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Alterations in body image, self-esteem and quality of life in a sample of Italian transgender individuals before gender-affirming surgery

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SUMMARY

Objectives

Mental health, alterations in body image, self-esteem, general and sexual quality of life among transgender individuals waiting for gender-affirming surgery versus cisgender individuals were investigated.

Methods

47 Italian transgender participants and 47 cisgender participants completed self-report measures.

Results

Compared to cisgender ones, trans participants showed higher alterations in self-esteem, body image, and psychological, social, and sexual quality of life, together with a comparable level of mental health conditions (Tab. I). No significant differences emerged between trans men and trans women in terms of the variables taken into account (Tab. II). Moreover, trans individuals receiving hormone therapy are more likely to report both better quality of life and body image than those who are not receiving it yet (Tab. III).

Conclusions

The main psychological distress of individuals diagnosed with gender dysphoria seems related to the symptoms directly associated with their gender incongruence, such as body image, self-esteem, and quality of life. Healthcare professionals should consider providing surgery and hormonal therapy together with psychotherapy as best practices for such patients.

Key words: body image, gender-affirming care, gender dysphoria, gender incongruence, quality of life

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Introduction

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* defines gender dysphoria (GD) as a form of clinically significant distress resulting from incongruence between one's experienced gender and one's assigned gender, along with a persistent, strong desire to be rid of one's primary and/or secondary sex characteristics, typically due to a marked incongruence with experienced and/or expressed gender and a strong desire for the primary and/or secondary sex characteristics of the other gender. Beyond those defined characteristics, GD is associated

with clinically significant impairment in important areas of functioning [1]. Recently, in the World Health Organization's eleventh revision of the International Classification of Diseases and Related Health Problems (ICD-11), the diagnostic category of "transsexualism" has been replaced with the term "gender incongruence", and it has been moved into the "Conditions related to sexual health" chapter [2].

The Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People, version 7 (SOC-7), developed by the World Professional Association for Transgender Health (WPATH), offer clinical guidance for health professionals assisting transsexual, transgender, and gender-nonconforming people. Such assistance includes providing primary, gynecological and urological care, voice and communication therapy, mental health services, and hormonal and surgical treatments [3].

Data on the association of GD and mental health are not homogeneous [4]. Indeed, studies conducted on transgender individuals with GD recruited before [5], during [5,6] and after gender-affirming treatment [7] highlighted higher rates of coexisting mental health conditions in trans people than the general population [5] and a control-matched group [6,7]. In contrast, other research with trans people recruited before [8], during [8,9] and after [8] gender-affirming treatment have not found any significant differences.

Despite the possible presence of any mental health problem, commencing hormonal treatment is associated with reduced levels of depression, better self-esteem [10] and improved psychological functioning [11], sexual function, and overall quality of life [12].

Alteration of body image is another pathological pattern characterizing patients who have received a GD diagnosis [13], together with a dissatisfying sexual [14], physical, and mental quality of life [15].

Although studies focusing on Italian transgender people are on the rise [16-18], more research is needed. Indeed, as far as we know, only one of them investigated both mental health and body image [17] on this population, and none of these studies compared transgender adults with a cisgender group.

Starting from this lack of consensus regarding the psychological well-being of individuals with GD, the aim of this study was to make a psychological assessment of trans people with GD waiting for gender-affirming surgery (GAS) compared to a group of cisgender individuals matched in terms of birth-assigned sex, age, and years of education. For the purpose of this paper, "transgender" is used as an inclusive term for individuals with GD who desire to undergo GAS, whereas "cisgender" is used for individuals whose gender identity and gender expression align with their birth-assigned sex.

Specifically, we assessed coexisting mental health conditions, alterations in body image, self-esteem, general and sexual quality of life in a sample of Italian trans men and trans women compared to a control group of cisgender ones. Possible differences in those psychological characteristics between trans men and trans women and between transgender participants receiving hormone therapy and those not receiving hormone therapy yet were also investigated.

