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Virginity testing: recommendations for primary care physicians in Europe and North America

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ABSTRACT

Virginity testing is a complex, culturally mediated practice that is poorly understood by Western clinicians. While advocating for global elimination of the practice of virginity testing as a human rights violation, clinical practice is often more complicated and ethically nuanced, and the clinician must act in the best interest of her patient. Upholding human rights does not have to be incompatible with providing a needed service to a patient, which should never include an invasive exam if not medically necessary, but should include education and safety assessments.

Summary box

- An examination of the hymen cannot accurately or reliably tell you whether a woman has had intercourse.
- "Virginity testing" is a complex, culturally mediated practice that is poorly understood by Western clinicians.
- While advocating for global elimination of the practice of "virginity testing" as a human rights violation, clinical practice is often more complicated and ethically nuanced, and the clinician must act in the best interest of her patient.
- Refusal of care may be counterproductive, and a missed opportunity for education about the lack of science behind 'virginity testing', and about female anatomy and sexuality.
- Clinicians should not perform an invasive two-finger examination for the purpose of 'virginity testing'.

INTRODUCTION

"Virginity" testing refers to the practice of evaluating—through a physical examination of the hymen—whether a woman or girl has ever engaged in vaginal sexual intercourse (with or without consent). "Virginity" testing is practiced in countries from multiple regions of the world, but appears to be most established in Asia and the Middle East and countries in northern and southern Africa.[1] This practice is controversial and broadly considered to be unethical and ill-advised. As part of the global call to eliminate violence against women and girls everywhere, on 17 October 2018, The UN Human Rights Office, UN Women and WHO issued a statement stressing that 'virginity" testing was unscientific and a violation of human rights and that 'this medically unnecessary, and often times painful, humiliating and traumatic practice must end.'[2]

"Virginity" testing usually involves visual inspection of the hymenal membrane by a medical professional (physician, nurse or midwife). In some cases, the examination includes a 'two-finger' test to assess the size of the vaginal opening. The purpose is to 'determine if a woman is a virgin' though it is based on an incorrect and false assumption that penile penetration results in predictable observable changes in the vaginal introitus, and especially in the shape and appearance of the hymen.[1]

In some cultures, virginity is considered an important social norm that links sexual purity with the honour of an individual woman, her family and community, and ultimately the State.[3] Virginity is celebrated as a virtue, and women are expected to be 'virgins' prior to marriage. 'Virginity' examinations have been conducted forcibly by official representatives of the State in cases where women are suspected of adultery or prostitution, or during detention. It is also not uncommon for law enforcement or adjudicators to request an examination of the hymen in cases of alleged vaginal sexual assault, despite the fact that a hymen examination has a very low predictive value in such circumstances,[4] and that best-practice dictates a full body examination including a thorough ano-genital examination. In 2016, a parliament member in Egypt called for "virginity" tests for university entrants with the stated reason to discourage premarital sex.[5] A "virginity" test is required in some countries such as Indonesia when

an unmarried women applies for a job in the military.[6] Although officially banned in Afghanistan, it has been reported that the practice of "virginity" testing remains widespread, both officially by the State, and unofficially at the request of families. An Afghani woman told a reporter 'If your hymen is broken, it is finished—you fall into hell.'[7]

There are few articles in the medical literature discussing 'virginity" testing from the perspective of clinicians from countries where 'virginity' testing is practiced. Robatjazi *et al* examined the perceptions and experiences of 16 physicians and midwives who perform 'virginity' tests in Iran.[8] The authors report that 'virginity' testing is conventionally requested because of cultural factors and social pressures. Examples of reasons for patients' requesting 'virginity' testing included fear of not being a virgin, certifying 'virginity' before marriage and requests for determination if their hymen was 'dilatable', so they could engage in premarital sex without damaging the hymen. Legal reasons for 'virginity' testing included assessment of sexual assault and assessing accusations of not being a virgin in the absence of bleeding on one's wedding night. In this small study, the clinicians admitted that the test was unreliable in determining 'virginity'. Most of the clinicians in this study reported discomfort with performing the test at all, and agreed that education on virginity testing and guidance for clinicians as well as to the public is necessary. More research is needed on the attitudes and practice of clinicians from countries where 'virginity' testing is practiced.

