

Research Paper

Demographic Characteristics and Personality Disorders in People With Gender Dysphoria in East Azerbaijan Province, Iran



Ali Reza Shafiei Kandjani^{1,2}, Sona Sadeghpour³, Bahram Samadirad^{4**}, Arezoo Mehrara⁵, Parisa Hosseinnejad³, Behzad Shalchi^{2,3*}

1. Road Traffic Injury Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.
2. Department of psychiatry, Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran.
3. Research Center of Psychiatry and Behavioral Sciences, Tabriz University of Medical Sciences, Tabriz, Iran.
4. Legal Medicine Research Center, Forensic Medicine Organization, Tehran, Iran.
5. Forensic Medicine Organization, Tabriz, Iran.



Citation Shafiei Kandjani AR, Sadeghpour S, Samadirad B, Mehrara A, Hosseinnejad P, Shalchi B. Demographic Characteristics and Personality Disorders in People With Gender Dysphoria in East Azerbaijan Province, Iran. *International Journal of Medical Toxicology and Forensic Medicine*. 2022; 12(2):E36056. <https://doi.org/10.32598/ijmtfm.v12i2.36056>

<https://doi.org/10.32598/ijmtfm.v12i2.36056>



Article info:

Received: 08 Sep 2021
First Revision: 04 Nov 2021
Accepted: 11 Jan 2022
Published: 23 May 2022

Keywords:

Demographic characteristics, Personality disorders, Gender dysphoria

ABSTRACT

Background: Gender identity is an important part of human identity. It is a personal conception of oneself as male or female. One of the major goals of treatment for individuals with Gender Dysphoria (GD) is to treat comorbid psychological and psychiatric disorders such as personality disorders. The present study aims to investigate demographic characteristics and personality disorders in people with GD seeking gender reassignment therapy in East Azerbaijan Province, Iran.

Methods: In this descriptive cross-sectional study, study population consists of all patients with GD referred to the forensic medicine centers in East Azerbaijan province during 2016-2020, of whom 61 (21 males and 40 females) were selected using a convenience sampling method. Their age, gender, educational level, and marital status were recorded and their personality profile was assessed by the Millon Clinical Multiaxial Inventory-III.

Results: The frequency (percentage) of Cluster A, B and C personality disorders in males were 0(0%), 9(50%) and 2(11.10%), while in females they were 1(5.56%), 4(22.40%), and 2(11.10%), respectively. The frequency (percentage) of antisocial, obsessive, borderline, avoidant, narcissistic, histrionic, and paranoid personality disorders in males were 4(22.2%), 2(11.10%), 3(16.67%), 0(0%), 0(0%), 2(11.10%), and 0(0%), while in females they were 4(22.20%), 1(5.56%), 3(16.67%), 1(5.56%), 2(11.10%), and 1(5.56%), respectively. The prevalence of different clusters ($P=0.34$) and types ($P=0.18$) of personality disorders was not significantly different between males and females.

Conclusion: Personality disorders are comorbid with GD. They exist in one-third of patients with GD in East Azerbaijan Province. Personality disorders are significantly more prevalent in male patients with GD than in females.

* Corresponding Author:

Behzad Shalchi, PhD.

Address: Department of psychiatry, Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran.

Tel: +98 (914) 1261018

Bahram Samadirad, PhD.

Address: Legal Medicine Research Center, Forensic Medicine Organization, Tehran, Iran.

Tel: +98 (914) 1170975

1. Introduction

Gender Dysphoria (GD) is a new diagnostic class in the Diagnostic and Statistical Manual of Mental Disorders-fifth edition (DSM-5) which has replaced Gender Identity Disorder (GID) in DSM-4. While the DSM-4 focuses primarily on GID, DSM-5 focuses mostly on GD as a clinical problem [1]. GD refers to individuals who have a clear incongruity between their experienced gender and the gender assigned at birth [2]. Green and Blanchard reported that GD is more common in children than in adults, with a prevalence of 1% in boys and 3.5% in girls. Its prevalence in adults is very rare, 0.005%-0.041% in men and 0.002%-0.003% in women [3, 4].

Transgenderism is an interactive perspective in psychopathology. Although gender has anatomical and physiological characteristics, it is also affected by psychological, social and cultural factors. Gender reassignment therapy seems to be effective for a number of people with GD; for many others who may have personality problems and mental disorders, treatments such as gender reassignment therapy may not be able to treat their mental health concerns and can even worsen them [5]. Studies have indicated that psychological and personality disorders are more prevalent among people with GD than in general population [6, 7], which can be explained based on the minority stress theory [8, 9]. In this theory, the role of psychosocial stressors on the health and well-being of people belonged to minority groups or populations in society is emphasized. According this theory, exposure to minority stress in a continuous manner from the earliest years of life is likely to lead to the formation of dysfunctional personality traits and interpersonal patterns, such as personality disorders.

