

## Gender Identity Disorders in Iran; Request for Sex Reassignment Surgery

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### ABSTRACT

**Background:** Based on reports of the Tehran Legal Medicine Organization (LMO), requests for sex change operation by persons with Gender identity disorder (GID) have increased in the past few years in Iran. Due to the social and legal ramification of transsexualism, we decided to perform a study to assess the demographic status and legal aspects of Iranian Transsexuals who were applicants for sex reassignment surgery (SRS).

**Method:** The total number of 69 cases with GID who requested sex change by surgery was assessed during a period of four years (2005-2009) in Tehran. Descriptive statistical methods and Chi square were used to analyze the data.

**Results:** There were 44 male-to-female and 25 female-to-male Transsexuals with a mean age of 25 years. Out of 69 requests for sex change, transsexualism was confirmed in 61 cases and the remaining 8 cases had other Psychiatric disorders manifested by identity confusion. The onset of symptoms had developed in childhood (<10 y) in nearly 70% of patients. Depression was found in about 26% of cases. Eighteen cases (26%) had a history of suicide attempts. Among individuals with final diagnosis of Transsexualism, request of 93% was accepted for SRS.

**Conclusion:** This study showed dominancy in Male to Female Transsexuals (1.7/1). Depression was the most common psychiatric disorder associated with Transsexualism. The article also showed that recently transsexualism accepted by community and country low more than before.

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► *Implication for health policy/practice/research/medical education:*  
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## 1. Introduction:

Transsexualism is considered to be the extreme end of the spectrum of gender identity disorders (GID) and is defined as a persistent cross-gender identification with the patient's persistent discomfort with his or her sex and sense of inappropriateness in the gender role of that sex (1, 2). In this condition, a person with apparently normal somatic sexual differentiation of one gender is convinced that he or she is actually a member of the opposite sex. Transsexuals mainly attempt to obtain hormonal treatment to simulate the phenotype of the desired sex or experience a pursuit of sex reassignment surgery (SRS). The origins of Transsexualism are still largely unclear (2).

A transsexual may be attracted to persons of the opposite sex, of the same sex, or both. Axis I disorders have higher prevalence rate in transsexuals and may be a cause of suicide attempts in these patients (3).

Although, formation of gender identity arises from genetic influence and biological attributes like prenatal hormonal organization, it is results more from postnatal life such as parental and cultural attitudes (4). Transsexualism has many legal aspects, such as impairment in social and occupational functioning (5, 6) and this point is more prominent in Islamic countries.

Iran is an Islamic country with in which being sexually different is not easily accepted. Families of homosexuals and Transsexuals usually have a hard time dealing with them mostly because of the fear of losing face (7, 8). In Iran, gay male sex carries the death penalty. However, after the 1979 revolution in Iran, hundreds of people are authorizing to legally change

their sex by the blessings of members of the ruling Shia clergy (9).

Iranians with the mentioned tendency could obtain the necessary medical treatment and new identity documents. To obtain legal permission for sex-change operations and new birth certificates, applicants must provide medical proof of gender-identity disorder (9, 10).

In Iran, the request for SRS is assessed by a committee in LMO, consisting of psychiatrists and forensic medicine specialists. After interviewing and a thorough clinical assessment of the patients requesting a sex change operation, if the final diagnosis of Transsexualism is confirmed, patients are introduced to the civil court.

Recently, Transsexualism has received greater attention and importance by specialists who work at LMO. The official statistics of LMO (11) shows that, there were 65 requests for SRS from 1987 to 1991. But the prevalence of requests has significantly increased in the past decade in Iran; from 1992 to 1996 there were one hundred two requests, 1997 to 2001 one hundred three cases, and 2001 to 2006 one hundred forty cases (9, 11).

Unfortunately, in Iran, due to social stigma there is not enough information on this subject and almost no statistical information is available about the prevalence of GID.

Most estimates of prevalence are based on the number of persons seeking SRS (12). Therefore we decided to carry out this study on Iranian Transsexuals who were applicants for SRS. The aim of this study was to assess the basic socio-demographic measures of Iranian Transsexuals and legal aspects of Transsexuals such as cross-dressing, sex transformation by surgery and identity document changes.

**Table 1:** Demographic data of cases requested MtF and FtM transsexual surgery.

		<b>FtM (25, 36.2)</b>	<b>MtF (44, 63.8)</b>	<b>Total (69, 100)</b>
		No(%)	No(%)	No(%)
<b>Educational status</b>	Undergraduate	9(36)	19(43.6)	28(40/5)
	High school	6(24)	14(31.8)	20(28.9)
	Post graduate	10(40)	11(25)	21(30.4)
<b>Occupational status</b>	No	11(44)	25(56.9)	36(52.2)
	Yes	14(56)	19(43.1)	33(47.8)
<b>Onset of symptom</b>	Childhood	18(72)	30(68.1)	48(69.6)
	Puberty	5(20)	8(18.1)	13(18.8)
	Late onset	2(8)	6(13.8)	8(11.6)
<b>Status of parents</b>	Single	10(40)	14(31.9)	24(35)
	double	15(60)	30(68.1)	45(65)

