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GENDER DYSPHORIA: A MEDICAL AND ETHICAL PERPLEXITY AS DISTINCT FROM REALITY AND THE RATIONAL APPROACH FOR MUSLIM YOUNG PEOPLE

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SUMMARY

Gender dysphoria (GD), a conflict between one's self-perceived gender identity and the biological sex has been a wholly enigma and a source of contention between experts of various disciplines since long. This is a narrative review of the medical literature utilizing PubMed, Scopus, and Web of science databases, on the social status of GD patients, their therapeutic options, as well as the medical and ethical debate on GD that are of especial interest to the Muslim readers.

Gender dysphoric patients or transgender people have a long history of social discrimination, marginalization, abuse, and neglect all around the world. Currently, large scale social developments supporting of transgender rights are rapidly underway in the west. Clinical evidence-based guidelines have also been published and are available for the management of GD, albeit with some medical and ethical concerns. On the other hand, the transgender community is continued to suffer profoundly in the developing and majority of Muslim nations, due to generalized unawareness, neglect, cultural and religious boundaries on this issue. Currently, Muslim youth or young adults are showing passionate interest in GD and are actively seeking information to comprehend its complexities, but they face more dilemma on this matter than the people in the West.

This article addresses and discusses key transgender issues and controversies and provides a logical explanation that demonstrates that GD is real medical condition needing attention and that its treatment guidelines are justified. We hope this article will stimulate a new and broader perspective in minds of young Muslims and will urge them to take pragmatic steps in alleviating the travails of long-suffering and neglected transgender community.

Key words: *gender dysphoria – transgender - Muslim countries - Islamic countries - Muslims*

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INTRODUCTION

Gender dysphoria (GD) (previously known as gender identity disorder) is defined as an extremely distressful psychological condition evolving from a person's perception that they are "trapped" in a wrong body and belong to the opposite sex (American Psychiatric Association 2013). For instance, a male with GD strongly believes or feels that he is a woman and similarly with a female experiencing GD. The intense emotional pain associated with GD may be severe enough to cause functional impairment in peoples' lives. Gender dysphoria patients are commonly referred to as *transgender* (American Psychiatric Association 2016).

Recently, GD awareness is growing; Western countries are opening up to transgender people and talking about the issues that transgender folk experience. Socio-political reforms favoring transgender rights are rapidly taking place in the West and medical assistance is freely accessible to those opting to transform their bodies in line with their gender expression (National Gay and Lesbian Task Force 2008, Reisner et al. 2015a). Undoubtedly, major changes are observable in the West, but a breakthrough acceptance or awareness is still far away. Similar to the situation elsewhere in the world, GD has been contested and is a culturally sensitive topic in Muslim societies (Ishak & Haneef 2014, Saeed et al. 2018). Awareness about GD varies dramatically among Muslim countries with some showing legal acceptance; some rejection and others simply choose to remain oblivious to the existence and needs of transgender folks (Polat 2005, Wong 2012, Saeed et al. 2018)

Retrospectively, a vast majority of Muslim countries have had shunned transgender discussion and mention of transgender people altogether as evidenced by a stark lack of research output and media coverage of any sort on this matter. Recently, younger generation of Muslim youth or young adults are showing keen interest in understanding and learning about GD, but simultaneously, they are confounded by diametrically opposing religious and sociocultural transgender views within Islamic denominations (Ishak & Haneef 2014). Therefore, understanding the complexities of GD is far more challenging for young Muslims than the people in the West (Saeed et al. 2018). No wonder, that many Muslims are still dubious and question the legitimacy of GD. This article provides a synopsis of transgender people or GD patients – their reality, social and medical status followed by major medical and ethical views and controversies on GD, to the Muslim readers. Moreover, the article will discuss and analyze some key points that are of special interest to the younger generation of

Muslims based upon our observation and experience in Islamic societies. The tem "young" or "young people" will be used throughout this essay to refer to people who are 16-30 years of age.

