

ORIGINAL ARTICLE

Psychological distress among transgender people in Brazil: frequency, intensity and social causation – an ICD-11 field study

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Objective: To describe self-reported experiences of gender incongruence related to discomfort and body changes to be more congruent to the desired gender, and to examine whether experiences of psychological distress related to gender identity were more strongly related to the experience of gender incongruence per se or to experiences of social rejection.

Methods: This field study used a structured interview design in a purposive sample of transgender adults (aged > 18 years or older) receiving health-care services in two main reference centers in Brazil.

Results: A high proportion of participants (90.3%, n=93) reported experiencing psychological distress related to their gender identity and report having experienced social rejection related to their gender identity during the interview index period and that rejection by friends was the only significant predictor for psychological distress.

Conclusions: Gender incongruence variables were not significant predictors of distress. This result supports the recent changes proposed by the World Health Organization in ICD-11 to move transgender conditions from the Mental and Behavioral Disorders chapter to a new chapter on Sexual Disorders and Conditions Related to Sexual Health.

Keywords: ICD-11; diagnosis and classification; social and political issues

Introduction

The World Health Organization (WHO) updated the ICD-10¹ by publishing the ICD-11 in June 2018. The WHO's 194 Member States use the ICD as an international standard for collecting and reporting health information and, in many countries, it is employed as a part of the framework for defining government obligations to provide free or subsidized health services to their populations. Other public and private insurers also use ICD health conditions as a basis for defining eligibility and covered services.²

Classification systems related to transgender identity have been controversial.³⁻⁵ This controversy must be

understood in the context of serious health disparities, poor access to health services, and experiences of violence and systematic discrimination among transgender people around the world.^{6,7} Brazil, unfortunately, is challenged by the same difficulties, despite advances in social acceptance and efforts from many social and political groups to change the way the transgender people are seen. Recently, studies have reported that transgender people suffer from daily discrimination, their access to healthcare is still hindered and they tend to avoid seeking healthcare because they assume that will suffer discrimination. This is a particularly serious concern considering the difficulty they have with expressing their needs to still untrained health professionals.^{8,9} Moreover, recent

research has provided evidence of associations between experiences of discrimination, social exclusion, violence, psychological distress, depression, suicide attempts, and elevated risk of human immunodeficiency virus (HIV) infection, with some findings supporting the minority stress model.¹⁰ An extreme example of this is evidenced in recent comprehensive research by the German non-governmental organization, Transgender Europe, which reported an alarming number of deaths due to transphobia, including a total of 325 in Brazil between 2008 and 2011.¹¹

Brazilian transgender healthcare has been regulated since 1998 by the Conselho Federal de Medicina, primarily on an experimental basis, and has been modified and enhanced over the years. In short, they are in agreement that all individuals diagnosed with transsexualism (F.64 – ICD-10) should be granted fully supported access to gender affirmative surgery by the Brazilian Unified Health System (Sistema Único de Saúde [SUS]). This public health access was obtained after many years of judicial process by the Ministério Público Federal – 4^a Região, against the Brazilian government, which finally broadly recognized the right of access to medical treatment for all individuals with an F.64-ICD-10 diagnosis.¹² There are, on a tertiary care basis,¹³ five official services that perform such clinical and surgical procedures. However, studies on Brazil's transgender population have shown that trans-specific healthcare services do not provide comprehensive medical assistance and do not fulfill the needs of transgender people who are not seeking gender affirmative surgery.^{14,15}

Because the ICD has the most important role in defining health conditions and determining health services access, the decision to maintain transgender conditions in the 11th version – as gender incongruence in childhood (GIC) and gender incongruence in adolescence and adulthood (GIAA) – has been widely discussed and viewed as necessary in the current global health context.

