

# Islamic Bioethical Perspectives on Gender Identity for Intersex Patients

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## Abstract

Best practice policies for the care and treatment of intersex patients, specifically in deciding their gender assignment, are a disputed topic. Analyzing Islamic resources regarding intersex individuals helps inform Islamic bioethical views on the most appropriate medical approaches to diagnosis and treatment. Based on readings of a classical Islamic legal manual as well as contemporary legal rulings we contend that Islamic legal precedent problematizes the notion of a complete gender binary, and provides precedence for both early and delayed approaches to medical intervention for intersex patients. Additionally, we discuss how such scholarly understandings set the stage for negotiating the gender identity of intersex patients.

## Introduction

Although record keeping practices make it difficult to collect accurate data on intersex, some studies have indicated that the frequency of live births with some form of ambiguous genitalia is as high as 2%, with high levels of complexity in medical management and decisions surrounding gender assignment (1, 2). Data is again limited when analyzing patient satisfaction in long-term quality of life studies based on current treatment policies, specifically “corrective” genital surgery (3). With increasing numbers of adolescents seeking treatment with gender identity services, greater medical resources at hospitals and medical schools devoted to improving transgender health, and an overall improved recognition of the harms of gender dysphoria with underlying discordance between expressed and experienced gender and assigned biological sex, there is room to further explore medical management of intersex patients that

achieves the best physical, psychological, and emotional health outcomes (4, 5). Beyond discussions of medical management, general exploration of the complexities in gender and sexuality has been of greater interest recently within academic discourse, as demonstrated by the rise in “new college courses, concentrations, majors, and programs in gender and sexuality studies(6).

Similar discussions are found within Islamic religious and scholarly circles as well, highlighted by a recent decree from Pakistani religious clerics declaring “full marriage, inheritance, and funeral rights for transgender people under Islamic Law” (7). Ethnographic works speaking of the gender and sexuality in the Muslim majority nation of Indonesia discuss the *Bugis* group, a group that challenges the traditional model of gender dimorphism between male and female. The *Bugis* in

Indonesia, not unlike other groups in countries such as India, problematize a simple categorization of gender into male and female based on identifiable physical characteristics (8). In her book *Gender Relations in an Indonesian Society*, Nurul Ilmi Idrus adds to this work by discussing how some of those who study the *Bugis* group acknowledge room for a gendered space beyond the dominant male and female paradigm, and include a third, or even fourth or fifth gender (9).

This paper seeks to build upon this larger discussion of gender complexity by examining intersex conditions and what is considered appropriate medical care through an Islamic bioethical perspective. Just as more clinical and outcome research is needed to develop best care practices for intersex patients, bioethical analyses can help inform current approaches as well. Specifically, we analyze various biomedical and Islamic definitions of intersex, think through contemporary notions of gender, and describe what Islamic bioethical considerations can contribute to modern medical treatment practices concerning intersex individuals.

## Intersex, *Khunthā*, and Disorders of Sex Development

It is important to understand exactly what is meant by the term intersex and other related terms across different fields. Biomedical scientists consider intersex as a deviation from a single, idealized version of male and female in regard to chromosome composition, gonadal structure, hormone levels, and structure of internal genital duct systems and external genitalia. In medical practice, the term intersex has been replaced by the umbrella term disorders of sex development (DSD). Diagnostically (DSD) encompasses any problem associated with atypical development of chromosomal, gonadal, or anatomic sex (10).

A useful definition provided by the Intersex Society of North America, a group that seeks to end stigma and unwanted genital surgeries for those deemed intersex, defines the condition as “a general term used for a variety of conditions in which a person is born with a reproductive or sexual anatomy that doesn’t seem to fit the typical definitions of male or female” (11).

Lastly and of particular importance to this discussion is the term *khunthā*, a term analogous to intersex used globally in Islamic legal context as well as scholarly discourse. Ultimately what is commonly shared through all these definitions is atypical sexual development leading to ambiguity in the assignment of biological sex.

