

Depression in patients suffering from gender dysphoria: The hospitalized patients of Legal Medicine Center in Southwest of Iran

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Abstract

Background and Aims: Sexual identity is a kind of cognitive phenomenon which shows an individual as a male or female. The main problem regarding this issue is the violation of gender identity through which the patients are to change their behaviors based on their gender identity. In this case, the patients are not understood by their friends and family. Consequently, they are overlooked by other people and will be disappointed. This issue may lead them to be hopeless and lose their confidence and finally become depressed. This research was to compare the patients who became depressed before and after surgery of gender dysphoria in the southwest of Iran, Fars Province.

Method: This study is a survey research which has studied all the population with gender dysphoria who were referred to Legal Medicine Center in Fars province in the southwest of Iran. The research sample included the 66 patients who were selected based on convenience sampling method. Data were collected through Becks' (1961) Depression Questionnaire. Data were analyzed through Mann Whitney U test, Pearson correlation analysis, and convenience sampling method through SPSS' version 21 at the significance level ($p < 0.05$).

Results: Findings showed that the participants were between 18 and 36 years old and mainly had non-governmental jobs (i.e., free job) about (60.7%). Their educational level was mainly below the diploma (i.e., about 55%). The amount of depression was in potential status (51.97 ± 7.39) and in actual status was (51.35 ± 6.91) regarding a severe condition. The Mann Whitney analysis showed that there was not a significant difference between before and after surgery of the patients with gender dysphoria ($p = 0.67$). There was a correlation between age and depression ($r = .389$) after the surgery. However, there was not a correlation between depression and other demographic variables (i.e., age, Gender, Occupation, Educational level) in both groups ($p < 0.05$).

Conclusion: In conclusion, results showed that gender dysphoria patients face many challenges like isolation, family conflict, finding jobs or partner after surgery which are due to Iranian cultural, social and religious beliefs. They become isolated and depressed and they have the same situation like before the treatment and surgery.

Key words: Gender dysphoria, depression, sex re-assignment surgery

Introduction

Sex is an everlasting phenomenon which is with human beings to the end of life. In social processes, the individuals learn how to behave and feel, based on their sex and become a member of the society. They learn how to behave based on social expectations. Being successful in the process, the individuals can shape their gender identity and adapted it to society (Ceglie, 2000). Sociologists believe that gender is a phenomenon which is unique and it is affected by social and cultural learning (Correll, 2001); however, it is violated when it is treated prejudicially. In other words, the individuals may physically have a specific sex but they do not feel they belong to that sex spiritually or physically. These people may behave or feel like the opposite sex. Indeed, this bisexual situation may affect their psychological condition and weaken their appropriate performance (Ceglie, 2000).

Sexual identity is a cognitive phenomenon which shows that an individual is male or female (Saddock, 2009). In fact, individuals have a kind of sexual identity which shapes their beliefs, attitudes and behaviors in a stereotyped fashion (Tavassoli, 2014). Freud believes that the sexual malbehaviors are rooted in people's childhood which is experienced by children's Oedipal Triangle. It means, the children experience the behaviors of their parents and they try to adapt to the same situation (Utnam, 2003).

The patients of gender dysphoria are the people whose appearance is different to what they view as their actual sex. They need to change their appearance to their gender identity (Veale, 2010). Some of these patients are the people with male appearance but have female gender identity (Male to Female). The other group may be the opposite. They are female in appearance but their gender identity is male (Female to Male). This phenomenon is seen among males (Sohn, 2007).

The social pressure on patients with gender dysphoria is too severe since they cannot manage their behaviors in a cooperative way with their counter parts (Matsomoto, 2009). The main form of this problem is called appealing to sex reassignment surgery based on IV DSM that shows 1 person per 30,000 males and 1 person per 100,000 females wish to change their sex (APA, 2000). Therefore, these patients face many sexual problems since they have some limitations (i. e., physical, sexual and job condition) which cause conflicts with their family and society. They also face isolation and ignorance imposed by their family and society. In fact, they suffer from affective ties which make them isolated. This can cause loneliness, lack of self-confidence, fear of judgment and feeling unattractive (Gomez, 2012).

