Research Paper: Suicidal Ideation in Patients With Gender Identity Disorder in Western Iran From March 2019 to March 2020



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ABSTRACT

Background: In recent years, the number of patients with gender identity disorder (GID) has rapidly increased. These people are at risk of adverse life events that influence their health and wellbeing. Research studies have also shown a significant rate of suicide in these individuals. This study aims to determine the prevalence of suicidal ideation in patients with GID referred to Legal Medicine Office in Ilam Province.

Methods: In study sample comprised 21 patients without psychiatric comorbidity visited the Legal Medicine Office in Ilam Province for confirmation of transsexuals from March 2019 to March 2020. GID disorder was diagnosed through a Gender Identity/Gender Dysphoria Questionnaire for adulescents and Adults (GIDYQ) (A-A) questionnaire and clinical interview. The Beck scale for suicide ideation was used to clarify and measure the intensity of attitudes, behaviors, and planning for a suicide attempt.

Results: In 21 patients with GID, the average score for suicide ideation was 11.6. The average age of patients was 19 years, and all of them were single. In this sample, 19.1% had low risks, 71.5% high risks, 9.5% had very high-risk suicide ideation. Linear regression analysis showed that higher education and higher age were risk factors for suicide ideation in patients with GID.

Conclusion: The high rate of suicidal ideation in patients with gender identity disorder makes it essential to pay attention to their mental health. It should be noted that suicidal thoughts can be a basis for suicide attempts.

1. Introduction



ender identity is a combination of attitudes, behavioral patterns, and physical characteristics determined through culture and usually is associated with male or female [1]. Gender identity would affect individual development, growth, and performance [2]. Therefore, any divination from the usual trend of gender identity formation causes a kind of incongruence; its severe and determined form is called gender identity disorder [3]. The term "gender dysphoria" or "gender discomfort" is

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being used to describe individuals willing to change their gender [4]. These people want to acquire characteristics of the opposite sex because the images of their gender disagree with their reproductive organs [5]. This disorder causes serious damages to occupational, educational, and social functions, also personal relations [6]. In recent years, the number of individuals with gender identity has increased rapidly.

Nonetheless, they have been faced with the danger of adverse life events affecting their health and wellbeing, including being overlooked, isolated, and socially molested. Also, these studies have shown a significant rate of suicide attempts and suicide ideation among these individuals. Scanlon et al. reported the rate of suicide ideation among patients with gender dysphoria in Ontario State, Canada, 77% compared to 37% for the general population [7]. Imbimbo et al. reported the rate of suicide ideation among patients with gender dysphoria as 50% in Italy [8]. In Iran, studies about individuals with gender identity disorder is an emergent domain in which it is necessary to consider risk factors and social and emotional damages in these individuals. From 2001 to 2006, a total of 140 cases requested the LMO (legal medicine organization) for confirmation of being transsexuals [9]. One of the main factors useful in the life of individuals with GID is suicide ideation. The purpose of this study is to determine suicide ideation in patients with GID requested to the Legal Medicine Office in Ilam Province for confirmation of transsexuals.

2. Materials & Methods

A total of 46 patients were requested to the Legal Medicine Office in Ilam Province for confirmation of being transsexuals from March 2019 to March 2020 and received different methods of gender reassignment surgeries. Their disorder was diagnosed through a Gender Identity/Gender Dysphoria Questionnaire for adulescents and Adults (GIDYQ) (A-A) questionnaire and clinical interview. The two psychiatrists performed the interview. Psychiatric comorbidity in these 46 GID patients was assessed based on clinical interviews and the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID II) questionnaire. Psychiatric comorbidity was diagnosed in 25 patients who were excluded from the study, and 21 patients were without it. Beck's scale for suicide ideation (BSSI) was used to evaluate suicide ideation. Aron Beck developed this questionnaire to examine suicide ideation. It consists of 19 questions scores from 0 to 2. Therefore, an individual's scores are variable (0 to 38). This questionnaire was prepared to clarify and measure the intensity of attitudes, behaviors, and planning for suicide attempts. To consider suicide ideation, this scale is of high validity and reliability. Its normality has been confirmed for the Iranian community [10]. Assessment of suicide ideation based on obtained scores is as follows: low-risk suicide ideation (0-5), high-risk suicide ideation (6-19), very highrisk suicide attempts (20-38). Linear regression analysis was conducted for demographic variables and suicide ideation score in Stata software version 12.