METHODS

A non-systematic literature review was conducted through PubMed, Web of science and Scopus databases to search English language articles that covered topics relevant to our objectives i.e. GD definition, related terminologies, medical management, social and health status of transgender community, medical and ethical controversies on GD. All selected articles were published between the periods of 1960 to 2020.

DEFINITIONS AND SOME TERMINOLOGIES

Oftentimes people use the words *sex* and *gender* indiscriminately in some cultures, like Middle Eastern or Indian subcontinent, without paying attention to the connotation or the implications thereof. Therefore, it is important to define these two terms for the readers of this article.

Nature has created humans, principally, as males and females, but based on their behavior or gender expression, humans are also categorized as men and women. In most societies, males are defined as men and females as women - the so-called binary system of human existence (Wong 2012). However, in reality and rarely, this idyllic social model is disrupted when a puzzling scenario appears and a male passes himself as a woman and vice versa. Such people are termed as non-binary, gender nonconforming, gender atypical, gender variant or colloquially transgender or trans (Richards et al. 2016, Hyde et al. 2019). Many different variants of transgender people exist to date based on their behavioral profile as shown in Table 1 (American Psychiatric Association 2013).

Notably, not all variants of transgender people suffer from GD as explained later under etiology (Levine 2018). Transgender folks who experience GD are greatly uncomfortable or agonized about the conflict between their gender and natal sex and seek sex change therapy (Joseph et al. 2017). This article is focused exclusively on transgender with GD and any mention of transgender would imply those with GD.

THE REALITY OF GENDER DYSPHORIA (GD)

People with uncharacteristic gender behavior, lifestyle or mannerism, have existed in human societies since inception and are mentioned in the Scriptures [The Holy Bible: Isaiah 56: 4–5 & John 7:24; The Holy Quran: 4: 119] (Zurada et al. 2018, The Holy Bible 1989, The Holy Quran). In many Muslim cultures, there is not much awareness about the diversity of sexual and gender configuration, and the intersex, transgender, and homosexual individuals, are all viewed as the same thing, which is not the case (Jami 2005). Homosexual males or females are sexually attracted to members of their own sex but their gender identity is fully congruent with their sex. In contrast, most transgender people are heterosexuals because their sexual orientation is driven by their gender and not the biological sex (Nieder et al. 2011, Fein et al. 2018). Intersex people, on the other hand, have abnormalities of sexual development, and have ambiguous chromosomal or genitalia (Mouriquand et al. 2016).

Etiology of GD

Gender dysphoria has been an enigma as regards its etiology. Whether transgender behavior is an inherent feature or an acquired one, it is still being investigated. Numerous theories have been proposed to link its origin to genetic, hormonal, neurobiology, psychological or environmental factors (Berglund et al. 2008). The most convincing hypothesis is that alterations in prenatal hormonal exposure to developing fetus might induce some neuronal differentiation, which is responsible for GD (Mouriquand et al. 2016, Swaab 2017).

Scientists also believe that environmental factors, such as family, lifestyle, cultural, and social values might also predispose a person to become transgender (Marantz & Coates 1991). However, none of the above theories have been proven on concrete grounds and further research is ongoing, to date. It is worthwhile noting that sometimes people adopt conflicting identity, temporarily or permanently for entertainment or commercial reasons and such people typically suffer no dysphoria about living or posing as the other gender (Levine 2018).

Table 1. Definitions of some common gender variants

Gender Expression	Definition
Gender queer or gender fluid	Whose gender identity is unstable
Bi-gender	Those who experience two different gender identities
Transvestites	Those who cross-dress for psychological satisfaction, but the term is not really a term used anymore.
Transsexuals	Those who are or have already been through sex change therapy, commonly known as gender confirming surgery.
Cis-gender	Whose sex and gender are in harmony by social standards or their interior disposition is congruent with their exterior demeanor, like majority of the human population.

Global Status of Transgender People

Below is a glimpse of the way transgender people are faring on a global stage, in two categories: socio-economic status and health status.