Methods

Participants and procedure

Recruited from February 2019 to August 2020, all participants had been examined in the Plastic Surgery Unit of the AOUP "P. Giaccone" in Palermo, Italy, in order to be waitlisted for GAS and were consecutively invited to participate in this study. None of the individuals refused to participate in the study. Each participant was also assessed in a psychiatric interview as well as a psychological interview and asked to answer self-report questionnaires anonymously. A group of cisgender individuals homogenous in terms of birth-assigned sex, age, and years of education was recruited. Cisgender individuals could volunteer to enroll in the study by responding to an advertisement posted in the outpatient clinic and on social media.

Eligibility criteria to participate in the study included: aged at least 18 years old; self-identifying as transgender; meeting the DSM-5 diagnostic criteria for GD; being able to provide their written informed consent. Individuals who self-identified as non-binary were excluded because they typically receive hormone treatment that differs from that of other transgender people.

Specifically, forty-nine consecutive trans patients were screened; among them, two were excluded since they self-identified as non-binary.

Forty-seven individuals with a GD diagnosis (trans women = 42.6%, mean age 28.15, *SD* = 9.20) and forty-seven cisgender adults (42.6% males, mean age 31.57, *SD* = 9.89) participated in this study. Among them, two transgender individuals were excluded from the analysis since during medical history taking it was not possible to clarify if they received hormone treatment under the supervision of health care professionals. In terms of hormone therapy, transgender men took exogenous testosterone, whereas transgender women took exogenous estrogen and anti-androgens. All trans patients asked for psychotherapy, and also received endocrinology and surgical consultations.

This study was approved by the ethical review board of the AOUP "P. Giaccone" in Palermo, Italy ("Comitato Etico Palermo 1", Verb N° 02/2019). Informed consent was obtained from each participant, and all measures were administered with respect for the participants' privacy.

Measures

Millon Clinical Multiaxial Inventory – III

In order to investigate the presence of coexisting mental health conditions, the Millon Clinical Multiaxial Inventory – III (MCMI-III) was used. The MCMI-III is a 175-item, true-false, self-report questionnaire that measures 14 personality disorders and 10 clinical syndromes according to DSM-IV criteria. The Italian version of the MCMI-III was found to have good psychometric properties: Cronbach's alpha values ranged from 0.66 to 0.90; test-retest reliability was between 0.82 and 0.96 [19].

Body Uneasiness Test

The Body Uneasiness Test (BUT) is a self-report questionnaire that consists of two parts: BUT-A, which measures weight phobia, body image concerns, avoidance, compulsive self-monitoring and depersonalization; and BUT-B, which measures specific worries about particular body parts. The questionnaire consists of 71 items on a 6-point Likert scale (from 0 "never" to 5 "always"). Cronbach's alpha of the Italian-validated version ranges between 0.69 (only BUT-B VII factor "hair, skin") and 0.90; the questionnaire showed a good test-retest reliability [20].

World Health Organization Quality of Life-BREF (WHOQOL-BREF)

The WHOQOL-BREF was derived from the WHOQOL-100. This self-administered questionnaire is composed of 26 items and it produces scores for 4 domains related to quality of life: physical health, psychological health, social relationships and environment. The Italian version of the WHOQOL-BREF domains has shown good internal consistency, ranging from 0.65 for the social relationships domain to 0.80 for the physical domain; test-retest reliability values range from 0.76 for the environment domain to 0.93 for the psychological domain [21].

Sexual Quality of Life-Female (SQOL-F)

This self-report questionnaire is composed of 18 items on a 6-point Likert scale, ranging from "completely agree" to "completely disagree". The items were developed through interviews with 82 women and it reflects three specific areas: self-esteem, emotional issues, and relationship issues. A higher total score reflects a better sexual quality of life. The instrument was found to have good internal consistency (Cronbach's alpha = 0.95) and good test-retest reliability [22].