This paper will primarily use intersex and the social and legal equivalent in Islamic tradition *Khunthā*, as well as DSD as it is common in contemporary medical work.

## Medical Classification and Treatment of Intersex Conditions

The typical process when health practitioners encounter a patient with ambiguous genitalia consists of a complete family and prenatal history, physical exam, and noninvasive procedures such as karyotyping, imaging tests, and hormone serum level tests, among others. Based on the results a specific diagnosis may be made that orients further gender assignment. Treatment consists of one or all of sex assignment surgery, hormone replacement therapy, and psychosocial support (10).

In regard to surgery, the timing of when to perform the surgery is a highly contentious issue that incorporates two opposing views regarding treatment practices. On one hand is the “optimal gender policy” wherein genital surgery is recommended within the first year of life in hopes of fostering an unambiguous gender identity congruent with body image and reducing potential harmful psychosocial influences around ambiguity (12). This is possible assuming a diagnosis is made at birth or soon after. On the other hand, is the “full consent policy” which seeks to postpone any operation until the child is old enough to give full consent and approve surgical treatment addressing genital ambiguity (3). This delayed approach is done to avoid major psychological turmoil later in life caused by a premature operation that causes discord between physical gender identity and other forms of gender identification. It is important to note here that conditions of imminent harm with uncontroversial surgical treatments such as hypospadias in genetic male infants should not be delayed (13).

Conversations concerning the medical treatment of intersex individuals are occurring throughout the Muslim world as Muslim practitioners and researchers aim to determine best practice models while seeking appropriate reference of Islamic ethical and legal sources. We will review some of this discourse by examining a classical legal manual and modern legal opinions (*fatāwa*).

## A view on Intersex within an Islamic Legal Manual

In this section we explore the contents of the Chapter of Intersex from a traditional book on Islamic jurisprudence (*fiqh*). *Mukthasar al Qudūri* is a classical textbook taught in traditional Islamic studies seminaries in numerous

educational institutions across the world as a primer for the Hanafī School of *fiqh* (14). Imam Abul Husayn Ahmad ibn Muhammad al Qudūri wrote *Mukhtasar al Qudūri* in approximately the 12th century AD(15). The specific chapter titled “The Chapter of Intersex” (*Kitāb al khunthā*), is a short chapter that deals with the legal proceedings and considerations for transactions and worship of intersex individuals.

*Kitāb al Khunthā* begins by providing a definition of what the term *khunthā* means according to jurists at the time:

إذا كان للمولود فرجٌ و ذكرٌ فهو خنثى

“If a child is born with male and female genitalia, then the child is intersex.” The understanding of intersex here clearly relies on visible physical ambiguity of the genitalia. The chapter moves on to providing criteria for helping to determine the sex of a child born with such ambiguity.

و إن كان يبول من الفرج فهو أنثى، فإن كان يبول من الذكر فهو غلامٌ

“So if the child urinates from the male genitalia, he is a boy. And if the child urinates from the female genitalia, she is a girl.” This methodology for helping to determine gender is derived from a saying of the Prophet Muhammad in which he was asked, “How does one (who is intersex) inherit? So he said, according to how they urinate” (15). The method of urination and the genitalia used indicates a form of empirical indication of gender categorization. The text then goes on to discuss further criteria for determining gender based on the method of “according to how they urinate” in more difficult situations. If unclear one should examine which external genital they urinate from first, and which one releases more urine.

The text then transitions to what happens at puberty.

و إذا بلغ الخنثى و خرجت له لحية أو وصل إلى النساء فهو رجل، و إن ظهر له ثدي كثدي المرأة، أو نزل له لبن في ثدييه أو حاض أو حبلى أو أمكن الوصول إليه من جهة الفرج فهو امرأة

“And if the intersex individual reaches puberty and a beard emerges, or he has sexual attractions toward women, then he is a man. And if breasts appear like the breasts of women, or milk comes out from the breasts, or she menstruates, or she becomes pregnant, or if it possible to enter her from the vaginal canal [i.e. sexual intercourse is possible] then she is a woman.”