Socio-economic status

A thorough and comprehensive academic review of the literature points to a bitter reality that transgender people are profusely abused, maltreated, disrespected, stigmatized, overtly or covertly, virtually in all societies (Grant et al. 2010, United Nations 2011, Bostwick et al. 2014). Data show that about 90% of transgender people are harassed and 25% have experienced physical assault because of their gender expression (Kosciw et al. 2012).

Discrimination to transgender is exhibited everywhere whether it is an educational institution, healthcare center, employment sector or a place of worship (Kosciw et al. 2012, Bostwick et al. 2014). Professor Canales, succinctly describes transgender folks as "*the most maligned, misunderstood, and marginalized group*" in one of his numerous articles (Canales 2018a,b). Currently, Western societies are recognizing and are steadily becoming more tolerant of transgender issues by implementing trans friendly civil and legal policies, passing non-discrimination laws to provide protections for transgender people in employment, education, and healthcare (Transgender Law and Policy Institute 2012).

Health status and statistics

Numerous reports have also demonstrated that the transgender population is at 2-3 times higher risk of psychiatric illnesses such as anxiety, depression, social phobia and adjustment disorders compared to their cisgender peers secondary to the host of internal and external stressors shown in Figure 1 (Gómez-Gil et al. 2010, Reisner et al. 2015b). As direct result of experiencing marginalization, transgender people also have a high prevalence of substance abuse and suicidal behavior with 41% has actually attempted suicide in their lifetimes (Grant et al. 2010). It is also been reported that HIV risk is much higher in transgender population compare to the general population (Wilson et al. 2009).

Transgender people in Muslim countries

The state of affairs for transgender people in Islamic socities is not any different from the rest of the world, and perhaps it is far worse in some developing Muslim countries. Our literature review discovered that social and economic states of transgender people are deplorable in Malaysia, Indonesia, Pakistan and are marked by poverty, marginalization, abundant stigmatization, hatred, violence, neglect, lack of education, healthcare, employment opportunities etc. (Gibson et al. 2016, Saeed et al. 2018, Shah et al. 2018). High prevalence of human immunodeficiency virus and other sexual transmitted diseases among local transgender people in these developing nations is a major public health issue that have raised international concern (Akhtar et al. 2012, Wong 2012, Gibson et al. 2016, Barmania & Aljunid 2017, Vijay et al. 2018, Mitchell et al. 2019, Akhtar et al. 2020, Robbins et al. 2020). Unfortunately, most data on transgender people has been reported by a few Muslim countries, i.e. Turkey, Iran, Malaysia, Indonesia, Pakistan, and Nigeria.