Sexual Quality of Life-Male (SQOL-M)

The SQOL-M is a 11-item self-administered instrument derived from the SQOL-F questionnaire. Each item is graded on a 6-point Likert-type response scale, ranging from "completely agree" to "completely disagree". Higher scores imply better sexual quality of life. The questionnaire showed good psychometric properties (Cronbach's alpha = 0.92; test–retest reliability = 0.82) [23].

Basic Self-Esteem Scale

This self-report test measures that particular type of self-esteem which is independent of personal skills, achievement or outside validation. The questionnaire is composed of 22 items rated along a 5-point Likert scale (from 1 "totally disagree" to 5 "totally agree"). The Italian-validated version showed good psychometric properties: Cronbach's alpha was 0.85, test-retest reliability was between 0.81 and 0.83 [24].

Statistical analysis

Group-based differences in terms of mental health were analyzed with χ^2 tests. Normality assumption was tested using the Kolmogorov-Smirnov test. Group-based differences in terms of body image, general and sexual quality of life, and self-esteem levels were analyzed with independent samples *t* tests or Mann-Whitney *U* tests. All analyses assumed an alpha risk of 5%. All statistical analyses were performed in the Statistical Package for the Social Sciences for Windows 22.0.

Results

The two groups did not differ significantly in age, level of education, birth-assigned sex, or marital status (all $p > .05$).

The Kolmogorov–Smirnov test for normality was significant for body image concerns, avoidance, compulsive self-monitoring, depersonalization, and sexual quality of life ($p < .05$), violating assumption of normality. Moreover, the test was not significant for weight phobia, global severity index, total positive symptoms, positive symptom distress index, overall quality of life, and levels of self-esteem, reflecting normal distribution.

Compared to cisgender ones, transgender participants showed significant higher alterations in several dimensions of body image, including weight phobia, body image concerns, avoidance, compulsive self-monitoring, depersonalization, global severity index, total positive symptoms, and positive symptom distress index. Differences in levels of self-esteem were also significant between the groups, showing that transgender people reported lower levels of self-esteem than cisgender people. Moreover, transgender individuals reported a significant worse sexual, psychological and social relationships quality of life than cisgender ones. No significant differences emerged in terms of physical and environmental quality of life, and mental health problems (Tab. I).

Furthermore, no significant differences emerged between the trans men and trans women in terms of body

TABLE I. *Comparisons between transgender and cisgender groups.*

Factor	Transgender group (n = 47) M (SD)	Cisgender group (n = 47) M (SD)	Independent t test (*p* value)
Weight phobia	2.55 (1.02)	1.01 (.91)	.000
Global severity index	2.39 (.90)	.91 (1.13)	.000
Positive symptom total	22.69 (8.32)	12.10 (7.93)	.000
Positive symptom distress index	3.29 (.92)	1.74 (.53)	.000
Physical health QoL	66.42 (17.69)	71.25 (17.02)	.199
Psychological QoL	57.48 (20.43)	68.08 (16.23)	.008
Social relationships QoL	62.08 (20.58)	72.01 (17.18)	.016
Environment QoL	61.01 (14.66)	65.11 (16.02)	.220
Self-esteem	39.13 (32.96)	57.59 (33.07)	.010
Factor	**Transgender group (n = 47) M Rank**	**Cisgender group (n = 47) M Rank**	**Mann-Whitney U test (*p* value)**
Body image concerns	67.61	27.39	.000
Avoidance	66.67	28.33	.000
Compulsive self-monitoring	58.37	36.63	.000
Depersonalization	67.64	27.36	.000
Sexual QoL	24.23	60.83	.000
Factor	**Transgender group (n = 47) Frequency (%)**	**Cisgender group (n = 47) Frequency (%)**	**Chi Square of Pearson (*p* value)**
Schizoid	2 (4.3%)	-	.153
Avoidant	5 (10.6%)	2 (4.3%)	.239
Depressive	10 (21.3%)	5 (10.6%)	.159
Dependent	5 (10.6%)	1 (2.1%)	.091
Histrionic	3 (6.4%)	1 (2.1%)	.307
Narcissistic	5 (10.6%)	9 (19.1%)	.247
Antisocial	-	-	-
Aggressive	1 (2.1%)	-	.315
Compulsive	2 (4.3%)	1 (2.1%)	.557
Passive-aggressive	3 (6.4%)	4 (8.5%)	.694
Self-defeating	4 (8.5%)	2 (4.3%)	.399
Schizotypal	1 (2.1%)	-	.315
Borderline	-	1 (2.1 %)	.315
Paranoid	-	2 (4.3%)	.153
Anxiety	8 (17.0%)	3 (6.4%)	.109
Somatic symptom	1 (2.1%)	-	.315
Bipolar disorder	-	-	-
Persistent depression	-	-	-
Alcohol use	-	-	-
Drug use	1 (2.1%)	-	.315
Post-traumatic stress	-	-	-
Thought disorder	-	-	-
Major depression	1 (2.1%)	-	.315
Delusional disorder	-	-	-