In the ICD-10, transgender conditions were described in the Mental and Behavioral Disorders chapter under the “gender identity disorder in childhood” and “gender identity disorders in adolescence and adulthoods.”¹⁶ However, stigma associated with the notion that transgender people have a mental disorder contributed in some degree to the precarious legal status, human rights violations, and barriers to healthcare among this population in many countries.⁶⁻⁸ There are two main reasons for this: 1) If the transgender condition was considered a mental disorder, it must be treated by psychiatric specialists exclusively, justifying denial of coverage for other related medical services by governments and private healthcare insurance companies; and 2) If the transgender condition was considered a mental disorder, some governments may deny transgender individuals self-determination and decision-making capacity to change legal documents, child custody, and reproduction.^{3,4,6-8}

Therefore, the WHO Working Group on Sexual Disorders and Sexual Health, comprising experts from all WHO regions, recommended not just renaming (as gender incongruence) and re-conceptualizing these categories in a less stigmatizing manner, but also moving them out of the chapter on Mental and Behavioral Disorders to a new

chapter on Sexual Disorders and Conditions Related to Sexual Health in the ICD-11.

The DSM-5 has managed stigma issues by renaming transgender conditions as “gender dysphoria,” but it continues classifying them as mental disorders, based on the argument that distress and/or dysfunction are essential criteria of this condition. However, the universality and real causes of the distress and dysfunction in this population have been questioned. Consistent with previous research on the minority stress model, according to recent evidence from the Mexican ICD-11 field study¹⁷: distress and all types of dysfunction were not present in all transgender participants, and if so, they were more strongly predicted by social rejection and violence experiences than by gender incongruence per se.

This study supports the removal of categories related to gender identity from the ICD classification of mental disorders. This study has been replicated in countries representing diverse regions, cultures, and economies of the world (including India as a lower income country, Brazil, Lebanon, and South Africa as upper middle-income countries, and France as high-income country). This article, in the context of the ICD-11 Brazilian field-study, aimed to: 1) describe self-reported experiences of gender incongruence related to discomfort and body changes performed to be more congruent to their desired gender; and 2) examine whether experiences of psychological distress related to gender identity were more strongly related to the experience of gender incongruence per se or to experiences of social rejection.

Methods

Adult transgender individuals between 18 and 53 years old recruited at the Hospital de Clínicas de Porto Alegre and the Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, Brazil, who volunteered to participate, were included in the study and completed an interview which was administered by a trained research assistant. The structured interview used in the study was the same one used in the Mexican study,¹⁷ but translated and adapted for the Brazilian population.

Information about the protocol was given by health-care providers at the recruitment sites. All individuals who expressed interest in participating received a full explanation of the procedures for the study and provided written informed consent. The study protocol and the interview procedures were approved by the ethics committees of both hospitals.

The research interview included questions related to sociodemographic status (e.g., age, occupation, marital status), medical history related to gender identity (e.g., use of hormones and surgery for body transformation), experiences related to gender incongruence (e.g., age they had first become aware of their gender identity, discomfort with body features associated with assigned sex at birth, behavioral changes performed to be more like the desired gender), perceived social rejection from family, friends, and schoolmates/co-workers), and experience of psychological distress (presence and intensity using a 100-point visual analog scale with 100 representing “extreme distress”).

The interview index period for the study, with the exception of demographic and medical history, involved adolescence, which was conceptualized as the salient period during which gender incongruence and distress may prominently occur.¹⁸ The interviews lasted approximately 1 h and were conducted in a private room in both hospitals by a trained research assistant.

Statistical analyses

All analyses were performed with SPSS version 20.0. Descriptive statistics of all variables were calculated. Chi-square analyses for categorical variables and independent samples-tests for continuous variables were used for comparison purposes. A multivariate logistic regression analysis was performed including variables related to the experience of gender incongruence and social rejection as explanatory variables and psychological distress as the outcome variable. Since the backward-conditional method was used, we selected the Akaike information criterion (AIC) to identify the best regression model for the data.