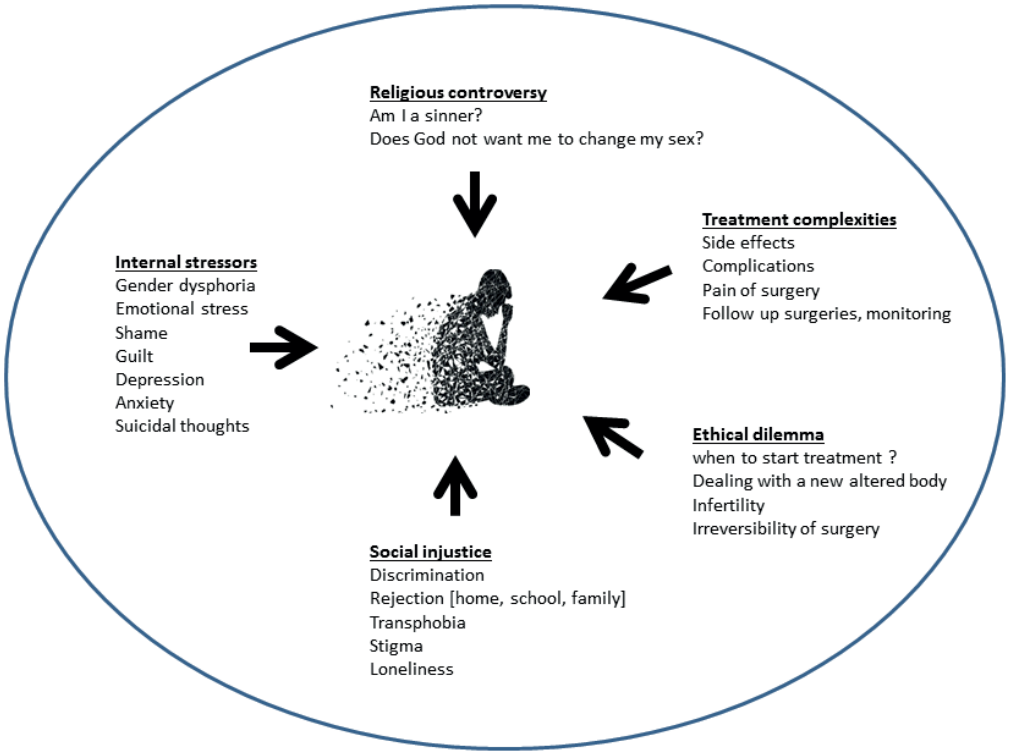

Figure 1. A depiction of the conglomerate of stressors for gender dysphoric patients

There is minimal or no representation of transgender people from Arab nations or the rest of the Muslim countries indicating a generalized negligence or lack of attention on transgender matters in these countries. To date, only three Islamic countries, Turkey, Iran, and Egypt legally recognize GD as a medical condition and offer medical management or sex change therapies to those seeking ways to align their bodies with their psychological feelings to adjust to society's standards (Turan et al. 2015, Mazen 2017, Valashany et al. 2018). Pakistan has also recently granted its transgender citizens the rights of their gender expression regardless of their natal sex (Shah et al. 2018). Legally, the transgender community does have legitimate rights and a functional support system in Turkey, Iran and Pakistan. Nevertheless, the burden of social stigma and discrimination for transgender people is still a reality and is felt at all levels in these countries (Polat 2005, Saeidzadeh 2016).

VARIOUS VIEWS ON GD AND ITS MANAGEMENT

Understanding the root causes of the controversy regarding GD is paramount. The debate in medical and ethical disciplines that GD has provoked is extensive. The religious debate on GD is a substantial area and is beyond the scope of this article. Readers are briefly reminded that like Christian and Jews scholars, Islamic religious leaders also hold both conservative and liberal views on GD and its management (Ishak & Haneef 2014). Except for Egypt, Turkey and Iran, the rest of the Islamic states have prohibited sex change treatment to cure GD.

Medical views and controversies

Initially, GD was considered a psychiatric condition (Bancroft & Marks 1968, Green & Money 1969). However, after years of research, experts in the field are now convinced that GD is neither a mental or psychiatric illness nor a personal choice; rather it is an inherent conflict between one's gender and sex that warrants intervention (Reisner et al. 2015b). Retrospectively, all other modalities including behavioral and psychotherapy approaches attempting to conform patient's feeling of self-perception to align to a person's natal sex have proven unsuccessful (Bancroft & Marks 1968, Green & Money 1969).

Evidence based management guidelines

World Professional Association for Transgender Health [WPATH]," have established and published evidence-based treatment guidelines for GD (Coleman et al. 2012).

According to these guidelines, the management of GD is aimed at alleviating the dysphoria or distress associated with the feelings of gender incongruence rather than attempting to conform patient's feeling of self-perception to align to a person's natal sex (Coleman et al. 2012). Therefore, at present, the gender confirmation or affirmation or sex reassignment therapies (SRT), seem to be the only authentic option in relieving GD (Meyerowitz 2009). Table 2 presents diagnostic criteria for GD in adults and children (Zucker et al. 2016).

It is apparent from a glance at the stepwise sequence of the treatment process shown in Figure 2 that SRT are quite an elaborate process. Given the extensive nature of the SRT, clinicians must ensure that the patient understands the protocols, and the short-term and long-term benefits, difficulties, and consequences of SRT. On the other hand, prescribers are also cautioned that after diagnosis of GD is established, any barriers or restrictions to SRT can culminate in devastating consequence for patients (Gridley et al. 2016, Wright et al. 2018).