*M: mean; SD : standard deviation; M rank: mean rank; QoL: quality of life; NS: non-significant; *p < .05; **p < .01; ***p < .005; ****p < .001.*

image, self-esteem, sexual quality of life, or physical, psychological, social relationships, or environmental quality of life (Tab. II).

Last, comparing transgender participants receiving hormone therapy and those not receiving hormone therapy yet, those receiving it showed significant higher rates of self-esteem, several domains of quality of life, such as physical and psychological ones, and in several dimensions of body image, including body image concerns, avoidance, and global severity index. No significant

TABLE II. *Comparisons between trans women and trans men.*

Factor	Trans women (n = 20) M (SD)	Trans men (n = 27) M (SD)	Independent t test (p value)
Body image – Global Severity index	2.22 (1.01)	2.53 (.81)	.255
Physical health QoL	67.85 (15.71)	65.36 (19.30)	.667
Psychological QoL	61.48 (18.58)	54.52 (21.61)	.293
Social relationships QoL	59.80 (21.29)	65.906 (23.99)	.554
Environment QoL	59.24 (15.06)	62.31 (14.55)	.520
Self-esteem	48.05 (34.29)	33.30 (31.35)	.154
Factor	**Trans women (n = 20) M Rank**	**Trans men (n = 27) M Rank**	**Mann-Whitney U test (p value)**
Sexual QoL	22.85	18.76	.274

*M: mean; SD: standard deviation; QoL: quality of life; M rank = mean rank; NS = non-significant; *p < .05; **p < .01; ***p < .005; ****p < .001.*

TABLE III. *Comparison between transgender participants receiving hormone therapy and those not receiving hormone therapy yet.*

Factor	Hormone therapy group (n = 21) M (SD)	Hormone-naive group (n = 24) M (SD)	Independent t test (*p* value)
Weight phobia	2.33 (1.05)	2.86 (.89)	.076
Global severity index	2.10 (1.00)	2.76 (.59)	.009
Positive symptom total	20.57 (8.73)	25.26 (7.05)	.056
Positive symptom distress index	3.37 (.95)	3.31 (.87)	.822
Physical health QoL	73.21 (13.92)	60.35 (19.45)	.026
Psychological QoL	63.62 (19.68)	50.20 (19.23)	.041
Social relationships QoL	65.73 (19.78)	57.91 (20.85)	.244
Environment QoL	62.26 (12.49)	60.04 (17.02)	.654
Self-esteem	52.05 (34.26)	26.78 (28.10)	.013
Factor	**Hormone therapy group (n = 21) M Rank**	**Hormone-naive group (n = 24) M Rank**	**Mann-Whitney U test (*p* value)**
Body image concerns	17.74	27.60	.012
Avoidance	16.64	28.56	.002
Compulsive self-monitoring	22.86	23.13	.945
Depersonalization	19.12	26.40	.062
Sexual QoL	20.71	18.52	.547

*M: mean; SD: standard deviation; QoL: quality of life; M rank: mean rank; NS: non-significant; *p < .05; **p < .01; ***p < .005; ****p < .001.*

differences emerged between the groups in terms of weight phobia, compulsive self-monitoring, depersonalization, positive symptom total, and positive symptom distress index, sexual quality of life, social relationships and environmental quality of life (Tab. III).

