

Comorbidity of gender dysphoria and other major psychiatric diagnoses.

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INTRODUCTION

Gender dysphoria, or transsexualism, involves a long-standing and persistent feeling that one's sexual identity is incongruent with one's anatomic sex. The American Psychiatric Association (1994) Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV) delineates this further by noting that such individuals often have the desire to change their bodies through hormonal therapy and surgery to fit their personal sexual identity. This phenomenon has been described clinically and researched since the middle of this century (Cauldwell, 1949; Benjamin, 1966). Before that, cases of gender incongruence can be found in the writings of early sexologists such as Krafft-Ebing (1894) and Hirschfeld (1945). Indeed, references to such behavior can be found in a variety of cultures dating back to antiquity (Green and Money, 1969).

Much has been done in recent decades to clarify this disorder and develop treatment techniques to aid individuals experiencing these feelings (Pauly, 1990). An international medical society has been formed, the Harry Benjamin International Gender Dysphoria Association, and Standards of Care have evolved for professionals who work with transgendered persons (Walker et al., 1985). Articles have appeared in the literature suggesting that outcome following treatment can be positive, and that individuals can lead happy and productive lives (Lundstrom et al., 1984; Cole et al., 1994). Despite this, however, a suspicion continues to exist that such individuals harbor serious underlying psychopathology. As some researchers note, the persistent wish to mutilate one's body must be a sign of some devastating trauma or maladaptive developmental-familial process from childhood that has gone terribly awry (Stoller, 1968, 1975; Ovesey and Person, 1973; Lothstein, 1979a, 1979b, Morgan, 1978; Buhrich and McConaghy, 1978; Halle et al., 1980). Some type of psychosis is generally suspected (Lothstein, 1983).

Estimates from the National Institute of Mental Health regarding the American population in general suggest that up to 25% may have identifiable psychiatric symptoms suggestive of anxiety disorders, depression, drug and alcohol abuse, and personality disorders (Robins et al., 1984; Weissman and Myers, 1978; Weissman et al., 1991). In light of this, it is of interest to

examine psychiatric symptoms in a transsexual population. To what degree do individuals with gender dysphoria have significant psychiatric problems that could result in a comorbid diagnosis? How have they impacted or not impacted the sense of gender dysphoria? The present study sought to examine these questions.

METHODS

Individuals presenting with a self-diagnosis of gender dysphoria or transsexualism were examined for indicators of coexisting mental illness that could result in a comorbid Axis I or Axis II psychiatric diagnosis. The criteria employed to determine whether other psychiatric problems were present are described. The overriding philosophical stance used was "functional" in nature. That is, to be considered as a serious psychopathological problem, the individual would need to experience the disruption in mood or personality to such an extent that it had impacted one's life, work, and relationship in identifiable ways. Many individuals experience transient bouts of anxiety, depression, or other states that may temporarily affect them but do not have long-standing notable consequences. Of interest here were the more serious, long-standing conditions that did have a serious impact on mental health.

Procedure

The data came from a retrospective analysis of 435 individuals who presented to a gender clinic with a self-diagnosis of transsexualism. Every subject completed a minimum 1- to 2-hour clinical interview and an extensive biographical, medical-psychosocial questionnaire upon first contact with the clinic. The factors studied included the following: (i) hormone treatment (Have you undertaken any prescribed hormone therapy for your condition?); (ii) surgical treatment (Have you undergone any surgical procedures related to your condition? e.g., cosmetic, breast, genital); (iii) substance abuse history (Have you ever received treatment for a substance abuse problem? Lost a job or a relationship? Been arrested?); (iv) mental illness history (Have you ever received treatment for a mental health problem other than this condition? Been hospitalized for psychiatric problems?); (v) genital mutilation history (Have you ever attempted to cause physical damage to your genitals? breasts?); and (vi) suicide attempts (Have you ever made an attempt to end your life?).

A subgroup of the original sample also completed the 400-question short form Minnesota Multiphasic Personality Inventory (MMPI). The MMPI might offer a less biased perspective on the coexistence of other mental illness than the clinical interview and has been employed previously in studies of transgendered individuals (Rosen, 1974; Finney et al., 1975; Roback et al., 1976; Fleming et al., 1981).

Subjects

Since 1980, 435 individuals presented to a gender clinic with a self-diagnosed condition of gender dysphoria and were requesting treatment for their condition (e.g., counseling, hormones, surgery): 318 were male-to-female candidates with a mean age [+ or -] SD of 32 [+ or -] 9 and 117 were female-to-male candidates with a mean age of 30 [+ or -] 8 years.