Initiation of SRT require meticulous evaluation by at least two health care professionals specializing in sex/gender issues to confirm the diagnosis of GD. After initial evaluation, GD patients are started on hormones treatment. Subsequent to adequate hormone therapy, which normally lasts 1-2 years, patients can proceed for surgeries. Before the surgeries, patient is asked to provide an evidence of social adaptability to a new gender role by dressing and living like a member of the desired sex. After passing all above criteria, only then the patients are deemed fit for surgical procedures (Coleman et al. 2012).

Sex change surgeries are complex, multi-step procedures with a range of major and minor procedures that mandate postsurgical follow-ups and medical care for life (Table 3) (Coleman et al. 2012).

Table 2. Diagnostic criteria for gender dysphoric children and adolescents or adults

	Children	Adolescents/Adults
Common diagnostic features	Presence of a marked conflict between one's gender and the assigned sex at birth combined with significant distress and functional impairment for at least 6 months.	
Age specific features	• Insistence on being the other sex • Showing strong predilection for choices in clothing, toys, and playmates similar to the opposite sex children	The strong urges (desires), • To be treated as the person of the other sex • A strong desire for the primary and/or secondary sex characteristics of the other sex • To get rid of one's sexual features

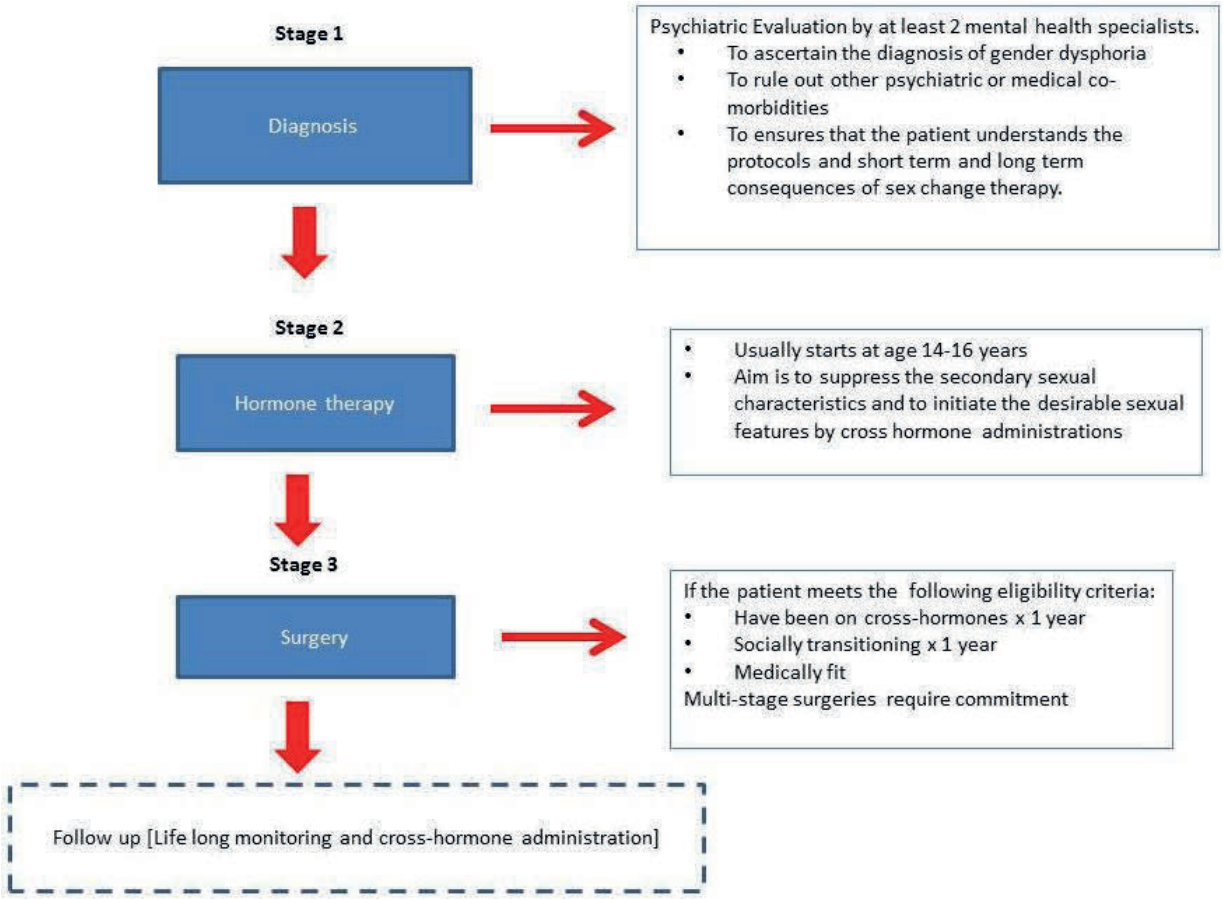

Figure 2. World Professional Association for Transgender Health [WPATH] recommended stepwise approach for GD management

Table 3. A few examples of common transgender surgeries

Surgical Procedures	Male to Female	Female to Male
Major	• Penectomy • Orchiectomy • Vaginoplasty • Clitoroplasty • Vulvoplasty	• Mastectomy Hysterectomy/Oophorectomy • Vaginectomy • Metoidioplasty Phalloplasty • Scrotoplasty • Erection and/or testicular prostheses
Cosmetics	• Liposuction/Lipo filling • Voice surgery • Thyroid cartilage reduction • Gluteal augmentation • Hair reconstruction	• Liposuction/Lipo filling • Voice surgery • Thyroid cartilage enhancement • Pec-toral implants • Forehead or check augmentation • Rhinoplasty, chin and jaw recontouring