Results

A total of 103 transgender individuals were included. More than three-quarters of the individuals were assigned male sex at birth and currently identified themselves as transgender women (76.7%; n=79). The sample had a mean age was 30 years old (standard deviation [SD] = 8.8, range 18-53) and an average education level of 11.9 years (SD=3.4, range 2-20). Most of the participants were single (78.6%, n=81) and had remunerated employment (79.6%, n=82) at the time of the study. Transgender men reported a higher level of education ($t = -2.3$, $p = 0.02$) and were similar to transgender women with regard to the remaining demographic characteristics assessed, as shown in Table 1.

Transgender individuals reported they had first become aware of their gender identity at age of 10.0 years (SD = 4.9; range = 3-25). Most of the participants reported having used some kind of health service for body transformation at some point in their lives (84.5%, n=87), with almost all of them having hormone treatment (97.7% of those having treatment, n=85) and a substantial minority having undergone surgery for body transformation (39.1%, n=34). A slightly higher proportion of transgender women (44.1%, n=30) than transgender men (21.1%, n=4) had undergone surgery for body transformation, although this difference was not significant (chi-square [χ^2] = 3.3, $p = 0.06$). The specific body transformation surgeries reported by the participants are shown also in Table 1.

During the index period, all transgender individuals reported having experienced the desire to be a different gender than that assigned at birth. On an intensity level from 1 to 6, with 6 being the most intense desire, the sample's mean level of desire was 5.7 (SD = 0.5, range 4-6). Discomfort with several aspects of their bodies was reported by all individuals (Table 2), with more participants assigned a male sex at birth expressing discomfort with their pubic hair (58.2%, n=46 vs. 25%, n=6; $\chi^2 = 8.1$, $p = 0.004$), while more participants assigned a female sex at birth expressed discomfort with their hips (70.8%, n=17 vs. 41.8%, n=33; $\chi^2 = 6.2$, $p = 0.01$). Behavioral changes that individuals had made during the index period to become more like their desired gender were similar across transgender men and transgender women and are shown in Table 2.

Experiences of social rejection and psychological distress

During the interview index period, a high proportion of the participants (76.7%, n=79) reported having experienced social rejection related to their gender identity, mainly from family members (94.9%, of those who had experienced

Table 1 Demographic features, use of hormones, and surgeries performed for body transformation and age of awareness of transgender identity

	Total sample (n = 103)	Women/transgender women (n = 79)	Men/transgender men (n = 24)
Employment status – Remunerated	82 (79.6)	62 (78.5)	20 (83.3)
Marital status – Unmarried	81 (78.6)	62 (78.5)	19 (79.2)
Body transformation – Yes	87 (84.5)	68 (86.1)	19 (79.2)
Hormonal treatment	85 (97.7)	67 (98.5)	18 (94.7)
Surgeries	34 (39.1)	30 (44.1)	4 (21.1)
Age (years), mean (SD) [range]	30.0 (8.8) [18-53]	30.1 (8.9) [18-53]	29.6 (8.3) [18-44]
Years of education, mean (SD) [range]	11.9 (3.4) [2-20]	11.5 (3.0) [4-20]	13.4 (4.2) [2-20]
Age of first awareness of transgender identity and the need to do something about it, mean (SD) [range]	10.0 (4.9) [3-25]	10.0 (4.6) [3-25]	10.0 (6.2) [3-24]
Type of surgery (of those who had received surgery)	(n=34)	(n=30)	(n=4)
Breast implants	24 (70.5)	23 (76.6)	1 (25.0)
Nose	7 (20.5)	7 (23.3)	-
Buttock implants	5 (14.7)	3 (10.0)	2 (50.0)
Mastectomy	3 (8.8)	-	3 (75.0)
Facial feminization	2 (5.8)	2 (6.6)	-
Sexual reassignment	1 (2.9)	1 (3.33)	-
Cheekbones	1 (2.9)	1 (3.33)	-
Liposculpture	1 (2.9)	1 (3.33)	-

Data presented as n (%), unless otherwise specified.