RESULTS

Subjects presented from a variety of educational and occupational backgrounds. To qualify these data in more understandable terms, the Hollingshead Index of Social Position was employed (Meyers and Bean, 1964). The Hollingshead scale scores of the male-to-female transsexuals are presented in Table I. Both groups' educational means placed them between high school graduate (4.0) and partial college (3.0). There was no statistical difference between these groups. In terms of the Occupational Scale, both groups' mean score placed them between 4.0 (clerical and scales workers, owners of small businesses) and 5.0 (skilled manual employees). Again, there was no statistical difference between these groups. Hollingshead social position scores, calculated from the educational and occupational scores, were not significantly different and suggest both groups were primarily middle class, between III and IV.

One could reason that distance from the clinic kept all but the most functional away. For this reason we examined samples in terms of how far they traveled to the clinic (Table II). Approximately one third of the sample lived less than 50 miles from the clinic, one third lived between 50-300 miles from the clinic, and the remaining third lived over 300 miles away.

Table I. Subject Characteristics

	Male-to-female	Female-to-male
Hollingshead scale (N = 318)	(N = 117)	
Educational	3.5 [+ or -] 1.2	3.7 [+ or -] 0.9
Occupational	4.2 [+ or -] 1.3	4.5 [+ or -] 1.2
Social position(a)	43.7 [+ or -] 12.4	46.2 [+ or -] 10.7
a Index of Social Position: Occupational scale x 7 + Educational Scale x 4 = Social Position Scale.		

Table II. Profile for Distance (in Miles) from Clinic for Total Sample Studied(a)

	Patients with	add'l psychiatric
Mileage	n	% of Sample
0-50	133	30.6
51-300	173	39.7
[greater than]300	129	29.7
a [[Chi].sup.2](2, N = 435) = 4.6, ns.		

Clinical Interview and Survey Findings Table III lists pertinent psychosocial and medical factors endorsed by the population as obtained from the clinical

interview and biographical questionnaire. Two thirds or more of both groups were undergoing their respective hormone therapies, suggesting a commitment and involvement in the "real life" transition process. Additionally, nearly one third of the male-to-female individuals and one half of the female-to-male individuals had undergone surgery specific to their conditions. In most cases, such surgeries were cosmetic to aid in appearance (e.g., to the face) or were procedures to the breasts (e.g., augmentation for the male-to-female or reduction for the female-to-male). Very few had completed the genital procedures related to sexual reassignment surgery, hence a chief reason why they applied to the gender clinic program.

Twenty-nine percent of the male-to-female and 26% of the female-to-males reported past substance abuse problems which included such elements as having received treatment from a substance abuse counselor, participated in Alcoholics Anonymous or Narcotics Anonymous, or experienced problems with job or relationships as a consequence of their substance usage. In virtually all of the cases, subjects described their substance abuse problems as associated with trying to deal with their gender dysphoria issues. In other words, prior to seeking specific gender treatment, or even fully recognizing the nature of their problem, usage of a variety of chemicals served to ease the pain of their dilemma.

Table III. Factors Studied with Sample (Percentage Having Characteristics)

	M-to-F	F-to-M	Total
Factor (N = 318) (N = 117) (N = 435)			
Hormone treatment	65	83	70
Surgical treatment	28	49	34
Substance abuse history	29	26	28
Mental illness history	9	9	9
Genital mutilation history	8	1	6
Suicide attempts	12	21	15

Table IV. Associated Psychiatric Illness

	Male-to-female	Female-to-male
(N = 318) (N = 117)		
n % n %		
Axis I	18 6	5 4
Axis II	12 4	4 3

When questioned about past psychiatric treatment, only 9% of the total group indicated past treatment for diagnosed psychiatric conditions other than gender dysphoria or substance abuse. This finding was examined in further detail. Specifically, the question was asked as to what types of mental disorders had been identified. Table IV provides a breakdown of the frequency of Axis I and Axis II diagnoses in both groups. (This classification was based on usage of DSM-III-R which was employed during the period that the data were collected and examined.) An almost equal split occurred between the groups with respect to the Axis I and Axis II identified problems. Further examination of the specific diagnoses was conducted, and Table V indicates