The WPATH has set a very well-defined and standardized criterion for the diagnosis and treatment of SRT. The aim is to ensure that only transgender patients with intensely painful psychological feelings arising from the sex and gender mismatch are offered SRT. Simultaneously, it is also desired that GD patients should not be denied their right of changing their sex to normalize their lives.

Medical concerns with sex reassignment therapies

Successful SRT are, undoubtedly, commendable scientific achievements in restoring a person's gender dysphoric feeling; they are not without risk and caveats. It is wise to briefly discuss some points of concerns associated with SRT.

Hormonal therapies are reversible and seemingly serve to reinstate the psychological well-being of children, youth and young adults (Corley et al. 1981, Hembree et al. 2017). However, the side effects of hormone therapies, albeit manageable require close monitoring. Current safety data on the hormone agents has mixed findings, though studies showing benefits outnumber the studies showing harm or serious side effects (Viner

et al. 2005, Weinand & Safer 2015, Hembree et al. 2017). Similarly, the outcomes of sex change surgeries are highly questionable with some studies showing improvement in patients' quality of life and life satisfaction and others demonstrating high mortality rates, dissatisfaction, substance abuse, and poor quality of life with physical, and role limitations even 12-15 years after surgeries (Kuhn et al. 2009, Mur et al. 2010, Wierckx et al. 2011, Simonsen et al. 2016, Zeluf et al. 2016, Simbar et al. 2018, Fallahtafti et al. 2019). However, the surgical outcome depends on the nature of the procedure involved and the general health status of the patient (Djordjevic et al. 2019, Schardein et al. 2019).

Unfortunately, until now we lack reliable, well-designed, long-term studies with statistically significant data. Most of the studies in this arena suffer from methodological limitations, lack of right matching control, or small sample size inadequacies, which render conclusion less reliable (Levine 2018). All things considered, further investigation is required to gain clarity on the durable outcomes of SRT.