People with GD seem to experience an unfavorable amount of stressful life events due to not going along with or expressing their gender at birth, and this stress may directly or indirectly affect their mental health and lead to the formation of serious psychiatric disorders [6, 8, 10-12]. These individuals are more likely to be abused in childhood and may develop mood disorders, anxiety, post-traumatic stress disorder, suicidal ideation, self-harming behaviors, and antisocial personality disorder in adulthood [13-18].

A high rate of comorbidity between GD and personality disorders has been reported in men and women. Hepp et al. [19] reported a prevalence rate of 42%. In Maddo et al.'s study [20], the prevalence rate was 52%, of which 22% had cluster B personality disorders, 12% cluster C

personality disorders, 2% cluster A personality disorders, and 16% had other personality disorders. Lawrence and Lawrence & Zucker, in their review studies, reported a comorbidity rate of 20-70% between GD and Axis II personality disorders [21, 22]. Considering this high prevalence, the diagnosis and treatment of personality disorders should be the main goal for people with GD [23]. However, some other studies have reported lower rates of comorbidity between GD and personality disorders. For example, Haraldson and Dahl reported a comorbidity rate of 20% and Hills et al. reported a prevalence of 15±3% [24, 25]; therefore, it is not much different from the prevalence of personality disorders in general population, which is between 10.5 and 12% [26]. In this regard, the question is "how often people with GD have a personality disorder?" The present study aims to investigate personality disorders (types, clusters) and demographic characteristics of people with GD in East Azerbaijan Province, Iran.

2. Methodology

This is a descriptive study. The study population consists of all patients referred to forensic medicine centers in East Azerbaijan province during 2016-2020, of whom 61 (21 males and 40 females) were selected by using a convenience sampling method. After recruitment, participants were interviewed by a psychiatrist based on DSM-5 criteria in order to ensure GD diagnosis. Finally, by using the Millon Clinical Multiaxial Inventory-III (MCMI-III) and conducting diagnostic interviews based on DSM-5, the personality disorders in participants were diagnosed. Inclusion criteria were: at least a primary education (fifth grade) and having GD disease based on the clinical interview according to the DSM-5 criteria. Exclusion criteria were: any transvestic disorder, body dysmorphic disorder, and psychosis, and history of hospitalization due to psychiatric problems in the past six months.

The MCMI-III was used to assess personality disorders in participants. It has 175 items and 28 subscales. According to Millon et al., the MCMI-III a valid tool. Its reliability (internal consistency) is 0.78, and its correlation with Minnesota Multiphasic Personality Inventory score is ≥ 0.75 [27]. For its Persian version, Chegini et al. reported Cronbach's alpha coefficients of 0.64 to 0.89 for reliability [28].

3. Results

Participants were 61 people with GD (21 males and 40 females) with a Mean±SD age of 23.73±6.79 years. Most of them were single (n=56, 91.80%) and had a

diploma (n=20, 32.70%). Moreover, 29(47.50%) were unemployed and 32(52.40%) were employed. None of them had children, and 58(95.08%) were genetically identical to one another. Personality disorders were observed in 18(29.50%) participants (Table 1). Personality disorders were more in males than in females. As presented in Table 2, the frequency (percentage) of Cluster A, B and C personality disorders in males were 0(0%), 9(50%) and 2(11.10%), respectively, while in females they were 1(5.56%), 4(22.40%), and 2(11.10%), respectively. The frequency (percentage) of antisocial, obsessive, borderline, avoidant, narcissistic, histrionic, and paranoid personality disorders in males were 4(22.2%), 2(11.10%), 3(16.67%), 0(0%), 0(0%), 2(11.10%), and 0(0%), respectively, while in females they were 4(22.20%), 1(5.56%), 3(16.67%), 1(5.56%), 1(5.56%), 2(11.10%), and 1(5.56%). The prevalence of different clusters (P=0.34) and types (P=0.18) of personality disorders was not significantly different between males and females with GD.

4. Discussion

The purpose of the present study was to investigate demographic characteristics and personality profile of people with GD in Iran. In our study, the mean age of participants was not lower than in Gomez-Gil et al.'s study in Spain [29]. Our results were consistent with

the results of other studies [30, 31]. The mean age of subjects in studies conducted in Iran [30] and Singapore [31] was about 24 years. On the other hand, the mean age of participants in our study was lower than in a study conducted in Belgium (30 years) [32]. The difference in results may be due to differences in the sample size and the culture of the study population in different countries.