Discussion

To our knowledge, this study marks the first aimed at investigating the coexisting mental health conditions in GD diagnosis, alterations in body image, self-esteem, general and sexual quality of life in a sample of Italian transgender individuals waiting for GAS compared to a homogeneous group of cisgender ones in terms of birth-assigned sex, age, and years of education. Indeed, only a very few studies have been conducted recruiting an Italian sample of people with GD, and none of them compared transgender people versus a homogeneous group of cisgender individuals taking into account all the variables we considered.

This study revealed that the main psychological problems among transgender individuals compared to cisgender ones were a strong alteration of body image, an

unsatisfying sexual and overall quality of life, and low levels of self-esteem.

According to our data, transgender people who received a GD diagnosis experienced more concerns with their body image and appearance, weight phobia, compulsive self-monitoring, and symptoms of depersonalization than cisgender participants. Moreover, transgender patients receiving hormone therapy were more likely to report positive feelings towards their body image and physical appearance than those who were not receiving hormone therapy yet. Furthermore, transgender people can adopt avoidance behaviors and experience feelings of detachment and estrangement toward their bodies. Those results are congruent with Jones et al. [13], who have underscored the alteration of body image as an important factor that contributes to psychological suffering in patients diagnosed with GD. Indeed, the distress and unhappiness experienced by transgender individuals are focused on the areas of their body related to the birth-assigned sex [25]. In this regard, hormone therapy and GAS are considered as a way for relieving body dissatisfaction in transgender individuals [26]. According to our data, transgender participants who received a GD diagnosis reported lower levels of self-esteem than cisgender ones, and individuals receiving hormonal therapy are more likely to report higher self-esteem than those who are not receiving hormone therapy yet. Previous studies underlined that self-esteem can be negatively impacted by internalized transphobia and positively impacted by social connectedness [27]; in this regard the assessment of self-esteem in subjects with GD is relevant, since low self-esteem is a predictor of depression [28], and low quality of life [29].

Furthermore, our data showed an unsatisfying sexual quality of life among transgender individuals versus cisgender ones, including a lack of pleasure and confidence, feelings of guilt, embarrassment, anger, and anxiety, and a tendency to avoid sexual activity. That result is congruent with previous findings indicating dissatisfying sexual quality of life in transgender individuals [15].

Surprisingly, in contrast with Bartolucci and colleagues [14], no differences between transgender participants treated with hormone therapy and transgender hormone-naive ones were found on sexual quality of life. This result suggests that hormone treatment alone could be insufficient for improving this dimension of quality of life, at least in transgender individuals who are seeking for gender-affirming surgery. Indeed, a better quality of life and a satisfactory sexual function were found in transgender individuals who received GAS [30].

Moreover, in our sample, transgender people reported a worse psychological and social relationships quality of life than cisgender individuals, whereas transgender participants receiving hormone therapy are more likely to report a better quality of life than those who are not receiving it yet. Recently, a systematic review and meta-analysis suggested that transgender people have lower quality of life than the general population, however some evidence suggests that it improves after the onset of the hormonal treatment or GAS, which could be explained by being able to live as the experienced gender [31].

Finally, our data showed comparable rates of coexisting mental health conditions between the two groups, indicating that transgender people compared to cisgender people are not characterized by higher levels of psychological distress. Such results are consistent with reported findings indicating no evidence of elevated levels of depression, anxiety, psychosis-related symptoms, or signs of serious personality disorders in people diagnosed with GD [9].