Table 1. Linear regression analysis for demographic and suicidal ideation characteristics in patients with gender identity disorder

Variables		No. (%)				_
		Low Risk	High Risk	Very High Risk	Regression Coefficient (CI 95%)	- Р
Age (y) (Mean±SE)		17.5±1.19	19.3±0.73	20±0	1.26 (0.27–2.25)	0.01*
Age, No. (%)		4 (19.5)	15 (71)	2 (9.5)	-	-
Education	Under diploma	2 (50)	4 (26.7)	0 (0)	1ª	-
	Diploma	2(50)	9 (60)	1 (50)	4.42 (-1.80 – 10.63)	0.15
	Higher education	0 (0)	2 (13.3)	1 (50)	10 (1.20 – 18.79)	0.03*
Job	Unemployed	2 (50)	6 (40)	2 (100)	1ª	-
	Student	2 (50)	9 (60)	0 (0)	-4.16 (-9.89 – 1.57)	0.15
Beck's Scale for Suicide Ideation		4 (19.1)	15 (71.4)	2 (9.5)		
Beck's scale for suicide ideation (mean of total score) Cl		11.6 (8.7 – 14.6)				

^a Reference category; * Significant.

International Journal of Medical Toxicology & Forensic Medicine

3. Results

The prevalence of suicide ideation and demographic variables are presented in Table 1.

The average age of patients was 19 years. All patients were single and female. High-risk suicide ideation in patients with a diploma was higher than those with other educational levels (60%). High-risk suicide ideation was more frequent among students (60%). In this sample, 19.1% (4 patients) had low-risk suicide ideation, 71.4% (15 patients) high-risk suicide ideation, 9.5% (2 patients) very high-risk suicide ideation. The coefficient estimate for education shows that average baseline BSSI levels were about 10 per unit higher among patients with higher education than patients with under diploma. This difference is statistically significant (P= 0.03). Average baseline BSSI levels also increase by about 1.26 per unit for each additional year of age (P= 0.01) (Table 1).

4. Discussion & Conclusion

The purpose of the present study is to determine suicide ideation in patients with GID and without psychiatric comorbidity referred to Legal Medicine Office in Ilam. Research findings showed that GID patients have a high risk for suicide ideation, consistent with previous studies. Among trans Ontarians, 77% had life history of ever seriously considered suicide [7]. Xavier et al, showed 65% of trans having thoughts of killing themselves [11]. Imbimbo et al found that Seventy trans patients (50%) had contemplated suicide. Adams et al. in their meta-analysis study, reported the rate of suicide ideation 55%, i.e., 51% more than this rate in the general population [8]. A high rate of suicide ideation in individuals with suicide ideation makes it necessary to pay attention to their mental health.

It should be noted that suicidal thoughts can be a basis for suicide attempts. With regard to present research results and a high rate of suicide ideation, it is recommended to consider the problems of such individuals. The results of this study showed that the prevalence of suicidal ideation was high among these patients. Most patients face mental health challenges in their lifetime including withdrawal from social activities or relationships and the families of these patients, for cultural and social reasons; do not try to solve the problem of these patients. Family's education is traditionally the highest priority to adapt to various problems of patients in order to assist them in problem solving skills.

In our community, because of the negative attitudes toward these individuals, also lack proper cultural and social foundation, these patients have critical conditions. Hence, to prevent the consequences of repulsion by family members and the whole community, it seems necessary to apply proper psychological treatments and training for this group and the whole community. It is also recommended to invite experienced specialists, to arrange physiological visits, even to hold educational sessions such as training life skills. Also, it is demanded that clergymen pass academic courses regarding life expectancy, trust in God, and reliance on spiritual beliefs to solve their problems and help them confront their particular issues.

This research is a cross-sectional study; therefore, the longitudinal study of suicide thoughts in people with GID was impossible. Studying these individuals in a long-term period would clarify the effect of time on suicide ideation. The other limitation of the present study is to have a small sample referred to Ilam Legal Medicine Office because of the low population density in the province of Ilam that warrants the generalization of obtained results.

Ethical Considerations

Compliance with ethical guidelines

The ethical was approval by the Forensic Medicine Organization, Islamic Republic of Iran (IR.LMO. REC.1398.030).

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Author's contributions

Conceptualization, study design: Mehdi Alizadeh Mohajer, Amir Adibi; Data collection and Data analysis: Amin Bakhtyari and Aliashraf Mozafari, Amir Adibi; Writing – original draft: Ali Sahebi, Mehdi Alizadeh Mohajer, Amin Bakhtyari; Writing – review & editing, investigation: All authors.

Conflict of interest

The authors declared no conflict of interest.

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