VIRGINITY TESTING IN EUROPE AND NORTH AMERICA

The current unprecedented refugee crisis and global migration[9] increases the likelihood that clinicians in host countries will encounter the issue of 'virginity" testing. Although no precise statistics are available, there are reports of increasing requests for 'virginity' tests in Canada and Europe.[10] In the USA it has also been anecdotally reported in non-immigrant populations, such as the Orthodox Jewish community and among certain Christian fundamentalist groups.[11] Most recently 'virginity' testing has been catapulted into the news by rapper T.I.'s admission[12] that he requires his daughter to undergo these exams, and by media reports[13] that 'premarital exams' are popular in Utah.

A survey with 288 respondent US OB/GYNs revealed that 29 (10.1%) of the physicians reported patients who requested 'virginity' testing in the preceding 12 months, and 10 of these (34.5%) agreed to perform the test. Only one respondent reported asking the reason for the 'virginity' test request.[14] A Swedish survey revealed that 51% of 507 respondent healthcare workers had seen patients for virginity related issues, yet only 12% respondents felt equipped to respond to virginity related problems.[15]

Although there is published literature on the ethics of 'virginity' testing[10 16] and on the lack of reliability and the low predictive value of a hymen examination to determine 'virginity',[17] little practical guidance has been published for clinicians who may encounter requests for "virginity" testing in the clinical setting.

The ethical conflict for clinicians in this case is one of respecting traditional cultural practices versus practicing according to western values of gender equality and sexual rights. We are taught that upholding human rights always supersedes respect for cultural traditions. However, upholding human rights does not have to be incompatible with providing a needed service to a patient, even if the practice does not fit into our social norm. For example, we would argue that the physician may comply with the request for a 'virginity' test under certain conditions, and with the understanding that he or she is not assessing 'virginity', but rather performing a comprehensive sexual evaluation and providing documentation. These conditions include when the patient provides a compelling argument that she wants the evaluation, and has given informed consent; a 'virginity certificate' may be necessary for her marriage, and failure to acquire such a certificate may create problems for her or even affect her safety. A western ethical framework is outlined below,[10 16] but a deeper exploration into the woman's beliefs, values and realities of her life and social structure is required to fully comprehend the situation and begin the complex decision-making process.

ETHICS PRINCIPLES

'Standard' medical ethics analysis limits itself to the 'Georgetown mantra' of autonomy, non-maleficence and justice. We adopt these frames, but add to them to take account of beneficence (attempting to do good under the circumstances) and pragmatism (doing the best you can for your patient under difficult, real life, circumstances[18]).

Non-maleficence

Virginity is not a medical condition requiring diagnosis and treatment. 'Virginity' tests do not provide any clinical benefit to a patient, and have several harms associated with them. These include the risks of physical discomfort and pain, especially if a 'two finger' examination is conducted. This evaluation can also cause anxiety, depression and post-traumatic stress disorder, especially if it is done against the patient's will and without her consent. In some cases, a woman can be harmed by (1) having a hymen evaluation with the clinician determination that her hymen is 'non-intact', or (2) NOT having a hymen evaluation to document 'virginity'. Both situations can result in social harms, with a woman determined not to be 'marriage-eligible' (either because she was assessed (erroneously) to not be a virgin, or because she could not produce the certificate). In such situations, women may be ostracised by their families if they are not virgins/cannot provide 'proof' of virginity. Women have lost their

lives through suicide, and 'honour killings' because of perceived shame.