Table 2 Discomfort with body aspects and behavioral changes performed during the interview index period to be more like the desired gender, according to assigned sex at birth

	Total sample (n=103)	Assigned sex at birth	
		Female (n=24)	Male (n=79)
Body aspect of discomfort			
Genitals	101 (98.1)	23 (95.8)	78 (98.7)
Voice	67 (65.0)	18 (75.0)	49 (62.0)
Pubic hair	52 (50.5)	6 (25.0)	46 (58.2)
Hips	50 (48.5)	17 (70.8)	33 (41.8)
Chest	77 (74.8)	20 (83.3)	57 (72.2)
Body hair	63 (61.2)	10 (41.7)	53 (67.1)
Facial hair (if birth-assigned male)	54 (52.4)	-	54 (68.4)
Behavioral changes to be more like the desired gender			
Attempting to change physical appearance	94 (91.3)	23 (95.8)	71 (89.9)
Dressing differently	87 (84.5)	22 (91.7)	65 (82.3)
Choosing a different name corresponding to desired gender (even if not shared with others)	87 (84.5)	19 (79.2)	68 (86.1)
Changing activities or pastimes to correspond with desired gender	52 (50.5)	12 (50.0)	40 (50.6)

Data presented as n (%).

Table 3 Logistic regression model for predicting psychological distress – Backward conditional model

	β	OR	95%CI	p
Initial model: AIC value 34.8				
Discomfort				
With genitals	1.45	4.26	0.21-86.69	0.34
With body hair	1.17	3.23	0.56-18.49	0.18
With changes in body parts	-1.23	0.29	0.02-3.34	0.32
Changes performed	-18.74	0.00	0.00	0.99
Rejection				
Family members	0.69	2.00	0.25-15.63	0.50
Friends	0.97	2.64	0.22-30.72	0.43
Schoolmates/coworkers	0.09	1.09	0.14-8.44	0.93
Final model: AIC value 27.9				
Rejection – Friends	1.44	4.24	1.02-17.51	0.04

95%CI = 95% confidence interval; AIC = Akaike information criterion; OR = odds ratio.

rejection, n=75), followed by friends (79.7%, n=63) and schoolmates or coworkers (74.7%, n=59). Similar rates were found between transgender men and transgender woman (rejection from family, 100% vs. 93.2; rejection from friends, 85% vs. 78%; and rejection from schoolmates/coworkers, 75% vs. 74.6%).

A high proportion of participants (90.3%, n=93) reported experiencing psychological distress related to their gender identity during the interview index period. The mean level of distress was high (77.4, SD=25.9) on a scale of 0 (no distress at all) to 100 (extreme distress). A similar proportion of transgender women and transgender men experienced distress due to their gender identity (88.6%, n=70 vs. 95.8%, n=23; $\chi^2 = 1.0$, $p = 0.29$). Of the overwhelming majority of individuals who experienced distress, only 35.4% (n=33) reported having received specialized psychological or psychiatric treatment, and a high proportion (78.8%, n=26) found the treatment to be beneficial.

Prediction of psychological distress

A logistic regression model with the backward-conditional method was conducted to examine the predictors of psychological distress among the participants. The model included variables related to the experience of gender

incongruence and experiences of social rejection (family members, friends, schoolmates/coworkers). Variables of gender incongruence included those related to discomfort with body aspects and behavioral changes performed to be more like the desired gender. Since all individuals expressed discomfort with at least one body aspect (Table 2), gender incongruence variables were collapsed into four main dichotomous indices: 1) discomfort with genitals; 2) discomfort with body hair (pubic, face, body); 3) discomfort with changes in body parts (including voice, hips, and chest) and; 4) changes performed to be more like to the desired gender.

The final model for predicting psychological distress included rejection by friends as the only significant predictor of psychological distress during the interview index period (odds ratio [OR] = 4.24, 95% confidence interval [95%CI] 1.02-17.5, $p = 0.04$) and is shown in Table 3. This model is adequate according to the changes observed in the AIC value from 34.8 to 27.9.

