

Body Image and Transsexualism

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Key Words

Transsexualism • Gender identity disorder • Body image • Gender differences

Abstract

Background: To achieve a detailed view of the body image of transsexual patients, an assessment of perception, attitudes and experiences about one's own body is necessary. To date, research on the body image of transsexual patients has mostly covered body dissatisfaction with respect to body perception. **Sampling and Methods:** We investigated 23 preoperative (16 male-to-female and 7 female-to-male transsexual patients) and 22 postoperative (14 male-to-female and 8 female-to-male) transsexual patients using a validated psychological measure for body image variables. **Results:** We found that preoperative transsexual patients were insecure and felt unattractive because of concerns about their body image. However, postoperative transsexual patients scored high on attractiveness and self-confidence. Furthermore, postoperative transsexual patients showed low scores for insecurity and concerns about their body. **Conclusions:** Our results indicate an improvement of body image concerns for transsexual patients following standards of care for gender identity disorder. Follow-up studies are recommended to confirm the assumed positive outcome of standards of care on body image.

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Transsexualism [gender identity disorder (GID)] is characterized by dissatisfaction with one's assigned sex and its associated body image as one of the most salient features [1]. Today, the Standards of Care of the Harry Benjamin International Gender Dysphoria Association [2] or the German Standards of Care [3], each with psychiatric treatment, hormonal therapy (HT) and sex reassignment surgery (SRS), are applied in the treatment of transsexuals. The annual incidence of requests for sex reassignment to alter physical sexual characteristics to adapt their body according to their gender identity ranges from 0.15 to 0.26 per 100,000 in most European countries [4]. Different annual incidence rates are reported for Australia (0.58) [5] and Singapore (1.58) [6].

To date, research on the body image of transsexual patients has solely been carried out using the Body Image Scale [7–10] and the Adjustment to Sex Reassignment Surgery Questionnaire [11], covering body dissatisfaction with respect to primary, secondary and neutral body characteristics. The findings confirmed the theory of a dissatisfied perception of the natal body, parts of the body or sex characteristics in preoperative transsexuals, and of a more satisfied perception of the body after SRS. On a self-constructed, nonvalidated questionnaire on attitudes towards one's own body Rakic et al. [11] affirmed favorable results for postoperative transsexuals.

However, the concept of body image beyond the mere perception of the body is composed of attitudes, experiences and perceptions pertaining to one's physical appearance based on self-observation and the reactions of

others [12]. In this context we found attitudes and experiences in transsexual patients to be under-researched.

The aim of the study was to make a first attempt at providing a more detailed view of the body image of transsexual patients and the differences in the body image between preoperative and postoperative transsexual patients and norm values. Using a validated body image instrument [Fragebogen zur Beurteilung des eigenen Körpers (FBeK), body image assessment questionnaire] [13], we characterized preoperative patients currently in treatment at our GID unit and postoperative patients from our long-term follow-up study [14] with respect to body image variables and compared the scores obtained to norm values.

Methods

Participants and Procedure

The University Hospital of Zurich is one of two sex reassignment centers providing a comprehensive treatment for GID in the German-speaking part of Switzerland. In contrast to other European countries, Switzerland has no special legislation regulating the change of the name and personal status but assessment and treatment of GID is practiced according to German standards of care [3, 15].

We had complete data sets on body image from 22 postoperative patients from our antecedent study [14]. In addition, we collected data from 23 preoperative patients who had been consecutively referred to our department. The inclusion criterion for all patients was a diagnosis of GID according to DSM-III or -IV criteria, depending on the date of the diagnosis [DSM-III(-R) from 1980 until 1994; DSM-IV from 1994 on].

The 23 preoperative transsexual patients comprise 16 male-to-female (MtF) and 7 female-to-male (FtM), HT was already established in 15 (65.2%) of them (12 MtF and 3 FtM). No differences for all measures were found for preoperative transsexual patients, whether they had HT or not.

The 22 patients who had already undergone surgical sex reassignment and who were receiving continuous HT consisted of 14 MtF and 8 FtM. The mean time between SRS and follow-up in the latter group was 51 months (SD = 25; range = 5–96). None of the tested variables was related to the time elapsed since surgery.