Autonomy and informed consent

Forcibly conducting a 'virginity" exam without the patient's consent is a form of sexual assault (like any genital examination without consent). In many situations, even when requested by a patient, as in this case, "virginity" testing is not voluntary. A woman does not require a test to prove to herself that she is a virgin, but she may require a test to reassure herself that she can pass as a virgin (even if she is not) to others. She could be unsure about her 'virginity" status because of previous events (like for instance she has heard that if she rides horses, she may have a damaged hymen). 'Virginity' testing is, in most cases, for the benefit of other parties (usually family, intended spouses or States). Being put in a position to have to 'prove' to third parties that one is a virgin, may result in experiencing a sense of powerlessness, fear, humiliation, worthlessness and lack of the right to self-determination. Harm can be caused by physician participation in an act that is humiliating and degrading, the purpose of which is to intimidate, control and oppress women. At the same time, it is a woman's autonomous right to ask for a pelvic or genital examination, or an examination of any body part, for the purpose of documenting findings. We see this frequently when patients request a physical examination for the purpose of providing certificates indicating they are fit for work, school or volunteer programmes. In addition, we must acknowledge that we live in a gender biased world, and that women's autonomy to make decisions is often limited. In fact, asserting autonomy may put a woman at risk of harm by her family or community. Clinicians must consider this possibility when weighing the risks and benefits of an action.

Justice

"Virginity" testing is an example of gender-based oppression and discrimination, and it puts physicians in a morally and professionally complex position of acting as 'the morality police'. Hijacking the role of physicians to perform this task gives 'medical legitimacy' to 'virginity' testing. Physicians should resist pressure from any source to use medical skills in ways that attempt to legitimise violations of human rights.

Truthfulness and validity

Even if a physician concluded he or she would agree to do the 'virginity' examination, their ability to determine whether a woman has ever had intercourse (with or without consent) from the physical examination alone, is extremely limited, if non-existent. There is a large body of published literature which concludes that physical examination of the hymen is an extremely poor predictor and unreliable in determining if prior sexual intercourse has occurred.[4 17 19 20]

PRACTICAL CONSIDERATIONS

While agreeing with the UN guidance and the ethical arguments against virginity" testing, the situation in clinical practice is often more complicated and ethically nuanced. The clinician must develop an awareness of the complex interplay of social forces shaping this women's life, and consider the consequences of performing or not performing the requested exam, in terms of the impact for the patient, as well as due consideration to the clinician's moral and professional responsibilities.

One approach is to view what clinicians can and could do in three domains: (1) the individual level (doctor–patient), (2) patient and risk group education, (3) prevention and community level advocacy and education.

Individual consideration

This strategy focuses on helping the individual patient explore the issue within her specific situation, consider her options, and support of her decision and choices. One option to consider is a 'harm reduction' approach, as has been well described in the substance use disorder literature.[21] Harm reduction uses strategies aimed at reducing negative consequences of a practice or behaviour instead of trying to eliminate it. In the case of "virginity" testing, while acknowledging that the practice of "virginity" testing is a human rights violation and must end, it is important to consider the social, psychological and even potential physical harm that could result by not supplying a certificate. Through a process of shared decision-making, the risks and benefits of performing an evaluation and supplying a certificate must be weighed with the patient, and her choices respected. The clinician should work through options to determine 'the least harmful' course of action in each individual situation. An analogy (although imperfect) is working through solutions with women experiencing domestic violence, when there might be no 'good' solution, but a 'least harmful' solution. Given that we know that an examination cannot and will not determine 'virginity', one option in adopting the harm reduction model is to provide a certificate based on a complete sexual history, with or without an external examination only to document clinical observations. In the vast majority of cases, the physical exam will not show evidence of prior vaginal penetration, which can be truthfully documented. Invasive physical examinations should not be performed. Physical examinations on minors should never be performed, unless clinically indicated. Adolescent girls should, however, be provided with education and safeguarding.

While considering a course of action in response to a woman's request, it is first and foremost important to treat the patient with respect, dignity and cultural humility. In the context of a trusted doctor–patient relationship, an exploration of the reason for the request for 'virginity' testing must be elicited, as well as an explicit explanation as to what 'virginity' means to the woman. Education should be provided on the scientific facts (or lack thereof) that is congruent with the patient's

Box 1 Consider the clinical case

A woman in her 20s from a country where "virginity" testing is routinely practiced, who arrived in the USA 2 years ago, presents to her primary care physician requesting a 'virginity" test'and a written 'certificate of virginity'. She reports that she has recently become engaged and that both her fiancé, herself and her family expect this documentation. The woman reports that "virginity" testing is common in her culture, and that she wants the exam and certification.