## 2. Materials and Methods:

In a Cross-sectional study we assessed sixty nine individuals seeking SRS who were referred to LMO (the main referral center of Iran) between 2005 through the first 3 months of 2009. Demographic data, Medical history, psychological diagnosis interviews, physical examination, and paraclinical evaluations such as chromosomal analysis and sonography of internal genitalia were recorded and listed for each subject in. age, sex, age of onset of symptoms, single parents, city of residence, level of education, occupation, sex ratio, mental health status, sexual history, psychiatric comorbidities, history of suicide attempt, hormone therapy and effectiveness of psychotherapy on patient attitude toward SRS were studied.

Any request for SRS was assessed in a committee at LMO after complete psychiatric interview and after minimum six month of psychotherapy (Group therapy). We used the DSM-IV diagnostic criteria for Transsexuals and related gender identity disorders for the accurate

diagnostic criteria of GID. The probable comorbid psychiatric disorders were also considered in order to detect any need to therapy. We used one or more of the MMPI, Beck, MCMI-II and Rorschach tests for psychiatric evaluation.

Individual and group psychotherapy was carried out based on The Harry Benjamin protocol at Tehran Institute of Psychiatry by a team consisting of psychologists and psychiatrists. In this program, psychotherapy focused specifically on the next gender and sexual roll of applicants in community and their interpersonal relationships. However, due to legal limitations in Iran, they could not completely experience the 'real life test' before getting permission for SRS. Nevertheless, during the period of psychotherapy all applicants were recommended to have real life experience in the desired gender in private for six months. Descriptive statistical methods and Chi square were used to analyze the data.

**Table 2:** Current DSM-IV Axis I diagnoses of gender identity disorders.

	<b>FtM (25, 36.2)</b>	<b>MtF (44, 63.8)</b>	<b>Total (69, 100)</b>
	<b>No (%)</b>	<b>No (%)</b>	<b>No (%)</b>
Mood disorders	6 (24)	13 (29.5)	19 (27.5)
Schizophrenia and other disorders	0	1 (2.3)	1 (1.4)
Substance-related disorders	1 (4)	12 (27.3)	13 (18.8)
Anxiety disorders	9 (36)	3 (6.8)	12 (17.4)
Somatoform disorders	0	0	0
Eating disorders	0	0	0

**Note:** Some applicants were diagnosed with more than one disorder

### 3. Results:

The whole number of 69 applicants for SRS was included in this study. In according to table 1, 44 individuals requested male-to-female (MtF) transsexual surgery (MtF/FtM ratio was 1.7/1,  $P=0.02$ ). The mean age of applicants was  $24.9\pm 6.1$  years (MtF= $21.1\pm 1.6$ , FtM= $24.3\pm 6.4$ ). Symptoms had developed in 48 individuals in childhood ( $<10$  y), 24 applicants had single parent in childhood period (16 cases lived with father and 8 with mother). Another data is seen in Table1.

In according to psychological tests and interview, current mood disorders found in 19 individuals, eighteen cases with depression and one case suffered from bipolar mood disorder. Thirteen cases had history of substance abuse. Table 2 shows the psychiatric disorders associated with Transsexuals in our cases. In axis II, personality disorder was found in two patients.

From total request, 61 cases were finally diagnosed as Transsexuals and eight patients had other disorders associated with gender confusion. Six of them had the diagnosis of pseudohermaphroditism (that is no need to court certification for

Transsexual surgery). These patients had history of orchiectomy in childhood. In the remained cases, one case was a 21 years old boy with male phenotype and female genotype due to atrophic uterus in sonography evaluation. Another individual was a 28 years old boy with XXY genotype (Klinefelter syndrome).

Fifty seven individuals with final diagnosis of Transsexualism were accepted for SRS and four requests had been temporarily refused for additional evaluation.

### 4. Discussion:

In this study, dominancy in boys (MtF transsexual) was the same as the Western countries (12, 13). In our study, sex related ratio (M:F) was 1.7:1 compared to 3: 1 in Kevan study (4). Some East European centers studies (14, 15) show reverses or equal ratio. The reverse finding of our study might be explained as Iranians' attitude on sexuality and religious beliefs may be responsible for this variation in sex ratio.

The mean age of our cases at time of request for SRS was 25 years, which is lower than other 33.2 years in Hepp study (3), 44 years in Lawrence study (9), and 36.9 years in Lundstrums' study (17).

**Table 3:** Comparison of sexual activities and suicide attempts in both sexes.

	<b>FtM (25, 36.2)</b>	<b>MtF (44, 63.8)</b>	<b>Total (69, 100)</b>
	<b>No(%)</b>	<b>No(%)</b>	<b>No(%)</b>
Suicide attempts	7 (28)	11 (25)	18 (26)
Sexual activities	7 (28)	23 (52.3)	30 (43.5)
Hormone therapy *	3 (12)	43 (68.2)	46 (66.7)

\* Hormone therapy before request for SRS.