Ethical views and limitations

The complexity of GD does not culminate merely in scientific domains but extends to the ethics surrounding its management as well (Levine 2018). Followings are some points of ethical concern:

Optimum time to start therapy

The first ethical impasse to manage GD is to determine the right time to initiate therapy in children or adolescents. Not only the children's autonomy is questionable at immature age; it is inconclusive if children are able to fully comprehend the repercussions of the medical and surgical interventions to give their informed consent (Bizic et al. 2018). On the other hand, delaying the treatment is highly likely to intensify the dysphoria related depression, anxiety, suicidal ideation, and subject the trans person to embarrassment, harassment, and feeling of incompleteness (Giordano 2008).

Post-surgery regrets

There are reports and incidents of people experiencing postsurgical regrets. The major risk factors are named as wrong GD diagnosis, poor psychiatric evaluation, unsatisfactory aesthetical or functional outcome of the newly created sex organs, lack of family support and feelings of guilt due to religious affiliations (Djordjevic et al. 2016). Unlike the hormone therapy, surgery is irreversible and this fact heightened the sensitivity of surgical interventions.

Infertility is a concern for patients

A highly emotional ethical predicament for transgender young people is to choose between their sex transition and retaining their reproduction ability. Not only cross-hormone therapy temporarily impedes the infertility, surgical hysterectomy or orchiectomy can permanently deprive trans youth of the potential to bear their own off springs (Bizic et al. 2018). Since a vast majority of transgender adults aspire to have children, WPATH guidelines mandate that patients be fully and thoroughly informed of this major consequence of the SRT. Fortunately, some alternative options such as cryopreservation of the oocytes, sperms, or gonadal tissues are available that transgender can count on to procreate after SRT (Bizic et al. 2018, Ellis et al. 2015).

Briefly, opting for the surgery is a significant ethical dilemma for the GD patients, their families and as well as the surgeons.

DISCUSSION OF A RATIONAL APPROACH TO GD CONTROVERSIES

In this section, we will discuss and try to logically explain the perplexing questions that linger in the minds of many in the Eastern and Middle Eastern culture.

Is GD real?

Since scientists do not know with exact certitude the causes of GD, it is difficult to pinpoint its origins. Well, after seeing so many worldwide cases, it is difficult to deny the legitimacy of GD. The etiology of many other diseases such as multiple sclerosis, fibromyalgia pain, Alzheimer disease, cancer, and the primary hypertension is also unknown. Therefore, it should not be difficult for us to acknowledge another "mystery condition" like GD. The overall global prevalence of GD patients is unknown due to underreporting and possible shame associated with the condition in Islamic culture (Shumer 2016). Still, data obtained from Western countries demonstrate that a significant number of people self-identify themselves to be transgender people, for instance, 0.6 -1.4% in USA; 0.4 % in UK and 0.03-0.08% in Netherland, respectively (Van et. al. 1996, Conron et al. 2012, Ellis et al. 2015). Among Muslim countries, Iran and Turkey have published sizable number of articles on GD. With all of that information, it is hard to deny the legitimacy of GD. People might disagree whether GD is a physical, mental, or psychological issue, but it a real and legitimate medical perplexity.

What is the right treatment for GD?

Seemingly, most of the controversy, dilemma, and ethical concerns about GD revolve around its proper therapy; liberal-minded people corroborate the scientific facts and approve the evidence-based therapy for GD, while conservatives voice against SRT principally on religious or ethical grounds. Essentially, there are only two possible treatment options: (1) change the mind [psychotherapy] or (2) change the sex [hormone and surgical treatments].

Is psychotherapy the right approach?

Perhaps, conservatives would suggest that counseling and psychotherapy based conversion therapies are more appropriate for GD patient [to align their feelings to their natal sex]. As previously mentioned, studies have proven the futility of all such therapies including behavioral, spiritual, religious, and electro-convulsant techniques or the use of psychiatric medicines. Cultures that promote coercion policy to suppress any atypical thoughts result in seeing GD patients who suppress and conceal their gender expression and suffer internally (Reisner et al. 2015a). This does not seem to be a viable solution of ethical care or patient care within the medical community.