Discussion

Gender incongruence variables were not significant predictors of distress, and among variables related to social rejection, only rejection by friends was a significant

predictor. This result supports the recent changes in the ICD 11. The ICD-11 Working Group on Sexual Disorders and Sexual Health changes to the name, definition, and classification of transgender conditions seem to be in accordance with transgender groups that have been looking for both the depathologization of the condition and improvement in medical systems by enhancing the professionals involved in their health assistance.

However, an evidence-based decision to move transgender categories out of the chapter on Mental and Behavioral Disorders implied documentation of the non-universality and social causation of distress and dysfunction among this population in different contexts. Robles et al.¹⁷ have proven this among Mexican transgender adults, and the present study replicates such findings in a Brazilian sample. Also, in our study, the presence of psychological distress related to gender identity was very frequent, but not a *sine qua non* characteristic. Moreover, the presence of psychological distress was predicted by social rejection and not by any variable of gender incongruence per se, including those related to discomfort with body aspects as well as behavioral changes performed to be more like the desired gender. These findings supports the notion that transgender people do not have a mental disorder in the sense that their distress is not caused by the condition itself.

In this Brazilian sample, the specific form of rejection that predicted psychological distress was that posed by peers, which suggests the imperative need for interventions aimed to develop inclusive schools.¹⁹ Unfortunately, the high frequency and intensity of the distress related with gender incongruence expression in our population, as well as the low number of cases receiving specialized psychological or psychiatric treatment, are indicative of a country with many unmet social demands and needs.

In Brazil, medical care for the transgender population is not a priority. Some reasons for this include a supposed low prevalence (although not yet adequately measured) as well as a moralistic perspective regarding sexual behavior variances. This situation results in little incentive for improving primary or secondary health assistance centers or even for training professionals in medical, psychology, nursing, and social service schools, which overwhelms tertiary services, generating frustration for individuals who must wait years for specific procedures. Moreover, Brazilian transgender people have reported difficulties in health service access due to discrimination, lack of information, and a policy design that does not meet their needs. This history of discrimination was associated with a 6.72-fold increase in the frequency of health service avoidance.¹⁰

Additional important findings on the characteristics of transgender people in Brazil include a higher rate of hormone use without a medical prescription among those seeking treatment at our service (97%). The health risk of indiscriminate hormone use is well known, although this has not yet been adequately evaluated in our population. The WHO's recent report on Sexual Health, Human Rights, and the Law²⁰ described how poor access to accurate information and appropriate health services

can provoke serious behavioral and mental health consequences for transgender people, including increased HIV contamination, anxiety, depression, substance abuse, and suicide.^{3,4,21,22}

It seems clear that Brazilian society ought to improve its tolerance and acceptance of gender and sexual diversity.²³ It is hoped that part of this change, as far as policies are concerned, will include reformulating the diagnostic guidelines that naturalize the transgender condition, without diminishing the rights that have already been acquired regarding access to clinical procedures. In this sense, the ICD-11's new classification of gender incongruity should encourage health system planning actions, including policies providing for expanded access to health systems, and the procedures required for the best transgender care at different levels of complexity by the Brazilian Unified Health System.

This study has important limitations related to its method of recruitment and sample selection: its convenience sample was not representatively selected, even among transgender patients of the two main reference centers in Brazil. Therefore, our results should not be taken as estimates of prevalence or other epidemiological parameters. Another limitation of this study is that the data are based on the participants' recollection and reconstruction of their experiences of gender incongruence, dysfunction, and distress at a very young age. Such memories might be substantially influenced by subsequent experience, although in this regard the results of our study are no different from those of other retrospective diagnostic or epidemiological interviews. In view of its retrospective nature, the interview was designed to generate information that was as specific and accurate as possible regarding the most relevant time period.

Disclosure

The authors report no conflicts of interest.

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