The postoperative transsexual patients were slightly older than the preoperative sample (postoperative M = 38.2, SD = 9.0; preoperative M = 33.0, SD = 11.3; $p = 0.081$). The two samples were comparable with regard to distribution of biological sex (preoperative: 70.8% MtF; postoperative: 60.0% MtF; $p = 0.551$).

The study was approved by the ethics committee of the canton of Zurich. Written informed consent was obtained from all participants.

Body Image Measure (FBeK)

The patients' body image was assessed by the FBeK, a validated multidimensional body self-relation questionnaire [13]. The FBeK is one of the most widespread questionnaires in German for assessing peoples' subjective views of their own bodies and con-

sists of 52 dichotomous items, generating 3 scales. The use of the FBeK is recommended for psychiatric and psychosomatic disorders and for assessing body image concepts under sexological considerations.

Scale 1: insecurity/concern (19 items). This scale focuses on exaggerated attention to one's own body, uncertainty or distrust of physical processes and feelings of insecurity and lack of physical self-control (e.g. 'my body does whatever it wants').

Scale 2: attractiveness/self-confidence (13 items). This scale contains items about satisfaction and happiness with one's own body; items that describe feelings of attractiveness and identification with one's own body are positively scored, items which describe negative or aggressive reactions to one's own body are negatively scored (e.g. 'I am satisfied with my body weight and body height').

Scale 3: accentuation of body appearance (20 items). This scale describes a particular attention to physical appearance and pleasure in the concerns of one's body (e.g. 'my appearance is important to me').

For each scale of the norm sample there is a composite sum score. The internal consistency was tested and found to be sufficient, with internal consistencies (Cronbach α) between 0.74 and 0.82. Gender notably influenced the body image scales of the normative sample on attractiveness/self-confidence ($d = 0.124$), insecurity/concern ($d = 0.187$) and accentuation of body appearance ($d = 0.592$); females scored lower on the first and higher on the other two [13].

Statistical analyses were performed with SPSS for Windows version 11.0. Psychometric data of pre- and postoperative patients were compared by 2-tailed t-tests. χ^2 tests were used to test group differences for categorical variables.

Results

The comparison of the whole sample of transsexual patients with norm values according to the biological sex revealed high scores for MtF and FtM for insecurity/concern and low scores for attractiveness/self-confidence. Similar findings were obtained within the group of preoperative transsexual patients. Contrary findings, i.e. low scores for insecurity/concern and high scores for attractiveness/self-confidence, were revealed in the postoperative sample. In addition, we found FtM scoring low but MtF scoring high compared to norm values on the scale accentuation of body appearance. This pattern was confirmed for pre- and postoperative transsexual patients (tables 1, 2). Statistically, postoperative transsexual patients scored significantly higher on attractiveness/self-confidence ($p < 0.001$) and lower on insecurity/concern ($p < 0.001$) compared to preoperative ones.

Gender differences for the body image variables are described for the norm sample for attractiveness/self-confidence, insecurity/concern and accentuation of body appearance, whereas females score lower on the first and

Table 1. Body image variables of MtF compared with normative values

	Normative values		Compared to female normative values					
	female	male	MtF (n = 30)		Pre-Op MtF (n = 16)		Post-Op MtF (n = 14)	
	mean \pm SD	mean \pm SD	mean \pm SD	p	mean \pm SD	p	mean \pm SD	p
Insecurity/concern	5.1 \pm 3.7	4.7 \pm 3.1	5.90 \pm 4.33	n.s.	8.13 \pm 4.50	<0.05	3.36 \pm 2.31	<0.05
Attractiveness/self-confidence	8.9 \pm 3.1	9.5 \pm 2.6	8.53 \pm 3.00	n.s.	7.00 \pm 2.92	<0.05	10.29 \pm 2.02	<0.05
Accentuation of body appearance	12.6 \pm 3.2	10.3 \pm 3.5	12.30 \pm 3.04	n.s.	13.06 \pm 2.89	n.s.	11.43 \pm 3.08	n.s.

Significant results are typed in bold. Pre-Op = Preoperative; Post-Op = postoperative; p = t test (2-tailed).