the types of problems reported. Depression was the most common Axis I diagnosis. Diagnoses of bipolar disorder and schizophrenia were also well-represented dominant Axis I problems. Borderline and schizoid personality disorder were most prominent in the Axis II category. Only one person in that entire sample, presenting as male-to-female, had multiple diagnoses, those being paraphilia, borderline personality disorder, and antisocial personality disorder. This individual was, therefore, recorded in each of these categories. Records indicated that he came from a very dysfunctional family of origin, had various run-ins with the law, and also had molested his young daughter, resulting in a lengthy prison term. Now released from prison, he was seeking treatment for his long-standing self-diagnosed problem of gender dysphoria. Nearly two thirds of the individuals in both groups with prior Axis I diagnoses were taking medication for these conditions (e.g., anti-depressants, neuroleptics). The distance from the clinic was not significantly related to having additional psychiatric diagnoses (Table II) $[[\text{Chi}].\text{sup.2}](2, N = 435) = 4.6, \text{ ns.}$

Table V. Specific Types of Comorbid Psychiatric Diagnoses

Diagnosis	n
Male-to-female	
Axis I	
Major depression	9
Bipolar disorder	3
Schizophrenia	3
Paraphilia	1
Substance abuse	2
Axis II	
Borderline personality	6
Schizoid personality	4
Antisocial personality	2
Mental retardation	1
Female-to-male	
Axis I	
Major depression	2
Bipolar disorder	2
Schizophrenia	1
Axis II	
Borderline personality	2
Schizoid personality	1
Explosive personality	1

Regarding past genital mutilation attempts, 8% of the male-to-female and 1% of the female-to-male individuals reported such behavior (Table III). In general this involved such activities as taping, hitting, or squeezing the genitals out of intense frustration. Only a few individuals had cut their genitals with a knife or other object. Finally, the question of suicide attempts revealed that 12% of the male-to-female and 21% of the female-to-male subjects had engaged in such activity. Further questioning revealed that in virtually all of these cases this behavior was attributed to intense frustration and exasperation over the gender dysphoric condition. This finally reached a breaking point over such reported issues as feeling isolated and not able to

talk to others, being rejected by family or an intimate partner, or disgust with one's anatomic state and feeling that it could never change. All of the suicidal attempts occurred prior to individuals' becoming involved in specific gender treatment. None of these patients has had a suicide attempt since beginning therapy for his/her gender issues.

MMPI Findings

The MMPI was administered to 137 individuals (31% of the total original sample of 435). Ninety-three male-to-females (29% of the original M-F sample) and 44 female-to-males (38% of the original F-M sample) were included. The MMPI was used, rather than the MMPI-2 because data were collected using this instrument prior to the development and release of the newer version. It was felt, in order to be consistent, that usage of the original form was a better choice.

Table VI and VII denote the mean T scores for both subgroups. Results are presented for each subgroup based on anatomic sex and then on self-perceived sex. The most striking observation is the relative absence of psychopathology per se in these profiles (i.e., mean T scores above 70). This suggests no substantial indication of problems indicative of Axis I diagnoses (e.g., depression, schizophrenia, anxiety, mania, etc.).

Of particular note, the Mf score of the male-to-female subgroup was significantly elevated (above T score of 70) when plotted on the male profile but fell within the normal range when plotted on the female profile, consistent with the self-perception of this group [ILLUSTRATION FOR FIGURE 1 OMITTED]. However, the Mf score of the female-to-male subgroup was not significantly different when plotted as female or male. Both scores were below a T score of 70 with a slight tendency for the Mf score to appear closer to the norm when [TABULAR DATA FOR TABLE VI OMITTED] [TABULAR DATA FOR TABLE VII OMITTED] viewed from the self-perceived sex rather than the biologic sex for this group [ILLUSTRATION FOR FIGURE 2 OMITTED].

DISCUSSION

Our findings, based on retrospective analyses of clinical interview and questionnaire data and a subgroup of completed MMPIs, are consistent with our clinical experience over the last several decades. Specifically, gender dysphoric individuals appear to be relatively "normal" in terms of an absence of diagnosable, comorbid psychiatric problems. In fact, the incidence of reported psychiatric problems is similar to that seen in the general population (Robins et al., 1984; Weissman and Myers, 1978; Weissman et al., 1991). Similarities in incidence included depression, bipolar disorder, and schizophrenia. These are highlighted in Table VIII which compares our gender dysphoric sample and three surveyed general populations. In functional

terms, the majority of such individuals are able to hold down employment, develop lasting friendships and relationships, and pursue leisure activities of interest. A "psychiatric" population, functionally speaking, typically exhibits significant difficulties in trying to accomplish these tasks. Although a small percentage of gender dysphoric individuals in this sample had prior identifiable psychiatric problems (7-10%), this is not inconsistent with the general population (Robins et al., 1984). Since the general population studies were based on the Diagnostic Interview Schedule, they detected individuals with symptoms who had not sought mental health or medical services. The lack of formal, standardized interview schedules or symptom checklists can be cited as a weakness of this study, as such techniques would have added to the measurement of possible psychopathology. This may account for the higher incidence in the general population than our gender dysphoric sample.