While previous forensic studies on GD cases have reported that females seek gender reassignment at a younger age than men [33], our findings showed no significant relationship between gender and age. In terms of education level, more than three-quarters of participants in our study had a high school diploma. This ratio was about 1.7 times lower than in studies by Gomez-Gail et al. in Spain [29] and Dozen et al. in Serbia [31] where two-thirds of transgenders had completed high school. De Cuypere et al. in a study in Belgium [32] found that most of transgenders had reached the final years of high school (65%), while 19% had a university degree or higher education. In other study in Poland, transgender people generally had high school education [33]. Evidence from Serbia [31] showed an equal number of transgender patients with and without a job. In previous studies, 27 females to male individuals had significantly higher educational level and were employed than the male to female group. In this study, the level of education was not significantly related to the gender of people

Table 1. Demographic characteristics of participants

Variables	Mean±SD/No.(%)		P	Mean±SD/No.(%)
	Male	Female		Total
Age(Y)	22.47±5.80	24.40±7.24	0.29	23.73±6.79
Existence of personality disorder	Yes	11(52.30)	0.005	18(29.50)
	No	10(47.70)		43(70.40)
Marital status	Single	21(34.43)	0.23	56(91.80)
	Married	0(0)		3(4.93)
	Widow/widower	0(0)		2(3.28)
Educational level	Lower than high school	8(13.11)	0.09	12(19.60)
	Diploma	7(11.48)		13(21.31)
	Associate degree	2(3.28)		8(13.11)
	Bachelor's degree	3(4.92)		11(18.03)
	Master's degree and higher	1(1.64)		4(6.56)
Occupation status	Unemployed	14(22.95)	0.03	29(47.50)
	Employed	7(11.48)		25(40.98)

Table 2. Prevalence of personality disorders with different clusters and types in participants

Personality Disorder	No.(%)		P
	Male	Female	
Cluster	A	0(0)	0.34
	B	9(50)	
	C	2(11.10)	
Type	Antisocial	4(22.2)	0.18
	Obsessive	2(11.10)	
	Borderline	3(16.67)	
	Avoidant	0(0)	
	Narcissistic	0(0)	
	Histrionic	2(11.10)	
	Paranoid	0(0)	

International Journal of
Medical Toxicology & Forensic Medicine

with GD, but the employment status was significantly different in terms of gender, where the number of employed females were significantly more.

In our study, most of both female and male patients with GD were single. We did not find any study with different report regarding marital status of transgenders. Given the dissatisfaction of these people with their own gender and how society views it, they prefer to choose their marital status after gender reassignment therapy; hence, they were expected to be single. Numerous studies have shown that most of both male and female transgenders live with their parents [29]. In the present study, females were more likely to request gender reassignment therapy than males. A comprehensive review of studies in Europe, the United States, and other countries [29, 34] showed that GD was more common in males than in females. In the study by Aghabigloo et al. in Tehran, Iran, the number of males requesting gender reassignment therapy was 1.7 times more than females [35]. This difference may be due to cultural differences in Shiraz City and the fact that male transgenders have more freedom and less problems than females in Iran.

In the present study, personality disorders were common in 29.50% participants, but in Mazaheri et al.'s study, personality disorders were common in 81.4% of individuals with GD [36]. In Haroldson and Dahal's study, it was 19.8% [37], which is closer to the prevalence rate reported in our study. Regarding the borderline personality disorder, results are inconsistent; this may be because in Mazaheri et al.'s study [36], only those

who underwent gender reassignment surgery were examined. Many studies have examined personality disorders in people with homosexuality, transgenderism, and GD [38]. Some studies have shown that people with GD have at least one personality disorder such as borderline disorder and obsessive-compulsive disorder [19, 36]. In 2015, Steiniri et al. showed that the majority of people with GD had paranoid personality disorder. In their study, about 11% of people with GD had personality disorders [39].

Considering the effect of socio-cultural factors on GD and related disorders, it is important to conduct more studies on samples with high cultural diversity. In order to conduct detailed studies on epidemiological aspects, diagnosis, treatment and effectiveness of GD interventions, it is necessary to improve the systems for disease screening and follow-up on a large scale. The present study was conducted in East Azarbaijan province; despite its novelty, the generalization of its findings to other cities with different cultures and socio-economic conditions (affecting the experience of GD and its expression) should be done with caution. On the other hand, Sampling and follow-up of patients with GD created problems and limitations that made it difficult to select a high number of samples in the present study.

5. Conclusion

Personality disorders are comorbid with GD. In the diagnosis and treatment of patients with GD, it is necessary to pay attention to their personality disorders. Cluster B

personality disorders are more common than other two clusters in these patients, and antisocial and borderline personality disorders are more common than other personality disorders in these patients. There is no significant difference between male and female patients with GD in terms of type and cluster of personality disorders.