Successfully navigating this situation may take time over multiple visits. Our suggested approach in this patient is as follows:

1. Using reflective listening, allow the patient to educate you—fully understand and acknowledge the cultural and social context of the request.

You may ask: 'Why is this test important to you? Why is this important to your family?'

Acknowledge patient's response: 'I understand that this is an important cultural practice for you…'

2. Educate the patient (and her partner, if she agrees) and provide support.

Explaining your role as an advocate: You may say: 'Your health and well-being is my priority, and it is my duty as your doctor to act in your best interest with your consent.'

'What is your understanding of the type of examination to be performed?'

Explain scientific fact: 'Because this an important issue, there is a lot of research to assess the accuracy of virginity testing. However, all the research that has been done shows that there is no scientific way to tell from an inspection of your hymen whether you did or did not have intercourse.'

Acknowledging patient's viewpoint: 'I see that this issue of virginity is important to you and your family. Please help me understand how it would affect you not to get a certificate?'

Provide support in discussion: 'If you think it would be helpful, I am available to facilitate a meeting with both of you to discuss this further.' 'I am here to support you through this.'

In this case, a meeting with the patient and her fiancé was successful, and both partners were satisfied that virginity testing was not necessary.

If the clinician chooses to perform an evaluation and/or provide a certificate, box 2 provides recommendations for how to conduct an evaluation and document clinical findings.

Box 2 Recommendations for evaluation of women requesting 'virginity' testing

- Ensure a safe and confidential setting, with adequate time for examination and counselling.
- Obtain informed consent; be aware of the regulations related to consent by and on behalf of minors in the country or state where you practice.
- Use a professional interpreter (not family), if needed.
- Conduct a comprehensive risk assessment (interpersonal or domestic violence, mental health, self-harm, suicide, forced marriage, risk of honor-based killing).
- Use the opportunity to obtain a full health history (gynaecological, menstrual, sexual).
- Query the woman about her definition of 'virginity', that is, penile-vaginal penetration, digital-vaginal penetration, penile-anal penetration, penile-oral penetration or other.
- Ask about vulvar/vaginal/oral/anal/penile/object or digital sexual contact and assess the need for sexually transmitted infection (STI) testing. Women may engage in anal intercourse to avoid 'losing virginity'.
- Use the opportunity to discuss sexual health issues such as contraception, STIs and sexuality.
- Ask about the woman's knowledge about and expectation of bleeding at first intercourse, and dispel any misconception that if bleeding does not occur, the woman is not a 'virgin'.
- Use the opportunity to counsel about respectful, consensual and safe relationships and inquire about sexual and gender identity.
- Have a robust referral pathway if the patient needs a mental health evaluation or social services referral.
- Use a chaperone to serve as an advocate during the examination.
- If necessary, visually and gently inspect the external genitalia. Do not insert a speculum or fingers, unless medically necessary.
- Describe only what you see (eg, 'normal external genitalia for age'), do not interpret. Never use the term 'virgin' or 'virginity' to describe physical exam findings.
- Confirm, based on her history, her marital status, and sexual history. Note clinical observations, that is, normal external genital anatomy for her age, absence of tearing, abrasions, bruising. Do not mention the hymen, its morphology or analyse its appearance and structure.
- Write a summary statement correlating her social status (unmarried) with her medical evaluation. Example summary statement: The patient denies a history of vaginal intercourse and examination reveals normal external genitalia consistent with history and age.
- Arrange follow-up with the woman for a few days after the visit to ensure that she is safe, to assess further needs and to answer questions.

language skills and health literacy levels. A clinician may consider involving the male partner or another member of the family in this conversation as well, but only with the patient's consent. Consider the clinical scenario in box 1.