Another type of criteria for the determination of gender after the onset of puberty is by using secondary sexual development characteristics. Sexual characteristics that are female sex specific, as described above, help to classify one as female, and sexual characteristics that are male sex specific help to classify as male. An interesting point to note is that sexual attraction is included here in the discussion of determining gender.

The gender determination discussion concludes with the recognition that even after attempts have been made, it is still quite possible to not be able to classify someone into a male or female gender. The text mentions this before proceeding.

فإن لم يظهر له إحدى هذه العلامات، فهو خنثى مشكل

“And if either of these signs are not apparent, then the individual is a complicated intersex (*khunthā mushkil*).”

Lastly the chapter closes by discussing specific rulings as they pertain to worship and legal transactions stating that during congregational prayer intersex individuals should stand for prayer in rows that are between the rows for men and women.

“And if the individual stands behind the Imam (for prayer), the individual stands between the rows for the men and the rows for the women.”

As far as this text provides insight for the medical treatment context it is clear that in some cases of intersex it may be easier to assign sex earlier in life, some may be more difficult and require more delay, and some still may not be possible with certainty. Concessions were given to this latter type of cases, as the *khunthā mushkil* category was accepted and accommodated both in social and religious practice. We learn three concepts of interest from this chapter. Firstly the concept of intersex according to classical Islamic jurists pertains mostly to visible primary and secondary sex characteristics. As we will see in more discussion below, the Islamic notion of intersex has since broadened to include other indications as medical knowledge on the subject has improved. Secondly, the usage of specific internal psychological and emotional factors such as sexual attraction and orientation to help in the decision process may indicate a considerable role of the individual themselves in determining their gender preference. This point however needs to be expanded by Islamic scholarship. Thirdly, the text further contributes to an understanding of gender in Islamic legal practice. It is undeniable that significant importance is placed upon gendering an

individual as male or female. For Muslims, this gender determination implicates numerous ritual practices and obligations, legal transactions, and interpersonal rulings. Yet despite the efforts developed to help determine gender that the first half of the chapter considers, it maintains that in some cases the process of determining gender may simply be too difficult. That is to say, although the chapter indicates that Islamically a gender binary is sought out, Islamic law acknowledges this may not always be possible and there may be a third ambiguous category.

### Fatāwa Pertaining to the Treatment of the “Intersex Condition”

Using the Van Den Branden and Broeckert methodology of online *fatāwa* review, we examined English-language internet using the search terms “intersex,” “khunthā,” “hermaphrodite”, and “disorders of sex development” on June 23, 2019(16). This strategy was supplemented with additional relevant *fatāwa* using the same search terms through searches in Medline (via Pubmed) and the online Islamic Medical and Scientific Ethics (IMSE) library database at Georgetown University. Specifically as it relates to medical treatment, we analyzed the theological and ethical undergirding of these *fatāwa* concerning modern methods of determining gender and the legal rulings pertaining to assignment of gender.

The online search yielded nineteen total *fatāwa*, of which three were discarded because they did not discuss biological or ethico-legal aspects of intersex (Table 1). The PubMed and the IMSE database yielded seven more opinions from various Islamic jurisprudential councils and organizations (Table 2). Thus twenty-three *fatāwa* were reviewed. They discussed the concept of sex change or gender reassignment surgeries in the case of intersex individuals. There were two primary themes throughout the *fatāwa*. The first discussed the meaning of the term intersex, which was also used interchangeably with hermaphrodite and *khunthā*. The second centered on a key point: although under normal circumstances procedures that alter physical markers of biological sex are not allowed, in the case of intersex patients such a procedure may be permitted on the basis of medical need. Some areas of nuance also accompanied this second theme. Some *fatāwa* additionally contributed ancillary points including legal social rulings for intersex individuals.