Regarding, Iranian culture, the patients of gender dysphoria were not recognized as real patients but they were known as criminal persons and they cannot be accepted by many people. This creates stress and psychological problems for these people (Rahimi, 2016).

One of the main problems with gender dysphoria could be depression and suicide which are due to other people's negligence and ignorance. People also blame the individuals with this problem and do not see them as patients (Cook, 2004). Gorin- Lazard (2012) studied these people and concluded that these people have a shorter life than others since they experience depression which shortens their life. The research on 298 women with gender dysphoria in Boston, the USA in 2012-2015 showed that 35.4 percent were severely depressed and 14.7 percent had a suicide history (Reisner, 2016).

The treatment of gender dysphoria could be a combination of surgery and taking hormone medicine which changes the physical appearance. This can assist in helping the patients to adapt. The permission for sex reassignment surgery can be issued 12 months after experiencing the real new life and 6 months after taking hormone treatment (Lothstein, 1980).

Family affective support is the main factor for successful sex reassignment surgery (Besharat, 2012). They hope that these patients can regain their self- confidence and reduce their depression and anxiety to have a better life. Although there are some reports which has noted that sex reassignment surgery has positive effects on the patients' lives, their sexual activities may cause complicated sexual problems since they activate their sexual activities more than before the surgery. This shows that these changes are just limited to their physical appearance (Anisworth, 2010; Gorin, 2012; Life, 1993; Pakic, 1996). In this case, some patients after the surgery remain weakened and sensitive (De Cuypere, 2006). In a study, it was seen that 30 percent of males and 20 percent of females who had undergone surgery never experienced satisfaction (Asgari, 2007).

Therefore, the present study investigated the patients before and after surgery in Fars Province, Southwest of Iran. This surgery costs much for the patients who have to pass a problematic process to receive permission. Thus the aim is to know whether this treatment can free them from depression.

Methods

This study was designed based on a survey research on the cases of gender dysphoria in the legal medicine Organization in Fars province. They received permission and were classified into two groups:

A) The patients who were referred to Fars legal medicine organization or the psychotherapy clinics received some advice and they were recognized as candidates for the surgery based on (DSM-IV). Diagnostic and statistical manual of mental disorders- 4th edition.

B) The patients who had an operation two or ten years ago based on the recognition of the Fars psychiatrics of Legal Medicine Organization (LMO) International classification of disease – 10th revision (ICD-10, 1988, and DSM-IV, 1994).

The research population included 80 patients who were referred to LMO or the psychiatrics offices in Fars province. Following the Morgan table, the research sample included 66 patients who were selected through non-random convenience sampling method. They were selected among those patients who accepted to participate in the research process. Thus all patients included males and females who were not equal in one group and 38 patients in the second group were selected.

The criterion for selection was the recognition based on DSM-IV-TR. The other criterion included the patients' cooperation, their profile, the reports of their surgery, psychological status, and some ethical issues like patients' privacy. Sampling process took four months.

The explanation was given to all patients and they were required to fill in the questionnaires. In this process, their privacy, ethical values and cooperation were followed based on the Helsinki treaty (Javaheri, 2006). Finally, after completing the questionnaires, the researchers collected the data. The inventory was Beck's (1961) Depression questionnaire which included demographic information. Beck Depression Inventory (BDI-II) includes 21 multiple choice items and each item holds the scores from zero (mental health) to 3 (severe depression) and every respondent receives a score from zero to 64. The inventory items include depression factors of sadness, pessimism, lack of enjoyment, lack of self-confidence, sensitivity, lack of concentration, etc. The scores between 0-4 is low level and it means there is no depression. From 5 to 7 there is a minimum level of depression. The scores from 8 to 15 is medium depression and the score above 16 shows the highest level of depression.

Beck and colleagues reported the internal consistency of this instrument as ($r=.73$) to ($r=.92$) with the average of ($r=.86$) and Alpha level ($\alpha=.86$) for the patients and ($r=.81$) for healthy people. This reliability has been reported in some studies (e.g., Beck, 1984, 2000; Alto, 2012; Shafer, 2006; Nuevo, 2009).

