

## Original research

**Demographic characteristics of male to female Gender Identity disorder cases followed up in Legal Medicine Organization of Isfahan**

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**Abstract**

**Introduction:** Gender identity disorder is a sexual dysfunction. It is believed that complex biological and psychological processes and genetic factors are involved in its development. Despite the number of transgender people, not enough documented demographic report are available due to social and religious restrictions. The aim of this study was to investigate whether some demographic factors in gender identity disorder differ from male to female.

**Research methods:** Questionnaires were completed by 30 men with gender identity disorder who had referred to the psychiatry department of Isfahan Forensic Medicine for the legal procedures of gender reassignment. The information of the questionnaires includes age of referral, age of gender reassignment, family history, self-satisfaction, source of information about transgender identity, family acceptance, social acceptance, marital status, desire to marry, level of education and employment status. The data were analyzed using  $\chi^2$  and Fishers exact test with SPSS version 23.

**Findings:** Most of the participants underwent gender reassignment between the ages of 18 to 28 and most were satisfied with their new gender identity. The majority of participants were single and wanted to get married after gender reassignment. The education of the majority of the participants was diploma or sub-diploma level of education and most of them were job seekers. Statistical analysis declared a significant relationship between the support and acceptance of the family and self-satisfaction rate ( $p < 0.05$ ).

**Conclusion:** This study provides valuable insights into the demographic characteristics of male-to-female transgender individuals in Isfahan, Iran. The early onset of gender dissatisfaction, the desire to marry after gender reassignment, and the relatively low level of education of people with gender identity disorder are among these.

**Key Words:** Demographic data, Gender identity disorder, Male-to-female transgender

**Received:** 2024/5/22

**Accepted:** 2024/9/18

**Citation:** Hasanpoor A, Dehghani Ashkezari M, Sifati SM, Seyyed Frootan F. Demographic characteristics of male to female Gender Identity disorder cases followed up in Legal Medicine Organization of Isfahan, Family and health, 2025; 15(1): 76-82

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## Introduction:

Gender identity is a fundamental aspect of a human's life that refers to a personal feeling of being male, female, or something else. Trans-sexuality, which is known as gender dysphoria, reflect a complex interaction of biological, psychological and social factors and refers to the significant distress between a person's sexual identity and his apparent gender at birth (1). People with male-to-female gender identity disorder (MTF) experience gender dissatisfaction, in which they recognize themselves as female, but their gender was identified as male at birth. The exact cause of gender dysphoria is unknown, but complex biological, psychological, and genetic factors are believed to be involved (2).

Obtaining accurate demographic data of gender dysphoria worldwide remains challenging. The term trans-sexual is not universally used and the social label discourages some people from seeking diagnosis. Large-scale studies on the frequency of these individuals are limited. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) does not provide a comprehensive and accurate rate (1). However, there are estimates: a 2022 US study suggests that a total of more than 1.6 million adults (18 and older) and youth (13-17 years old) are identify as transgender in the US. It is estimated that 0.5% of US adults (about 1.3 million adults) and 1.4% of US youth (about 300,000 youth) between 13 to 17 are defined as transgender. Out of the 1.3 million adults who are identified as transgender, 38.5% (515,200) are transgender women, 35.9% (480,000) are transgender men, and 25.6% (341,800) have sexual dissatisfaction (3). A Dutch study presented a range of 0.005% to 0.014% for gender dysphoria in biological males and 0.002% to 0.003% for biological females (4).

Despite the increasing recognition and acceptance of Trans genders all over the world, social and religious restrictions have prevented the documentation of demographic data of affected people in many regions, including Iran. Understanding the demographic characteristics of people with male-to-female gender identity disorder can provide valuable insights into their experiences, their needs in the local context, and the challenges they face. While public attention to this disorder has increased, documented population reports are rare, especially in Iran, due to social and religious restrictions (5). Understanding the prevalence and demographic characteristics of gender dysphoria is essential to inform policy makers, health care practices, and support services for transgender and gender identity disordered individuals worldwide. This study was conducted with the aim of investigating the demographic characteristics of male-to-female transgender people applied for gender reassignment in Isfahan, Iran.