Because we discussed terminology previously, we now turn our attention to the juridical rulings. The main controversy under ethical consideration throughout all

these *fatāwa* was how to resolve tensions between recommending the seeking of medical treatment with the prohibited aspect of changing Allah’s creation.

As a general principal, permanent bodily change is prohibited as it opposes the sanctity of “Allah’s creation”. One *fatwa* states as evidence of this prohibition, “Allah relates to us that Satan says: ‘And I shall order them and they will alter Allah’s creation.’”(17) The case of the intersex patient however is given exception from this general rule, as it is deemed to accord with the Prophet Muhammad’s statement to seeking treatment for a medical condition -“O Servants of God seek medical treatment for your ailments”(18). These ideas are summarized by the following fatwa:

“With regard to one who has in his physical makeup both male and female characteristics, we should see which is prevalent in his case. If masculine characteristics are prevalent, then it is permissible to treat him medically in order to remove any ambiguity about his masculinity. If feminine characteristics are prevalent, then it is permissible to treat her medically in order to remove any ambiguity about her femininity. That may be done whether the treatment is by means of surgery or hormone therapy, because this is a disease, and the purpose of treatment is to heal disease, not to change the creation of Allah, may He be glorified and exalted.” (19).

As indicated above, treatment is congruent with current medical recommendations. In addition to treatment, diagnostic criteria have also been expanded beyond the classical concept of visible physical characteristics in external genitalia. One fatwa offers a conception of intersex that is more congruent with modern medical definitions by stating that a goal of treatment is to “achieve agreement between a person’s exterior and chromosomal makeup”(17). Ultimately a medical practitioner is responsible for determining diagnosis and treatment procedure. In response to a question from IslamWeb regarding gender assignment through surgical means, the fatwa titled “He was born hermaphrodite and needs sex change operation” states:

“If you are sure that you are a male, you should be treated as a male and it is not permissible for you to undergo any operation to change into a female. However, you are permitted to undergo an operation to remove the features of femininity.

On the other hand, if a person is not sure about his actual gender, he is, considered a problematic hermaphrodite. In this case, this person is dealt with according to rulings which are safest, as previously clarified in Fatwa 82158.

This type of hermaphrodite is allowed to undergo an operation to change into a male or a female according to the opinion of the doctors...” (20)

The process of determining if medical need is present is left to the treating physician.

Additional *fatāwa* echo sentiments similar to the statements from *Kitāb al khunthā* above.

Secondary physical characteristics that develop after puberty as well as the sexual orientation of the individual in question are useful in helping to determine the assignment of gender (21). In fact, one *fatwa* goes as far as stating that gendering decisions regarding those with intersex conditions should wait until after puberty in order to allow for secondary sexual characteristics such as the emergence of breasts or menstruation to help resolve the gender identity question (22). In situations with challenging cases of intersex, we have additional policy implications concerning timeline for diagnosis and treatment:

“But in the case of one who was created with both female and male genitalia – this is what is called ambiguous intersex – it is not permissible to be hasty in removing one and making the other more apparent. Rather we should wait until it is known what Allah, may He be exalted, will decree for this individual, which may become apparent after some time has passed” (23).

This ruling judges there to be a benefit to waiting before gender assignment surgery is performed and thus supports the delayed approach.

## Gendering Society and Gender Ambiguity

A point of ambiguity in *Kitāb al khunthā* and the *fatāwa* is the usage of the term gender. As used in the process of determining an intersex individual’s gender, gender is a term that intersects the current paradigms of both gender and biological sex. In this way gender and biological sex are used somewhat interchangeably, and arguably incorrectly. According to the World Health Organization, “sex refers to the biological and physiological characteristics that define men and women,” whereas gender is “the socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate for men and women,” (24). In the Islamic sources gender is primarily used to discuss whether an intersex individual is male or female based on physical, chromosomal, or hormonal characteristics. This is more accurately representative of the term biological sex. As

mentioned above, Islamic law appreciates the critical need for categorizing one as male or female because of the differing religious obligations that ensue. Yet moving from biology to social roles moves from sex to gender. This turn is seen in the *fatāwa* but obscured by the fact the jurists maintain the same terminology. Indeed the *fatāwa* and other references discuss the impact of biological sex on gender roles. Discussing actions specific to male and female gender such as prayer spaces delves beyond merely categorizing, and also considers the actionable expectations and roles that are male or female specific.