Table 2. Body image variables of FtM compared with normative values

	Normative values		Compared to female normative values					
	female	male	FtM (n = 15)		Pre-Op FtM (n = 7)		Post-Op FtM (n = 8)	
	mean \pm SD	mean \pm SD	mean \pm SD	p	mean \pm SD	p	mean \pm SD	p
Insecurity/concern	5.1 \pm 3.7	4.7 \pm 3.1	6.53 \pm 4.39	n.s.	9.00 \pm 3.83	<0.05	4.38 \pm 3.81	n.s.
Attractiveness/self-confidence	8.9 \pm 3.1	9.5 \pm 2.6	6.21 \pm 3.98	<0.05	3.14 \pm 2.91	<0.01	9.29 \pm 1.98	n.s.
Accentuation of body appearance	12.6 \pm 3.2	10.3 \pm 3.5	8.53 \pm 2.83	<0.001	9.14 \pm 4.01	n.s.	8.00 \pm 1.20	<0.001

Significant results are typed in bold Pre-Op = Preoperative; Post-Op = postoperative; p = t test (2-tailed).

higher on the others [13]. In the total sample of MtF and FtM we found differences in the scores on attractiveness/self-confidence ($t = 2.147$, $p < 0.05$) and insecurity/concern ($t = -0.461$, $p = 0.65$) which were in accordance with the relationship of the norm findings. It was interesting to note that accentuation of body appearance was different ($t = 4.007$, $p < 0.00$) and reversed in comparison to the norm relationship, i.e. MtF scores were similar to biological females and FtM scores more like biological males. This pattern was obtained within the pre- as well as within the postoperative sample.

Discussion

Differentiated data on the body image of transsexual patients is rare. Numerous studies have focused solely on the perception of one's own body [7–11] and surgical and cosmetic outcome [16], but no detailed examination of the body image has been published to date.

We investigated a preoperative and a postoperative sample of transsexual patients focusing on different vari-

ables of body image and with respect to differences in body image between the groups.

In general, transsexual patients seem to be insecure and to feel unattractive because of concerns about their body image. However, we found that postoperative transsexual patients scored high on attractiveness and self-confidence, indicating satisfaction relating to their bodies. Moreover, postoperative transsexual patients showed low scores for concerns about their body, indicating a reduction in the exaggerated attention to their bodies, lowered uncertainty and less distrust of physical processes as well as improved physical self-control.

In addition, we noted high scores for the accentuation of body appearance for MtF and low scores for FtM. Clinical experience indicates that MtF struggle a great deal to fit the cross-gender appearance. At present, adjusting to male appearance is easier for FtM, as male attributes in females are more readily accepted than female attributes in males. However, it is certainly not easier for FtM to accept themselves in their body after SRS, as the outcome of phalloplasty is much less favorable than the outcome of SRS in MtF.

Compared to male normative values					
MtF (n = 30)		Pre-Op MtF (n = 16)		Post-Op MtF (n = 14)	
mean ± SD	p	mean ± SD	p	mean ± SD	p
5.90 ± 4.33	n.s.	8.13 ± 4.50	<0.01	3.36 ± 2.31	<0.01
8.53 ± 3.00	n.s.	7.00 ± 2.92	<0.01	10.29 ± 2.02	n.s.
12.30 ± 3.04	<0.01	13.06 ± 2.89	<0.01	11.43 ± 3.08	n.s.

Compared to male normative values					
FtM (n = 15)		Pre-Op FtM (n = 7)		Post-Op FtM (n = 8)	
mean ± SD	p	mean ± SD	p	mean ± SD	p
6.53 ± 4.39	n.s.	9.00 ± 3.83	<0.05	4.38 ± 3.81	n.s.
6.21 ± 3.98	<0.01	3.14 ± 2.91	<0.05	9.29 ± 1.98	n.s.
8.53 ± 2.83	<0.05	9.14 ± 4.01	n.s.	8.00 ± 1.20	<0.05

A major limitation of our study has to be addressed: like other studies in the field of GID, the sample sizes are relatively small due to the low prevalence of GID.

Conclusion

Our results confirm clinical experience of feelings of both insecurity and unattractiveness concerning the body image of transsexual patients in general. These feel-

ings are accentuated in preoperative transsexual patients. Body image variables in the postoperative samples indicate improvement after SRS.

We recommend that further research on body image be carried out taking into consideration the various aspects constituting the body image. Prospective follow-up studies are recommended to confirm the positive outcome of SRS on body image and to differentiate between the outcome of the various steps of treatment such as real-life experience, HT and SRS.

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