## Research Methods:

This research was descriptive-analytical and retrospective. The population of the study was the people with gender identity disorder who had psychiatric evaluation done at Isfahan Forensic Medicine Center between 2015 and 2020, and the study was carried out in the form of a census. The inclusion criteria were confirmation of gender dysphoria by the psychiatric staff of Isfahan Forensic Medicine, the presence of complete information in the people's files, the willingness of cooperation, at least 2 years of psychotherapy and specialized counseling by the Forensic Medicine, at least 3 years from gender reassignment permission, and at least 2 years from gender reassignment. Exclusion criteria included having other mental illnesses. After passing the inclusion and exclusion criteria, the study population was 30 people. In order to comply with ethical considerations, the participants were given brief information about the purpose of the research, and the questionnaires were completed in the form of an interview. Independent variables were age, age of first experience of gender identity disorder, age of gender reassignment, family history of transgender identity, source of information

about transgender identity, acceptance of transgender identity by family, social acceptance of transgender identity, marital status, willingness to marry in the future, level of education, and employment status. Dependent variable was personal satisfaction with gender identity. The obtained data was analyzed using  $\chi^2$  statistical test and Fishers exact test with SPSS software version 23.

### Findings:

The demographic characteristics of the study population was as follows:

The majority (57%) of participants were between 18 and 28 years old, while 43% were between 29 and 38 years old. 33% of the participants were employed, 40% were unemployed and 27% were not actively seeking of a job. 80% of the participants had a high school degree or lower and 20% had a university degree.

57% of participants reported that their families accepted their transgender identity, while 43% were disappointed by their families. 97% of single participants expressed their desire to marry in the future, while only 3% disagreed. 83% of the participants were single and 17% were married.

90% of the participants reported that they had experienced transsexual tendencies before the age of 12, and only 10% had experienced these feelings in the 2 years leading up to the referral for gender reassignment. Even some participants had experienced transgender tendencies at a very young age (before 7 years old). 40% of participants had undergone gender reassignment surgery between the ages of 18 to 28, 23% between the ages of 29 and 38, and 37% were still in the pre-transgender stage at the time of the study. . Only 10% of participants reported a family history of transgender identity. 43% of participants learned about transgender identity from a psychologist, 37% from friends, and 20% from literary sources. 80% of participants who underwent gender reassignment felt completely satisfied with their gender identity (N=15), while 20% (N=4) reported moderate satisfaction. 63% of participants experienced high levels of social acceptance, while 37% reported low levels of social acceptance.

The results of  $\chi^2$  and Fishers exact test show that there is no significant relationship between age, occupation, education, marital status, gender reassignment age, age of first experience of gender identity disorder tendencies with the level of satisfaction after gender reassignment ( $p>0.05$ ). However, there was a significant relationship between family support and acceptance with the self-satisfaction after gender reassignment ( $p<0.05$ ). The results of descriptive and analytical statistics are summarized in Table 1.

Table 1: Demographic characteristics of the study population and its relationship with self-satisfaction after gender reassignment

Variable	Group	Frequency	Percentage of frequency	Statistic	p-value
Age	18 to 28	17	57%	1.89	0.75
	29 to 39	13	43%		
Occupation	Occupied	10	33%	3.8	0.87
	Unoccupied	12	40%		
	Not job seeker	8	27%		
Education	Below high school	24	80%	4.59	0.59
	Above high school	6	20%		
Marital status	Single	25	83%	2.51	0.64
	Married	5	17%		
	18 to 28	12	40%	2.05	0.35

<b>Gender reassignment age</b>	29 to 39	7	23%	13.1	0.04
	In the process	11	37%		
<b>Family acceptance</b>	Accepted	17	57%	26.53	0.43
	Not accepted	13	43%		
<b>Age of first experience of gender identity disorder</b>	Below 12	27	90%	13.1	0.04
	Above 12	3	10%		