Data were analyzed through descriptive statistics (i. e., Frequency, mean and standard deviation) and inferential statistics (i. e. Pearson correlation coefficient, and Mann U Whitney) through Statistical Package for Social Sciences (SPSS), version 21. In the present study Beck's questionnaire was given to 21 participants and its Cronbach alpha was (0.733) at the significant level ($p<0.05$).

Results

Sixty six participants participated in the present study. 28 participants received surgery and 38 did not receive an operation. The mean of age among the before surgery group was 22.84 ± 3.636 and among the after surgery group it was 24.46 ± 4.435 . Totally, 31 females and 35 males participated in the present study. In the operated group the highest frequency included 13 (46.4%) participants with diploma at the educational level and 17 (60.7%) participants who had non-governmental jobs. The range

of their age was from 19 to 36 years old. 21 non-operated highest frequency participants who held diploma included 21 (55.3%) participants (55.3%) and 19 (49%) participants had non- governmental jobs. Their age ranged from 18 to 32 years old (see Table 1).

In the present the amount of depression showed no significant difference between the two groups and the results showed that the patients with gender dysphoria in both operated and non-operated group were suffering from severe depression ($p=0.691$). The results are shown in Tables 2 and 3.

Moreover, the correlation between the amount of depression with the demographic variable like age, gender, job, and educational level in both groups was analyzed. In the operated group, there was a significant correlation between depression and age ($r=.389$) but the correlation between depression and other demographic variables was not significantly seen ($p<0.05$). Table 4 shows the results.

Since the data were not normally distributed, the analysis of Mann Whitney U test was used to compare the difference of depression in the two groups. Table 2 shows that there is not a significant difference between the two groups' depression ($P=0.691$) although the difference exists, it does not reach significant level ($p<0.05$).

To calculate the correlation between depression and age, Pearson correlation was used. Table 4 shows that the correlation of depression and age is significant (0.389) in the operated group at the significant level ($p<0.05$). The eta square was used to measure the correlation of depression and other demographic variables. Results show that there is not a significant correlation between depression and demographic variables like gender, occupation and educational level.

Discussion and Conclusion

The findings of this study showed that the difference between the two groups' depression was not significant. The amount of depression was severe in both groups. This may be explained in terms of the cost that the patients have to pay for the operation and the processes which are very difficult (Michel, 2002). These patients face the opposition of their families. They are often jobless or work in non-governmental institutes. Thus they cannot afford the operation cost. This may make them depressed. These patients are dealing with physical, mental and social problems and look at the operation as the way they can be free from these problems. Sometimes, the presence of their names in the operation list can help them to overcome depression (Michel, 2002).

The results of the present study are in line with Reisner (2016) who studied 298 females with dysphoria in Boston, US. From 2012 to 2015. The results showed that 35.4% of them had severe depression and 14.7% of them had suicide history. The results are also matched with De Cuyopere (2006) who conducted a longitudinal study on

Table 1: Demographic variable (i.e., age, gender and educational level) among operated and non-operated participants

Demographic		Operated participant with gender dysphoria	Non-Operated participant with gender dysphoria	Significance level based on Mann Whitney
Age	Average	19-36	18-32	0.133
	mean	24.46	22.84	
	SD	4.435	3.636	
Gender	Male	18(64.3%)	17(44.7%)	0.119
	Female	10(35.7%)	21(55.3%)	
Occupation	Unemployed	8(28.6 %)	13(24.2%)	0.162
	Student	3(10.7%)	6(15.8%)	
	Non-governmental	17(60.7%)	19(49%)	
Educational level	Under diploma	11(39.3%)	21(55.3%)	0.280
	Diploma	13(46.4%)	10(26.3%)	
	Two years after Diploma	1(3.6%)	3(7.9%)	
	Bachelor	3(10.7%)	4(10.5%)	
Total		28(100%)	38(100%)	

Table 2. Descriptive statistics of depression among operated and non- operated participants

	Operated	Non-Operated
Depression	51.35±6.91	50.97±7.39

Table 3. The Mean of depression in operated and non-operated participants

Mann Whitney U Test of Depression				
	Mann Whitney	Sig.	Mean of operated participants	Mean of non-operated participants
Depression	499.500	.672	34.66	32.64