The very notion of describing how male and female gender is normally enacted, or how gender roles are performed, is a term used in the field of gender studies known as performativity. Indeed this notion of the significance of gender as performative is something common within contemporary studies in gender and sexuality. One of the earliest established texts on this topic came from Zimmerman and West, in which they state “We have claimed that a person’s gender is not simply an aspect of what one is, but, more fundamentally, it is something that one *does*, and does recurrently, in interaction with others” (25). Among the most famous contemporary theorists on the topic is Judith Butler, who argues that in this mode gender is a “stylized repetition of acts...which are internally discontinuous,” and that it is only real “to the extent that it is performed.” She adds that gender is “a constructed identity, a performative accomplishment which the mundane social audience, including the actors themselves, come to believe and to perform in the mode of belief”(26). That is to say unlike biological sex, gender is a transient concept based on societal cues. What may be an expected or acceptable act for a given gender at a particular place and time may not be considered acceptable under different circumstances (27). When viewing gender through this lens it becomes easier to understand why the process of sex categorization and through extension gendering was given so much emphasis in Islamic legal texts.

As mentioned in Rispler-Chaim’s chapter titled “The Khuntha,” the intersex individual presents not simply a medical challenge, but also a challenge to a Muslim society’s ability to provide gender norms assuming a gender binary. The establishment of gender remains essential to religious acts as well as to more mundane ones (28). Given the need to fulfill such religious and social obligations as determined by gender, it is no surprise that when deemed appropriate, such obligations were expanded beyond an established gender binary by

creating space for a third gendered group. An intersex individual unsure of how their performative gender in regards to prayer or inheritance was offered unique alternatives. They were allowed to pray in the rows between men and women, or allowed to inherit a sum in between men and women. In this way the *khunthā*, particularly the *khunthā mushkil*, may be deemed as a group with differing social roles and performance expectations of gender from what is considered male or female.

## Conclusion

Based on the research presented above, there are numerous areas of contention when considering proper classification and medical treatment of intersex individuals from an Islamic bioethical viewpoint. As a purely biomedical concern, the question of the most appropriate time to treat an individual with a DSD is particularly significant. While clinicians and ethicists debate, there is no clear medical evidence for early intervention as opposed to a delayed intervention near or after puberty, except for cases of imminent or increased harm caused by delay in intervention of a DSD such as the increased rate of postoperative fistulas in treating older hypospadias patients (29). Meanwhile from an Islamic perspective, both the timing of and the criteria for medical intervention are also important. Although not all *fatāwa* opined on a timeline or clear decision maker for intervention, those that spoke to the concern in addition to jurisprudential text emphasized puberty as a milestone requiring waiting until an individual is old enough to make such decisions. This may additionally provide the benefit of improved physical and psychological health of intersex patients. Additionally, given that there is modern theoretical backing for gender variance beyond a strict binary, and precedent from traditional Islamic legal texts that indicate a gender beyond the binary, it is possible that in some cases a wholly accurate male or female designation cannot be made. Indeed where biological determination is inconclusive, it may be appropriate for an individual to carry on in life without fitting into a gender binary as male or female, and society should accommodate for this gender ambiguous position as something that is normal, even if not very commonly seen, as discussed in *Kitāb al Khunthā*. This idea may not be easily fit into all societies, including Muslim ones where a strict gender binary is deemed normative, but nonetheless Islamic texts presuppose the notion.