## Discussion and conclusion:

In this research, an initial examination is conducted to analyze the demographic traits of male-to-female transgender individuals seeking gender reassignment in Isfahan. Gender dysphoria, which involves experiencing considerable distress because of a conflict between a person's gender identity and the gender they were assigned at birth, is a multifaceted issue that exhibits different prevalence rates across the globe (1). The estimated prevalence of sexual dysfunction, as per the DSM-5, is relatively low, with rates ranging from 0.005% to 0.014% among individuals assigned male at birth and 0.002% to 0.003% among those assigned female at birth. However, these statistics might not fully capture the actual prevalence due to factors like social stigma, discrimination, and underreporting. Studies indicate that sexual dissatisfaction impacts individuals of various ages, ethnicities, and socioeconomic backgrounds (6, 7).

The results of our study indicate that a significant number of individuals experienced gender incongruence from a young age, with most of them being diagnosed with gender dysphoria before turning 28. The early onset of sexual dissatisfaction identified in our study aligns with previous research findings (7), underscoring the significance of early detection and support for individuals grappling with gender dysphoria. Furthermore, our study underscores the importance of professional assistance for individuals with male-to-female gender dysphoria. Nearly half of the participants obtained information about transgender identity from mental health professionals, showing the crucial role of such professionals in providing guidance and support in this area.

The research indicates varying degrees of familial and social acceptance among those with male-to-female gender identity disorder. Despite the majority expressing contentment with their new gender identity, encountering acceptance within their social circles and families proves to be a significant challenge. Though many respondents indicated experiencing acceptance within their social and familial circles, some encountered rejection. Nearly half of the participants in the study faced disapproval from their family members. Ambiguity within the families of origin of individuals with gender identity disorder appears to be a common occurrence (8).

The mental and physical health of transgender adults is greatly impacted by this issue. At the same time, these individuals stated that they experience fairly positive social acceptance. These results highlight how the experiences of transgender individuals are shaped by the intricate interaction of personal identity, family dynamics, and societal standards. This underscores the importance of raising social awareness and providing education about gender identity disorder (9).

The significant desire to get married, despite being mostly unmarried, underlines the potential significance of social changes to support the marriage of transgender individuals. Furthermore, this research brings attention to the educational and professional obstacles faced by male-to-female transgender individuals in Isfahan. The majority of individuals had limited education and encountered unemployment or inadequate employment opportunities. This emphasizes the necessity

for specific measures to enhance educational and job prospects for transgender people, consequently promoting increased social involvement and financial empowerment. Additionally, further investigation is essential to examine the potential connections between recognized demographic factors and genetic and epigenetic indicators linked to gender identity disorder.

The research offers important information about the demographic traits and encounters of individuals with male-to-female gender identity disorder in Isfahan, Iran. By gaining an understanding of the specific difficulties that this group faces, policymakers, healthcare providers, and the society as a whole can collaborate to find ways to establish supportive atmospheres for these individuals in the nation.

**Limitations:** The study is limited due to the relatively small sample size and the reliance on self-reported data. Focusing on a specific geographic location may not fully represent the population of people with male-to-female gender identity disorder in Iran. Future research with larger and more diverse samples is needed to obtain a more comprehensive picture. Additionally, exploring the biological and genetic factors associated with sexual dysfunction can offer further insights.

**Ethical considerations:** The ethical principles of research outlined in the Helisenki statement as well as the protection of client and participant confidentiality were given paramount importance by the authors of this article.

**Financial resources:** The Legal Medicine Research Center provided parts of funding for this research under contract number 170760.

**Acknowledgment:** We are grateful to the Isfahan Forensic Medicine Center for providing the equipment and providing the research environment for this study.

**Contribution of authors:** This research is adopted from a part of the doctoral thesis of cellular and molecular biology of the first author, Ms. Azadeh Hasanpour. Dr. Mahmood Dehghani Ashkezari, the first supervisor, and Dr. Farzad Seyed Forootan, the second supervisor, designed the research. Dr. Seyed Morteza Seifati was the project consultant and analyzed the data.

**Conflict of interest:** All authors declare that there was no conflict of interest. The sponsors had no role in the study design, data collection, data analysis or interpretation, drafting of the article, or decision to publish the results.

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