Table 4. The correlation coefficient of depression with demographic variable

		Occupation	Educational level	Gender	Age
Depression	Operated	.189	.105	.090	.389*
	Non-operated	.251	.186	.012	.192-

60 patients with gender dysphoria and noted that they faced high level of anxiety and depression. Several studies (e. g. ., Hepp, 2005), reported the highest correlation between gender dysphoria and other mental disorders. Campo (2003) in a study reports that gender dysphoria is correlated to personality disorder (79%) and ill-mannered behavior (20%).

Katz and colleagues (1985) studied the patients who were suffering from gender dysphoria. They found that the children with gender dysphoria were suffering from anxiety, depression, and behavioral affective problems. Some of these patients experienced learning problems and failure in schools. Committing suicide was also seen among these patients.

The results of this study, however, were not matched with several studies (i, e., Cardoso, 2016). For example, in the study, conducted by Cardoso (2016), results showed that 47 patients with operation (MTF) showed better mental health in social and psychological relations after a year of operation. But they faced physical problems and self-independent relations.

Farner and Cocust found that the patients after operation overcome their depression, lack of stability, sexual and social problems (cited in Moshtagh, 2007).

Hess et al (2014) examined 119 females in Germany and 65.7% of those female patients were satisfied with their life five years after the operation. In another study Tiffany (2010) worked on 247 (MTF) patients and found that their quality of life was developed and significantly improved. Ruppin (2015) conducted a follow-up study and found that 71 patients with gender dysphoria after 10 to 24 years could develop their social welfare and found a job. Thus their life was comfortable and they were satisfied with their interpersonal and sexual relations. These patients are satisfied when they have the operation since their physical and mental situations become parallel and enjoy having their identity and self-confidence (Ceglie, 2000). However, there are some reasons why they did not reach satisfaction, they may face some physical problems like the operation and physical pain, and not having an altered face or voice can affect their behaviors. These problems may limit their life and bring them depression (Michel, 2002). Moreover, after the surgery, they may face lack of beauty which is the goal for female patients (DeCupere, 2006). Other problems like lack of relationships with the family members and the other people and isolation may affect their life and make them depressed. Some families do not understand these patients. Studies (e.g., Cohen, 1999) show that they have strict and disciplined parents who reject these patients. In Iran, about 70% of families are angry with their children who want to talk about their gender dysphoria (Rahimi Ahmadabadi, 2016). This may affect the patients' mental status. Lack of family and friends' support with the lack of medical treatment depresses these patients even after the operation. Family should believe their problems since their family may have some wrong pre-supposed ideas (Parola, 2010). This can be improved through family and social

support which help the patients to overcome their gender problems (Besharat, 2012).

The other problem is that the patients may not receive what they perceived before. The patients who are married and then do the operation may be divorced and lose their children. This causes them to feel stress, anxiety and disappointed status (Mohr, 2008). This situation can be worse since Iran is a religious country which follows some cultural values (Asgari, 2007).

This study dealt with the variable of patients' gender, education and occupation which showed no significant difference between the operated and non-operated patients. But there is a significant relationship between age and depression among the operated participants. In other words, the patients who had the operation faced higher levels of depression in accordance with their age. This may be due to Iranian cultural and social situations which affect the patients' lives. Social and cultural positions may affect their educational and social activities in a very limited manner. They also cannot find their partner easily and the lack of stability, especially when they become older may make the depression more severe.

In fact, people's negative view on gender dysphoria in Iran causes these problems at the social and cultural level. Thus these patients are depressed and mentally retarded. Lack of family and social support after the treatment may be the main reason for the stability of the depression even after the operation. Thus operation is not enough by itself. There is a need for consultants, social and family support, cultural and religious acceptance. Psychoanalysis and psychological treatment are also needed (Michel, 2002). The investigation of such problems mentioned above can improve the patients' feelings before and after the operation (Norian, 2008). This can give them an ordinary life which helps them to be active in the physical, mental and social activities like other people in the society.

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