In some cases, a clinician may be asked for a referral to a specialist to have the 'hymen repaired'. To our knowledge, there is no literature on the prevalence of these 'hymenoplasty' procedures, although it is reported to be a growing phenomenon in Western countries.[15] It appears there are currently no consensus guidelines for how to handle such requests, no standardised instructions for surgery and no data on outcomes.[15 22]

Proactive patient and risk group education

If you have a large population of patients from countries or communities where 'virginity' testing is practiced, use routine or other visits to discuss this issue and provide education on the matter. 'Virginity' testing can be discussed as part of comprehensive sexual education and counselling during well visits for both men and women, adults and adolescents, as well as during paediatric and teenage preventive exams. Such conversations can help you build trust, assess knowledge, attitudes and practice of your at-risk patients and allow you to anticipate future requests.

Prevention and community level, advocacy and education

Physicians are considered thought leaders in their communities. They may partner with social workers or other community navigators to work with patients and/

Table 1 Professional Health Organizations official statements about Virginity Testing (as of October 2019)

Search term Organisation	Virginity testing	Hymenoplasty or hymen repair or hymen reconstruction
American College of Obstetrics and Gynecology	None	None
American Urological Association	None	None
American Academy of Dermatology	None	None
American Society of Plastic Surgeons	None	None
American Academy of Cosmetic Surgery	None	None
American Medical Association	None	None
American Medical Women's Association	None	None
American College of Physicians	None	None
American Academy of Family Physicians	None	None
American Academy of Pediatrics	There is a patient-oriented handout discussing virginity testing, but it is behind a membership pay-wall.	None
Canadian Society of Plastic Surgeons	None	None
College of Family Physicians, Canada	None	None
Society of Obstetricians and Gynaecologists of Canada	None	None
Royal College of General Practitioners UK	None	None
WHO	https://apps.who.int/iris/bitstream/-handle/10665/275451/WHO-RHR-18.15-eng.pdf?ua=1	

*'Virginity' testing should also be included as a regular topic in cross-cultural curricula. Ethics committees should be familiar with and equipped to guide physicians through such complicated situations when necessary.

or families within communities that want to uphold this practice. Consider speaking at community events, school gatherings and other social gatherings to provide non-judgemental evidence-based information. Seek out community representatives and faith leaders and engage in a dialogue about 'virginity' testing, among other gender-specific topics.

The role of health professional organisations

Health professional organisations can also play a role. To date, the vast majority of professional medical organisations do not provide guidance for clinicians encountering a request for 'virginity' testing (table 1). Quebec's physicians college (College des Medecins) has provided guidance on virginity testing which prohibits its members from performing "virginity" examinations.[23] This does not preclude forensic examination of genital structures, including the hymen, as part of a comprehensive examination following an alleged sexual assault. We would encourage medical professional organisations to issue official guidance to their members, through position statements or clinical guides.

CONCLUSION

We recognise that 'virginity" testing is a complex, culturally mediated practice that is poorly understood by Western clinicians in host countries, and considered a human rights violation by major international groups. The social value of women's virginity is deeply ingrained in some societies, and the practice of 'virginity' testing by examination of the hymen by clinicians plays an important role in a woman's marriageability and social status.

Changing social norms, attitudes and practices about 'virginity' testing will not occur easily, and change must come from within the culture and must be spearheaded by members of the community. 'Virginity' testing lies on a continuum of other harmful cultural practices specific to women and girls such as female genital mutilation/cutting, and forced or child marriage. Efforts to change cultural norms have not always been successful and any attempts must include recognition of the role of society, gender norms, economic empowerment and legal status, among others. Engagement with religious and community leaders is crucial for enacting change. While advocating for global elimination of the practice of virginity testing as a fundamental human rights violation, it is critical that the clinician always act in the best interest of her patient.

Education about the lack of reliability and the possible harms of "virginity" testing should be provided in communities who follow this practice, through training community members, reading materials and inclusion in other reproductive health discussions. Simply condemning the practice is not sufficient to successfully promote change, nor does it help the women we are obligated to protect. Finally, research on the sexual and reproductive issues

of adolescent girls and women from communities in which this and similar practices are prevalent is urgently needed so that health systems can be designed to meet those needs.

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