Our preliminary work also suggests some lines of further inquiry. For example, the Malaysian Ministry of Health suggests that Androgen Insensitivity Syndrome (AIS)

and Congenital Adrenal Hyperplasia (CAH) should be included as part of the definitions for “*khunthā mushkil*” (18). This judgement notes that both CAH and AIS are particularly difficult for the purposes of determining and assigning a single gender. Given this, can CAH and AIS widely be considered to be modern medical interpretations of *khunthā mushkil*, and are any other DSD classifiable as *khunthā mushkil*? Considering diseases are socio-culturally constructed and based on the techno-scientific vocabulary of the time, it is particularly interesting to consider updating the classical imaginary of *khunthā mushkil* with an enhanced biological vision from the modern age.

Additionally, another important area of investigation is to clarify the respective roles of the physician and the adult patient in determining medical need for gender assignment therapy. Some may argue that the physician should determine need based on biology, while others may suggest that the patient should determine need based on their psychological and identity needs. Hence just like in other areas of medicine, the debate between paternalistic models of the patient-doctor relationship and respect for patient autonomy would also be inflected into the intersex treatment debate. The question for researchers is- what are the Islamic stances on this debate? The *fatāwa* obliquely reference both ideals, further analyses should explicate out how each model may or may not fit within an Islamic moral framework.

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## References

1. Blackless M, Charuvastra A, Derryck A, Fausto-Sterling A, Lauzanne K, Lee E. How sexually dimorphic are we? Review and synthesis. *American Journal of Human Biology: The Official Journal of the Human Biology Association*. 2000;12(2):151-66.
2. Fisher A, Ristori J, Fanni E, Castellini G, Forti G, Maggi M. Gender identity, gender assignment and reassignment in individuals with disorders of sex development: a major of dilemma. *Journal of endocrinological investigation*. 2016;39(11):1207-24.
3. Thyen U, Richter-Appelt H, Wiesemann C, Holterhus P-M, Hiort O. Deciding on gender in children