Several studies have employed the MMPI around assessment issues involving transsexualism (Rosen, 1974; Finney et al., 1975; Roback et al., 1976; Fleming et al., 1981). Most notably, elevations have been identified on the Masculinity-Femininity (MF) and the Psychopathic Deviate (Pd) scales. One study went further by investigating both presurgical and post-surgical individuals, noting an interesting finding with respect to the MF scale (Fleming et al., 1981). Specifically, the male-to-female groups (both pre- and postsurgical) scored well above the mean on Mf as male but well within the normal range on Mf as female. This is consistent with the findings [TABULAR DATA FOR TABLE VIII OMITTED] of this study. On the other hand, the female-to-male groups (both pre- and postsurgical) scored within the normal range on Mf as female and well above the normal range on Mf as male. The current study's finding of most female-to-male patients scoring below 70 is different in this regard.

Table IX. MMPI Results (Mean T Scores) on Outpatient Psychiatric Sample Presented by Diagnostic Category(a)

Other Adjustment				
Borderline Affective personality and anxiety				
patients disorders disorders disorders				
MMPI scale (n = 27)	(n = 67)	(n = 47)	(n = 64)	
L	48	49	51	51
F	73	67	62	58
K	46	53	55	56
Hs	70	71	66	66
D	75	75	69	66
Hy	73	74	70	67
Pd	81	77	74	67
Mf	60	61	61	60
Pa	64	63	60	56
Pt	78	78	70	67
SiSc	64	64	50	57
Ma	70	71	69	64
Si	65	63	61	61
a	From Lloyd et al. (1983).			

How do these MMPI findings with the gender dysphoric sample compare to an identified psychiatric population? The MMPI findings for gender patients were near normal. Table IX illustrates the mean MMPI T scores reported by Lloyd et al., (1983) for four categories of patients: borderline, affective, other personality disorders, and adjustment-anxiety disorders (a "residual" group comprised of individuals with marital problems and the like). It can be seen that significant elevation (i.e., T scores above 70 occur on a number of scales, indicating problems with such areas as depression (D)), sociopathy (Pd), anxiety (Pt), and somatic preoccupations (Hs). One would expect to see such elevations in a clinically identified psychiatric population. This is particularly notable for the borderline and affective sub-groups as compared to the other subgroups. On the contrary, there appeared to be no elevations on the Mf scale across groups. Rather, these scores appear to be the most stable and least elevated of any indices on the profiles. A consistent theme presented by the individuals interviewed in this study was that they perceived themselves as happier, increasingly competent, and more productive in terms of vocational and avocational activities once they finally acknowledged their gender dysphoria. In other words, beginning the treatment process resulted in a sense of stability which was reflected by a decrease in self-destructive behavior (e.g., genital mutilation, suicide attempts, substance abuse). While contemporary gender treatment does not result in a "cure" for transsexualism, developing insight into one's problem, meeting others with similar concerns, and taking behavioral steps to change (e.g., the real life test) do appear to lead to improvements in self-confidence and relating to the general environment at large.

Conclusion

This study should help to clear up certain misperceptions about gender dysphoria per se. Specifically, individuals presenting with gender dysphoria often do not have problems indicative of a coexisting psychiatric illness such as schizophrenia or major depression. Instead, these finding suggest that gender dysphoria is usually an isolated diagnosis.

This study does not imply that contemporary evaluation and treatment approaches be abolished. The Standards of Care developed by the Harry Benjamin International Gender Dysphoria Association painstakingly evolved after much thought and discussion were shared among leaders in the field with many combined years of professional experience (Walker et al., 1985). Instead, it is felt that these elements (i.e., real life test, ongoing psychiatric counseling and support) are critical in helping individuals work through the multiple psychosocial, endocrine, and surgical issues associated with this diagnosis.

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- 1 -

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