Last, no significant differences emerged between trans men and trans women in terms of body image, self-esteem, sexual or general quality of life. Those findings indicate that in our sample those variables were not influenced by birth-assigned sex.

To our knowledge, the present study was the first to investigate mental health conditions, alterations in body image, levels of self-esteem, sexual quality of life, and the physical, psychological, social, and environmental dimension of quality of life in general in an Italian sample of transgender adults compared to a control group of cisgender ones matched in terms of birth-assigned sex, age, and years of education.

The chief limitation of the study was its small sample. However, considering the peculiarity of the condition investigated, it continues to be difficult to recruit transgender individuals in large numbers. Furthermore, it was not considered whether the participants in either group were taking psychopharmacological drugs, which could have affected some variables taken into account.

Conclusions

The results of the study show that the chief psychological problems of individuals diagnosed with GD seem to relate to significant alterations of body image, low self-esteem, and poor sexual and overall quality of life and it is not characterized by significantly higher levels of psychological distress.

In turn, such results provide support for reducing the social stigma of transgender individuals, which is a widespread issue in Italy [32]: trans people experience rejection since their childhood because of their gender nonconformity [33], and, to date, there are no Italian laws that criminalize violence and hate speech against LGBT+ people. By highlighting not significant higher rates of mental health conditions in transgender participants compared to cisgender ones, our findings potentially

contribute to deconstructing and reducing false beliefs and prejudices about trans people.

Implications for research and practice

These findings suggest that patients with a GD diagnosis could benefit from an integrated therapeutic approach until they have completed their gender transition, especially in terms of their body image, self-esteem, and quality of life. Furthermore, it would be useful for Italian mental health professionals to receive a specific training on gender identity and gender-affirming care, in order to adequately assist patients during their transition.

By extension, healthcare professionals who treat transgender individuals should consider providing surgery and hormonal therapy together with psychotherapy as best practices for such patients. Indeed, according to the WPATH's Standards of Care, health professionals should help patients to evaluate the full range of possibilities for care in accordance with their needs and goals [3]. According to Selvaggi and Giordano [34], offering psychological assistance is not a form of discrimination but can improve transgender patients' care by alleviating their internalized transphobia, improving their body image, promoting their resilience, and assisting the surgeons with preparing for GAS and with delivering follow-up care. The aim of such psychotherapy is to help people diagnosed with GD to overcome their distress by enabling them to achieve a greater sense of stability, acceptance, and satisfaction with their chosen gender. Currently, however, the sole psychotherapeutic approach aimed at treating GD directly is dialectical behavior therapy, which indicates that additional studies addressing psychotherapy are needed.

In the future, given the continued lack of consensus on mental health, researchers could benefit from the results reported herein, especially if able to investigate the variables assessed in a larger sample. In any case, studies are also needed that involve examining self-esteem, sexual quality of life, and overall quality of life among transgender individuals who have received GAS.

Conflict of interest statement

The Authors declare no conflict of interest.

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Author Contributions

GM: conceptualization, investigation, methodology, writing-original draft, writing-review & editing, formal analysis, resources; CLC: conceptualization, methodology, writing-review & editing, resources; CRS: Methodology, writing-review & editing, resources; LF: methodology, writing-review & editing, resources; AG: investigation, writing-original draft, writing-review & editing, resources; RA: investigation, resources; GO: investigation, writing-original draft, resources; EP: investigation, writing-original draft, resources. FT: Writing-review & editing, Resources; GZ: writing-review & editing, resources; AC: conceptualization, project administration, supervision, writing-review & editing; DLB: conceptualization, project administration, supervision, writing-review & editing.

Ethical consideration

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

Data availability statement

Due to the nature of this research, participants of this study did not agree for their data to be shared publicly, so supporting data is not available.