- with intersex conditions. *Treatments in Endocrinology*. 2005;4(1):1-8.
4. Krisberg K. Meeting the Demand for Better Transgender Care aamc.org: AAMC News; 2018 [Available from: [news.aamc.org/diversity/article/meeting-demand-better-transgender-health-care/](https://news.aamc.org/diversity/article/meeting-demand-better-transgender-health-care/)].
  5. Kaltiala-Heino R, Bergman H, Työlajärvi M, Frisén L. Gender dysphoria in adolescence: current perspectives. *Adolescent health, medicine and therapeutics*. 2018;9:31.
  6. Levstik LS, Tyson CA. *Handbook of research in social studies education*: Routledge; 2010.
  7. Khan M, Marszal A. Pakistani clerics declare transgender marriages legal in Islam. *The Telegraphy*. 2016 June 26, 2016.
  8. Davies SG. *Gender diversity in Indonesia: Sexuality, Islam and queer selves*: Routledge; 2010.
  9. Idrus NI. *Gender Relations in an Indonesian Society: Bugis Practices of Sexuality and Marriage*: Brill; 2016.
  10. Kim KS, Kim J. Disorders of sex development. *Korean journal of urology*. 2012;53(1):1-8.
  11. What Is Intersex? Isna.org: Intersex Society Of North America; 2008 [Available from: [https://isna.org/faq/what\\_is\\_intersex/](https://isna.org/faq/what_is_intersex/)].
  12. Lee PA, Houk CP. Changing and Unchanging Perspectives regarding Intersex in the Last Half Century: Topics Presented in the Lawson Wilkins Lecture\* at the 2015 Pediatric Endocrine Society Meeting. *Pediatric endocrinology reviews: PER*. 2016;13(3):574-84.
  13. O'Connor M. THE TREATMENT OF INTERSEX AND THE PROBLEM OF DELAY: THE AUSTRALIAN SENATE INQUIRY INTO INTERSEX SURGERY AND CONFLICTING HUMAN RIGHTS FOR CHILDREN. *Journal of law and medicine*. 2016;23(3):531-43.
  14. Darul Uloom. *The System of Education Darul Uloom*: Darul Uloom; [Available from: [http://www.darululoom-deoband.com/english/sys\\_of\\_edu/index.htm](http://www.darululoom-deoband.com/english/sys_of_edu/index.htm)].
  15. Quduri A. *Al Qudūri Ma'a Sharah Al Mu'tasar Al-Darūri Karachi Maktaba al Bushra*; 2008.
  16. Van Den Branden S, Broeckaert B. The ongoing charity of organ donation. *Contemporary English Sunni fatwas on organ donation and blood transfusion. Bioethics*. 2011;25(3):167-75.
  17. Al-Funaysān. *Sex-Change Operation Before Converting To Islam* En.Islamtoday.Net Islam Today; [
  18. Mohamed MS, Noor SNM. Islamic bioethical deliberation on the issue of newborns with Disorders of Sex Development. *Science and engineering ethics*. 2015;21(2):429-40.
  19. Her outward appearance is like other girls but she does not have female organs; she has male organs. What should she do? *Islamqa .info: Islam Question and Answer*; 2016 [fatwa no. 193236]. Available from: <https://islamqa.info/en/answers/193236/her-outward-appearance-is-like-other-girls-but-she-does-not-have-female-organs-she-has-male-organs-what-should-she-do>.
  20. He Was Born Hermaphrodite and Needs a Sex Change Operation *Islamweb.net: Islam Web*; 2009 [Fatwa no. 193236]. Available from: [http://www.islamweb.net/emainpage/index.php?page=sh\\_owfatwa&Option=FatwaId&Id=12693](http://www.islamweb.net/emainpage/index.php?page=sh_owfatwa&Option=FatwaId&Id=12693).
  21. Ruling on marrying a man who is intersex or impotent, and the difference between them *Islamqa.info: Islam Question and Answer*; 2014 [fatwa no. 114670]. Available from: <https://islamqa.info/en/answers/114670/ruling-on-marrying-a-man-who-is-intersex-or-impotent-and-the-difference-between-them>.
  22. Fawdah. *Hukm al-Khunthā. Alexandria al Dār al Ālamīyah* 2009.
  23. When is it permissible to do a sex-change operation from male to female or vice versa? *Islamqa .info: Islam Question and Answer*; 2014 [fatwa no. 138451]. Available from: <https://islamqa.info/en/answers/138451/when-is-it-permissible-to-do-a-sex-change-operation-from-male-to-female-or-vice-versa>.

24. WHO. What Do We Mean By "Sex" And "Gender"?" <p class="MsoListParagraph" style="margin-top:1.3pt;mso-add-space:auto; text-indent:-.25in;line-height:200%;mso-list:l0 level1 lfo1">1. World Health Organization International 2017 [Available from: <http://apps.who.int/gender/whatisgender/en/>.
25. West C, Zimmerman DH. Doing gender. *Gender & society*. 1987;1(2):125-51.
26. Butler J. *Gender Trouble*. 1990. New York: Routledge; 1999.
27. Wood JT. *Gendered lives*: Nelson Education; 2012.
28. Rispler-Chaim V. *Disability in Islamic Law*. 1 ed: Springer; 2006 2006/11/16/. 187 p.
29. Korvald C, Stubberud K. High odds for freedom from early complications after tubularized incised-plate urethroplasty in 1-year-old versus 5-year-old boys. *Journal of pediatric urology*. 2008;4(6):452-6

