoration of virginity. *Hawwa* 5(2–3): 324–349. *

Roberts H (2006) Reconstructing virginity in Guatemala. *Lancet* 367(9518): 1227–1228. *

Saharso S (2003) Culture, tolerance and gender: a contribution from the Netherlands. *European Journal of Women’s Studies* 10(1): 7–27.

Sharifi N (2018) *Female Bodies and Sexuality in Iran and the Search for Defiance*. Heidelberg, Germany: Springer. *

Shirazi F (2009) *Velvet Jihad: Muslim Women’s Quiet Resistance to Islamic Fundamentalism*. University Press of Florida. *

Steinmüller H and Tan T (2015) Like a virgin? Hymen restoration operations in contemporary China. *Anthropology Today* 31(2): 15–18. (*https://www.therai.org.uk/publications/anthropology-today/debate.*)

Tschudin S, Schuster S, dos Santos DD, et al. (2013) Restoration of virginity: women’s demand and health care providers’ response in Switzerland. *The Journal of Sexual Medicine* 10(9): 2334–2342. *

Tucker CM, Herman KC, Ferdinand LA, et al. (2007) Providing patient-centered culturally sensitive health care: a formative model. *The Counseling Psychologist* 35(5): 679–705.

Van de Wier M (2020) Artsenclub NVOG gaat regelen dat er geen maagdenvlieshersteloperaties meer plaatsvinden, stelt Minister Hugo de Jonge. Maar dat kan helemaal niet, reageert de NVOG (Doctors Club NVOG will regulate that there will be no more hymen repair operations, says Minister Hugo de Jonge. But that is not possible at all, responds the NVOG.) Trouw. 19 February 2020

Van Lunsen R and Van Moorst B (2012) De gynaecoloog, het hymen, maagdelijkheid en verzoeken tot hymenherstel. (The gynaecologist, the hymen, virginity, and requests for hymen restoration. *Nederlands Tijdschr Obstet Gyneacol* 125: 368–374. *

Van Moorst BR, van Lunsen RH, van Dijken DK, et al. (2012) Backgrounds of women applying for hymen reconstruction, the effects of counselling on myths and misunderstandings about virginity, and the results of hymen reconstruction. *The European Journal of Contraception & Reproductive Health Care* 17(2): 93–105. *

Vande Putte A (2015) Bio-ethische Vraagstukken Rond Maagdenvliesherstel. (Bioethical Issues Surrounding Hymenreconstruction. Universiteit Gent. Gent.*

Vermeirsch S, Sabbe A, Temmerman M, et al. (2013) De mythe van het maagdenvlies.(The myth of the hymen. *Tijdschrift voor Geneeskunde* 69(9): 440–445. *

Wei S-Y, Li Q, Li S-K, et al. (2015) A new surgical technique of hymenoplasty. *International Journal of Gynecology & Obstetrics* 130(1): 14–18. *

Widdow H (2013) Rejecting the choice paradigm: rethinking the ethical framework in prostitution and egg sale debates. In: Madhok S, Phillips A and Wilson K (eds), *Gender, Agency, and Coercion*. Palgrave Macmillan, pp. 157–180.

Wild V (2012) Zum Umgang mit “kulturellen Fragen “in der klinischen Ethik am Beispiel der Hymenrekonstruktion. (On dealing with “cultural issues “in clinical ethics using the example of hymen reconstruction). *Ethik in der Medizin* 24(4): 275–286. *.
Wild V, Bühler RN, Poulin H, et al. (2010) Anfragen an Online-Ärzte über die Möglichkeit einer operativen Rekonstruktion des Hymens: Datenerhebung am Universitäts- und am Kinderspital Zürich. (Inquiries to online physicians about the possibility of surgical reconstruction of the hymen: data collection at the University Hospital and the Children’s Hospital Zurich. *Praxis* 99(8): 475–480*).

Wild V, Poulin H, McDougall CW, et al. (2015) Hymen reconstruction as pragmatic empowerment? Results of a qualitative study from Tunisia. *Social Science & Medicine* 147: 54–61. *

Wynn LL (2014) Hymenoplasty and the relationship between doctors and muftis in Egypt. In: Gabriele M (ed), *Studying Islam in Practice*. England, UK: Routledge, pp. 46–60. *

Wynn LL (2016) ‘Like a Virgin’: Hymenoplasty and Secret Marriage in Egypt. *Medical Anthropology* 35(6): 547–559. *

Zeyneloğlu S, Kisa S and Yılmaz D (2013) Turkish nursing students’ knowledge and perceptions regarding virginity. *Nurse Education Today* 33(2): 110–115. *