Ethical Considerations

Compliance with ethical guidelines

This study obtained its ethical approval from the Ethics Committee of [Tabriz University of Medical Sciences](#) (Code: IR.TBZMED.REC.1397.1069). The patients' information was kept confidential. Participants completed the informed consent form, before entering the study.

Funding

This study was extracted from the MD thesis of the fifth author approved by [Tabriz University of Medical Sciences](#). This paper was financially supported by Road Traffic Injury Research Center, [Tabriz University of Medical Sciences](#).

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgements

The authors would like to thank the individuals participated in this study and the Road Traffic Injury Research Center for their cooperation and support.

References

- [1] Nolen-Hoeksema S. Abnormal psychology. 5th ed. New York: McGraw-Hill Education; 2020. https://books.google.com/books/about/Abnormal_Psychology.html?id=4tAmzgEACAAJ
- [2] Sadock BJ, Sadock VA, Ruiz P. Kaplan and Sadock's synopsis of psychiatry: Behavioral science/clinical psychiatry. 11th ed. Philadelphia: Wolters Kluwer; 2015. https://books.google.com/books/about/Kaplan_Sadock_of_Psychia%20care.
- [3] Dozois D. Abnormal psychology: Perspectives. 6th ed. New York: Pearson; 2019. <https://www.worldcat.org/title/abnormal-psychology-perspectives/oclc/1035217196/referer>
- [4] American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington: American Psychiatric Publishing; 2013. [DOI:10.1176/appi.books.9780890425596]
- [5] Sarason IG, Sarason BR. Abnormal psychology: The problem of maladaptive behavior. 11th ed. New Jersey: Pearson Prentice Hall; 2005. https://books.google.com/books/about/Abnormal_Psychology.html?id=sQgmSwAACAAJ
- [6] Anzani A, Panfilis CD, Scandurra C, Prunas A. Personality disorders and personality profiles in a sample of transgender individuals requesting gender-affirming treatments. International Journal of Environmental Research and Public Health. 2020; 17(5):1521. [DOI:10.3390/ijerph17051521] [PMID] [PMCID]
- [7] Dhejne C, Van Vlerken R, Heylens G, Arcelus J. Mental health and gender dysphoria: A review of the literature. International Review of Psychiatry. 2016; 28(1):44-57. [DOI:10.3109/09540261.2015.1115753] [PMID]
- [8] Hendricks M, Testa RJ. A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. Research and Practice. 2012; 43(5):460-7. [DOI:10.1037/a0029597]
- [9] Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. Psychological Bulletin. 2003; 129(5):674-97. [DOI:10.1037/0033-2909.129.5.674] [PMID] [PMCID]
- [10] Bockting WO, Miner MH, Romine RES, Hamilton A, Coleman E. Stigma, mental health, and resilience in an online sample of the US transgender population. American Journal of Public Health. 2013; 103(5):943-51. [DOI:10.2105/AJPH.2013.301241] [PMID] [PMCID]
- [11] Pflum SR, Testa RJ, Balsam KF, Goldblum PB, Bongar B. Social support, trans community connectedness, and mental health symptoms among transgender and gender nonconforming adults. Psychology of Sexual Orientation and Gender Diversity. 2015; 2(3):281-6. [DOI:10.1037/sgd0000122]
- [12] Testa RJ, Habarth JM, Peta J, Balsam K, Bockting W. Development of the gender minority stress and resilience measure. Psychology of Sexual Orientation and Gender Diversity. 2015; 2(1):65-77. [DOI:10.1037/sgd0000081]
- [13] Real AG, Fontanari AMV, Costa AB, Soll BMB, Bristot G, de Oliveira LF, et al. Gender dysphoria: Prejudice from childhood to adulthood, but no impact on inflammation. A cross-sectional controlled study. Trends in Psychiatry and Psychotherapy. 2021; 43(1):37-46. [DOI:10.47626/2237-6089-2020-0007] [PMID] [PMCID]
- [14] Kersting A, Reutemann M, Gast U, Ohrmann P, Suslow T, Michael N, et al. Dissociative disorders and traumatic childhood experiences in transsexuals. The Journal of Nervous and Mental Disease. 2003; 191(3):182-9. [DOI:10.1097/01.NMD.0000054932.22929.5D] [PMID]
- [15] Bandini E, Fisher AD, Ricca V, Ristori J, Meriggiola MC, Jannini EA, et al. Childhood maltreatment in subjects with male-to-female gender identity disorder. International Journal of Impotence Research. 2011; 23(6):276-85. [DOI:10.1038/ijir.2011.39] [PMID]
- [16] Horwitz AV, Widom CS, Mclaughlin J, White HR. The impact of childhood abuse and neglect on adult mental health: A prospective study. Journal of Health and Social Behavior. 2001; 42(2):184-201. [DOI:10.2307/3090177] [PMID]