## Appendices

<b>Table I: Online <i>Fatāwa</i></b>	
<i>Fatwa</i> Source	Question that originated the <i>Fatwa</i>
Islam Web	She has no womb and wants to marry <sup>1</sup>
	Division of Inheritance among 4 sons, 3 daughters, and a hermaphrodite child <sup>2</sup>
	Died leaving a full-brother and a hermaphrodite sibling <sup>3</sup>
	He was born hermaphrodite and needs a sex change operation <sup>4</sup>
	A hermaphrodite should be treated as an opposite sex from both sexes <sup>5</sup>
	Why Allah created hermaphrodite people <sup>6</sup>
	Operation for sex change <sup>7</sup>
	Washing the beard and running the fingers through in Wudhoo <sup>8</sup>
Islam Today	Sex-change operation before converting to Islam <sup>9</sup>
	Sex change operation <sup>10</sup>
Islam QA	Ruling on Marrying a Man who is intersex or impotent, and the difference between them <sup>11</sup>
	When is it permissible to do a sex-change operation from male to female or vice versa <sup>12</sup>
	He has Klinefelter syndrome; does he have to wear hijab? <sup>13</sup>
	Her outward appearance is like other girls but she does not have female organs; she has male organs. What should she do? <sup>14</sup>
	He had an operation to turn him from a man into a woman ("sex-change"). Can he be alone with women? <sup>15</sup>
	She changed her sex to male then she became Muslim <sup>16</sup>

1 ("She has no womb and wants to marry," 2014)

2 ("Division of inheritance among wife, 4 sons and 4 daughters," 2017)

3 ("Died leaving a full-brother and a hermaphrodite sibling," 2010)

4 ("He Was Born Hermaphrodite and Needs a Sex Change Operation," 2009)

5 ("A hermaphrodite should be treated as an opposite sex from both sexes," 2006)

6 ("Why Allaah created hermaphrodite people," 2005)

7 ("Operation for sex change," 2001)

8 ("Washing the beard and running the fingers through in Wudhoo'," 2014)

9 (Al-Funaysān)

10 (Al-Jar, 2016)

11 ("Ruling on marrying a man who is intersex or impotent, and the difference between them," 2014)

12 ("When is it permissible to do a sex-change operation from male to female or vice versa?," 2014)

13 ("He has Klinefelter syndrome; does he have to wear hijab?," 2014)

14 ("Her outward appearance is like other girls but she does not have female organs; she has male organs. What should she do?," 2016)

15 ("He had an operation to turn him from a man into a woman ("sex-change"). Can he be alone with women?," 2004)

16 ("She changed her sex to male then she became Muslim," 2011)



**Table II Supplemental *Fatāwa* From Medline and IMSE**

Original <i>Fatwa</i> Source	<i>Fatwa</i> Topic	Article Source of <i>Fatwa</i>
Fatwa Committee of the National Council of Islamic Religious Affairs Malaysia	Permissibility of genital reconstruction surgery in patients with DSD	1. The Islamic Perspectives of Gender-Related Issues in the Management of Patients with Disorders of Sex Development <sup>1</sup> 2. Islamic ioethical Deliberation on the Issue of Newborns with Disorders of Sex Development <sup>2</sup>
The Senior <i>Ulamā</i> Council Saudi Arabia	Consensus statement on intersex issues	Disorders of Sex Development: Diagnostic Approaches and Management Options- An Islamic Perspective <sup>3</sup>
The Islamic Fiqh Academy	The Issue of transforming the male into a female, and vice versa	Islamic Bioethical Deliberation on the Issue of Newborns with Disorders of Sex Development <sup>4</sup>
The Permanent Scientific Research and <i>Ifita</i> Committee Saudi Arabia	N/A	Islamic Bioethical Deliberation on the Issue of Newborns with Disorders of Sex Development <sup>5</sup>
Abd Al Rahman Muhammad Fawdah	The Ruling Regarding Intersex <sup>6</sup>	IMSE
Hātīm Ahmad Abbās	<a href="#">Human sex change and the position of Islamic law regarding it</a> <sup>7</sup>	IMSE
Haneef, Sayed Sikandar Shah Adb Majid, Mahmood Zuhdi Haji	Medical management of infant intersex:the juridico-ethical dilemma of contemporary Islamic legal response <sup>8</sup>	IMSE

1 (Zainuddin & Mahdy, 2017)

2,4,5 (Mohamed & Noor, 2015)

3 (Al Jurayyan, 2011)

6 (Fawdah, 2009)

7 (Abaas, 2011)

8 (Haneef & Majid, 2015)