References

1 American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. (DSM-5). Washington, DC: American Psychiatric Association 2013.

2 World Health Organization. International classification of diseases for mortality and morbidity statistics (11th Revision), 2018. (https://icd.who.int/browse11/l-m/en).

3 Coleman E, Bockting W, Botzer M, et al. Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. Int J Transgend 2012;13:165-232. https://doi.org/10.1080/15532739.2011.700873

4 Dhejne C, Van Vlerken R, Heylens G, et al. Mental health and gender dysphoria: a review of the literature. Int Rev Psychiatry 2016;28:44-57. https://doi.org/10.3109/09540261.2015.1115753

5 Gómez-Gil E, Trilla A, Salamero M, et al. Sociodemographic, clinical, and psychiatric characteristics of transsexuals from Spain. Arch Sex Behav 2009;38:378-392. https://doi.org/10.1007/s10508-007-9307-8

6 Davey A, Bouman WP, Meyer C, et al. Interpersonal functioning among treatment-seeking trans individuals. J Clin Psychol 2015;71:1173-1185. https://doi.org/10.1002/jclp.22209

7 Dhejne C, Lichtenstein P, Boman M, et al. Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. Plos One 2011;6:e16885. https://doi.org/10.1371/journal.pone.0016885

8 Gómez-Gil E, Vidal-Hagemeijer A, Salamero M. MMPI-2 characteristics of transsexuals requesting sex reassignment: comparison of patients in prehormonal and presurgical phases. J Pers Assess 2008;90:368-374. https://doi.org/10.1080/00223890802108022

9 Simon L, Zsolt U, Fogd D, et al. Dysfunctional core beliefs, perceived par-

enting behavior and psychopathology in gender identity disorder: a comparison of male-to-female, female-to-male transsexual and nontranssexual control subjects. J Behav Ther Exp Psychiatry 2011;42:38-45. https://doi.org/10.1016/j.jbtep.2010.08.004

10 Gorin-Lazard A, Baumstarck K, Boyer L, et al. Hormonal therapy is associated with better self-esteem, mood, and quality of life in transsexuals. J Nerv Ment Dis 2013;201:996-1000. https://doi.org/10.1097/nmd.0000000000000046

11 Hughto JMW, Reisner S. A systematic review of the effects of hormone therapy on psychological functioning and quality of life in transgender individuals. Transgend Health 2016;1:21-31. https://doi.org/10.1089/trgh.2015.0008

12 Murad MH, Elamin MB, Garcia MZ, et al. Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes. Clin Endocrinol 2010;72:214-231. https://doi.org/10.1111/j.1365-2265.2009.03625.x

13 Jones BA, Haycraft E, Murjan S, et al. Body dissatisfaction and disordered eating in trans people: a systematic review of the literature. Int Rev Psychiatry 2015;28:81-94. https://doi.org/10.3109/09540261.2015.1089217

14 Bartolucci C, Gómez-Gil E, Salamero M, et al. Sexual quality of life in gender-dysphoric adults before genital sex reassignment surgery. J Sex Med 2015;12:180-188. https://doi.org/10.1111/jsm.12758

15 Valashany BT, Janghorbani M. Quality of life of men and women with gender identity disorder. Health Qual Life Outcomes 2018;16. https://doi.org/10.1186/s12955-018-0995-7

16 Anzani A, Panfilis CD, Scandurra C, et al. Personality disorders and personality profiles in a sample of transgender individuals requesting gender-affirming treatments. Int J Environ Res Public Health 2020;17. https://doi.org/10.3390/ijerph17051521

17 Fisher AD, Bandini E, Casale H, et al. Sociodemographic and clinical features of gender identity disorder: an Italian multicentric evaluation. J Sex Med 2013;10:408-419. https://doi.org/10.1111/j.1743-6109.2012.03006.x

18 Scandurra C, Amodeo AL, Valerio P, et al. Minority stress, resilience, and mental health: a study of Italian transgender people. J Soc Issues 2017;73:563-585. https://doi.org/10.1111/josi.12232

19 Zennaro A, Ferracuti S, Lang M, et al. MCMI-III. Millon Clinical Multiaxial Inventory – III. Manuale. Florence: Giunti O.S. 2008.