Interestingly, some studies do suggest that 10-20% of children exhibiting GD like symptoms grow out of it during their adolescent or adult years (Hembree 2011). However, it would be wise to remember that our knowledge of GD is still evolving and much is still unknown. It is possible that those percentages of children were misdiagnosed and were transiently influenced by environmental factors.

Is sex reassignment therapy the right approach?

Sex reassignment therapies are exactly the medical procedure that a person struggling with GD desires; science supports such treatment and religious progressives agree. If SRT can be accomplished uneventfully, it will be an ideal scenario. But given the complications, regrets and guilt with the therapy, there is certainly a need to develop better, safer scientific techniques for SRT. It is wise to keep in mind that the two major causes of regrets after surgery or before surgery are the guilt of disobeying God and familial rejection, and not the SRT per se (Safavifar 2016). Both of these factors are only related to our hardline attitude toward SRT. Reports also indicate that the process of SRT, however, can by facilitated by the family support and care, not to mention the empathy, compassion, understanding, kindness, and love of the whole community that can make the entire process much more endurable (Polat 2005, Fallahtafti et al. 2019).

Hopefully, the more reliable SRT procedures will be invented in the future. Good news is that the stem cells are on our door steps and scientists have already formed autologous organs in laboratories (Iannaccone et al. 2018, Becherucci et al. 2018). It is only a matter of time when organs can be regenerated and implanted to humans (Atala 2013). We should be hopeful that humans can achieve this.

REFLECTION

This point is a moment of reflection for all to ponder. Above, illustrates the way transgender people have been and are still being treated in the world. Abuse, violence, injustice, discrimination, neglect, rejection, deprivation are all part of transgender lives only because of their atypical appearance. It is only now that the medical science has provided transgender people the opportunity to amend their misaligned bodies to live normal lives and blend in a society. Unfortunately, in many Muslim societies transgender folks are ignored altogether; their existence is known, but no steps are taken to normalize them in society or alleviate their plight.

Transgender people deserved to be given the choice to make decisions about their lives. It is time that we reconsider our behavior toward trans people, and change our minds on the ways we can accept them and assist them in their journey to treatment.

FUTURE DIRECTION

Two vital factors contribute to pitiful conditions for transgender people in the Muslim world: generalized unawareness and myopic religious views. Both factors demand a high caliber, multi-faceted, research on the transgender issues in Muslim countries. Scientific studies and theological research to highlight the root causes of transgender or GD, identify the merits or demerits of SRT, and to address the physical or psychological needs of the transgender people should be a research priority for Muslim countries. Collaborative research and dialogue will raise public understanding of transgender conditions, and will set the foundation for social reforms in Muslim countries to grant transgender people their human rights.

CONCLUSION

Gender dysphoria has always been a puzzling and controversial phenomenon worldwide.

In most Muslim countries, GD has been considered a far more complex and culturally sensitive subject as compared to the West. The discussion of GD treatment in these Muslim countries has been ignored since long. Consequently, in the trans community there is suffering on many counts, in silence, for years without any platform to voice their physical and psychological needs. Recently, Muslim young people seem to be interested in broaching upon transgender related topics. Through this article, we offer young people a glimpse into GD along with the global status of those living it, and the current medical and ethical dilemma surrounding it. We hope this discussion is logical, and our Muslim readers will be able to glean that GD is a real medical issue and deserves treatment. Whether the medical procedures are complicated, reliable, right or wrong, under the circumstances, we would be wise to let the trans person decide for themselves and be supportive to them either way. Raising more public awareness, initiating active research, and changing “our minds,” rather than that of GD patients, can bring forth a swift, happy, and peaceful solution to this suffering minority population.

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Contribution of individual authors:

Najla Taslim conceptualized, designed and drafted this article.

Arthur D. Canales provided mentorship supervision for the writing and conceptualization of this article besides editing and revising the document.

Shrooq Mohamed T. Alshehab provided insightful ideas, helped in literature search and articles selection.

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