Nearly one third of applicants had single parent in childhood. We believe that this high rate compared to Iranian society (<2%) suggests that absence of one parent especially for those with the same sex as parent during childhood may have an impact on the development of disturbances in gender identification by person. However, only one study (1) suggested this hypothesis and it is not confirmed by other studies.

Psychotherapy was not effective for all applicants in our study the same as other studies (18). Therefore, further studies should be performed to find out more effective Cognitive behavioral Therapy (CBT) and Psychotherapy methods. Some researches (7, 8) have shown that SRS substantially alleviates the suffering of Transsexuals but usually reversible treatments such as clothing, changing name, hormone therapy with its gradual somatic changes are preferred before irreversible procedure like SRS (16, 19). It is actually hard to deal with the social, educational and familial problems such as cross-dressing, SRS and changing identity documents as schools are also separate for each gender In Iran (6). In Iran, people usually ought to have a gender role identical to gender sex in public places such as school or university and persons are not allowed to wear the dress of opposite sex and aren't permitted to share the social life and activities of other sex before changing their name and sex by surgery in a way of legal process. For this reasons, some Iranian Transsexuals may

have social problems. For instances, ninety percent of our applicants had a gender role of opposite sex only at home and private places, fifty percent were jobless and ninety percent had history of emotional abuse by their classmates and left school because they could not adapt to school atmosphere. Low educational level (undergraduate) in forty percent of our cases (especially in MtF) can be counted as one of the side effects.

In the past decade, thanks to Media in Iran, negative attitude toward Transsexuals has been changed and they are accepted by society more than before (22), however, due to religious believes, and cultural and legal limitations, Iranian Transsexuals may lose their right to marry, adopt and receive social support for domestic violence, if they could not obtain the permission for changing sex from civil court.

In this study, nearly twenty six percent of patients had history of previous suicide attempts and there was no significant difference between FtM and MtF. Some researches (17, 20) reported that, Transsexuals may be commit suicide, especially if their demands are not met. Suicidal tendencies reported in at least twenty percent of subjects before SRS in Michel research (18). We believed that, the high rate of suicidal attempt in our Transsexuals cases compared to Iranian community (nearly 6 per 100000) is related to many factors such as high rate of depression, substance abuse and social limitations for Iranian Transsexuals. Also it seems that, relation between depression

and Transsexualism may be due to the fact that Iranian Transsexuals are rejected by society and that they have problems in making good communication with others.

According to Coid study (21), the prevalence rate of Axis I disorders in general population was 4-13 percent. Current Axis I disorders in our cases (sixty five percent) shows an increase compared to thirty nine percent in Hepp study (3). The symptoms of the disorder had developed during childhood in seventy percent of our cases. This compares to Dulko study (12).

Mood disorder was detected in twenty percent and substance abuse in nineteen percent of our cases. As shown in table 2, substance abuse in MtF was higher than FtM Transsexuals (7/1). This finding may be due to cultural factors in Iran, as girls have more social limitations than boys.

One third of applicants had a history of sexual activity. But this result cannot be compared with the general population because there is no statistics among the Iranian society. Furthermore, premarital sexual activity is forbidden due to strong religious and cultural beliefs in Iran. However, tendency for sexual activity among MtF Transsexuals was nearly twice as many FtM Transsexuals. We believe that, this difference may be due to more freedom for men compared to women in this aspect in the Iranian society. Moreover, previous applicants' experience in the opposite sex status had a positive important role at making decision for SRS permission by assessment team.

The permission to have SRS was not given temporarily for 4 cases; however, diagnosis of Transsexualism was proved, because of three reasons: a) Inadequate information about the results and aftermaths of surgery which led to doubtfulness in these applicants, b) Unrealistic expectation of the success of surgical treatment for their transition to the desired sex and c) Parent's objection. It must be consider that in Iran, parent's permission for SRS of their transsexual offspring is an important factor in the final

consideration by the assessment team. The stigma of being a sexual minority in an Islamic country which insists on not losing face contributes to the absence of information on homosexual and Transsexuals in Iran (7). Most families are disorganized and conflict oriented which clearly reflects the effect of stigmatization of being a sexual minority. This will put a lot of pressure on this group, putting them in danger of developing serious mental health problems (7, 8).

Birth certificate is an important issue for Iranian Transsexuals for social activity. However, in the United Kingdom, postoperative Transsexuals cannot have a new birth certificate issued and change their legal sex and in United States more than half of the states permit birth certificate change, as do most western European countries (4). In contrast to many other Islamic countries like Pakistan (23), legal provisions in Iran have made birth certificate adaptation possible for Iranian Transsexuals, after agreement with SRS by authorization of LMO. They can have a certificate with a different sex and new identity after court permission, but gay male sex severely forbidden by clergy and Iran's government law and it can lead to a death penalty for them (9).

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