20 Cuzzolaro M, Vetrone G, Marano G, et al. The Body Uneasiness Test (BUT): development and validation of a new body image assessment scale. Eat Weight Disord 2006;11:1-13. https://doi.org/10.1007/BF03327738

21 De Girolamo G, Rucci P, Scocco P, et al. Quality of life assessment: validation of the Italian version of the WHO-QOL-Brief. Epidemiol Psichiatr Soc 2000;9:45-55. https://doi.org/10.1017/S1121189X00007740

22 Symonds T, Boolell M, Quirk F. Development of a questionnaire on sexual quality of life in women. J Sex Marital Ther 2005;31:385-397. https://doi.org/10.1080/00926230591006502

23 Abraham L, Symonds T, Morris MF. Psychometric validation of a sexual quality of life questionnaire for use in men with premature ejaculation or erectile dysfunction. J Sex Med 2008;5:595-601. https://doi.org/10.1111/j.1743-6109.2007.00749.x

24 Forsman L, Johnson M, Ugolini V, et al. Basic SE. Basic Self-Esteem Scale. Valutazione dell'autostima di base negli adulti. Con protocolli. Trento: Erickson 2003.

25 Becker I, Nieder TO, Cerwenka S, et al. Body image in young gender dysphoric adults: a European multi-center study. Arch Sex Behav 2016;45:559-574. https://doi.org/10.1007/s10508-015-0527-z

26 de Vries ALC, Mcguire JK, Steensma TD, et al. Young adult psychological outcome after puberty suppression and gender reassignment. Paediatr 2014;134:696-704. https://doi.org/10.1542/peds.2013-2958

27 Austin A, Goodman R. The impact of social connectedness and internalized transphobic stigma on self-esteem among transgender and gender non-conforming adults. J Homosex 2017;64:825-841. https://doi.org/10.1080/00918369.2016.1236587

28 Witcomb GL, Bouman WP, Claes L, et al. Levels of depression in transgender people and its predictors: results of a large matched control study with transgender people accessing clinical services. J Affect Disord 2018;235:308-315. https://doi.org/10.1016/j.jad.2018.02.051

29 Bouman WP, Davey A, Meyer C, et al. Predictors of psychological well-being among treatment seeking transgender individuals. Sex Relation Ther 2016;31:359-375. https://doi.org/10.1080/14681994.2016.1184754

30 Wierckx K, Van Caenegem E, Elaut E, et al. Quality of life and sexual health after sex reassignment surgery in transsexual men. J Sex Med 2011;8:3379-3388. https://doi.org/10.1111/j.1743-6109.2011.02348.x

31 Nobili A, Glazebrook C, Arcelus J. Quality of life of treatment-seeking transgender adults: a systematic review and meta-analysis. Rev Endocr Metabol Disord 2018;19:199-220. https://doi.org/10.1007/s11154-018-9459-y

32 Prunas A, Clerici CA, Gentile G, et al. Transphobic murders in Italy: an overview of homicides in Milan (Italy) in the past two decades (1993-2012). J Interpers Violence 2015;30:2872-2885. https://doi.org/10.1177/0886260514554293

33 Scandurra C, Vitelli R, Maldonato NM, et al. A qualitative study on minority stress subjectively experienced by transgender and gender nonconforming people in Italy. Sexologies 2019;28:e61-e71. https://doi.org/10.1016/j.sexol.2019.05.002

34 Selvaggi G, Giordano S. The role of mental health professionals in gender reassignment surgeries: unjust discrimination or responsible care? Aesthet Plast Surg 2014;38:1177-1183. https://doi.org/10.1007/s00266-014-0409-0