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Adolescents who are Eligible for Sex Reassignment Surgery: Parental Reports of Emotional and Behavioural Problems

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ABSTRACT

One important reason why clinicians abstain from medical intervention in transsexual adolescents is that they assume that transsexualism and psychopathology are necessarily associated. However, several studies among transsexual adolescents considered eligible for sex reassignment, employing self-report questionnaires and the Rorschach according to Exner's Comprehensive System, did not find the high levels of psychopathology encountered in psychiatric populations. Thus far, no data have been gathered from sources other than the patients themselves. It has been argued that the method used may create a bias, as the sources of information were persons who have a stake in the outcome. In this study we therefore assessed the number and type of psychological problems among transsexual adolescents using Child Behavior Checklist and DISC data gathered from parents or other caretakers, at the time of application. In about one quarter of the patients DSM criteria were fulfilled (one specific phobia, one tic disorder, one oppositional disorder and one anxiety disorder), and in about one third of the patients, parents reported high levels of behavioural or emotional problems on the Child Behavior Checklist (CBCL). A post hoc qualitative inspection of the clinical CBCL group's situation revealed that in all patients important unfavourable family circumstances could be observed, such as having major conflicts with parents. This might have led to an over-reporting of problems by parents or may be indicative of a real elevation of emotional or behavioural disturbance, perhaps as a reaction of family problems that already existed or were a consequence of the child's gender dysphoria. However, in line with previous data, transsexual adolescents as a group did not score in the clinical range at the time of application.

KEYWORDS

adolescents, gender identity disorder, psychopathology, sex reassignment, transsexualism

Introduction

DESPITE THE EARLY onset of gender identity disorder (GID), in most countries sex reassignment (SR), beginning with hormone treatment, is not started earlier than 18 years of age. Yet treatment before the final stages of pubertal masculinization or feminization have been reached has its advantages. One advantage is a reduced risk of psychological problems that may develop as a consequence of GID. When adolescent transsexuals have to await medical treatment for many years it may increase their tendency to withdraw from social/romantic relationships. They may become depressed, have difficulties in concentrating on schoolwork or become insecure, because they have to live a self-concept that is never socially acknowledged or reinforced. They also have complex lives, full of secrets. Developmental arrest may be the result.

Furthermore, early treated transsexuals easily pass as a member of the opposite sex, which is a life-long advantage. Finally, outcome studies among adult transsexuals suggest that an unfavourable outcome is related to a late rather than an early start of the SR procedure (for reviews, see Green & Fleming, 1990; Pfäfflin & Junge, 1992).

However, with some rare exceptions (e.g. Dulcan & Lee, 1984; see also the recommendations of Newman as early as 1970) clinicians have been hesitant to employ forms of treatment for adolescent SR applicants other than psychotherapy or environmental therapy (for a well-articulated review of clinicians' dilemma see Wren, 2000). The reluctance to initiate hormone treatment before the age of 18 is based on the fear that the chance of making the wrong diagnosis is higher in adolescents than in adults. Naturally, if a complete reversal of extreme and life-long cross-gender identity was possible by using treatment methods other than SR, clinicians should refrain from SR. The few published case studies of transsexuals (only some of them older adolescents) who were 'cured' after psychotherapy (Barlow, Reynolds, & Agras, 1973; Barlow, Abel, & Blanchard, 1979; Davenport & Harrison, 1977; Dellaert & Kuhnke, 1969; Kronberg, Tyano, Apter, & Wijzenbeek, 1981; for a review see Cohen-Kettenis & Kuiper, 1984) do not permit us to draw such conclusions. Treatment success in these studies has been evaluated on the basis of diverse and sometimes questionable criteria. Few reports mention a long-term follow-up (so even the claimed 'cures' might in fact have been postponements of SR), and the case studies usually describe patients who were highly motivated to change their gender identity, a characteristic rarely encountered in most of our applicants.

Non-medical interventions can be helpful in cases of gender confusion or certain – perhaps milder – forms of gender dysphoria. However, we doubt that the reported cases reflect a complete and stable (re)establishment of a gender identity corresponding with

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genital sex in persons with a life-long complete cross-gender identity, that were treated in (early) adulthood. Moreover, despite many years of intensive psychotherapy, permanent gender identity change is, even in the perhaps 'milder' cases, not always achieved (Cohen-Kettenis & Van Goozen, 1998; Dulcan & Lee, 1984; Lothstein, 1980). These considerations have led us to favour SR as a treatment option for transsexuals, even when they have not yet reached the age of 18. We have therefore developed a rather extensive diagnostic procedure to minimize the chance that adolescents referred for hormone treatment will regret their decision later in life. In broad lines the procedure is as follows.

When an adolescent applies for SR at our clinic, we start with a series of interviews with the child and the family. With the parents we discuss the general and gender development of the child, the way the parents have dealt with their child's atypical gender behaviour, the current functioning of the child and the family and the family backgrounds of the parents themselves. With the adolescent, a wide range of topics is explored, e.g. identification figures, relationship with same-sex and opposite-sex parent, first conscious cross-gender feelings, emotional reaction of the child to the maturation of the body, and various aspects of sexuality (such as sexual fantasies, sexual orientation, anxieties, the meaning of cross-dressing, deviant sexual behaviour). Current issues such as school/career choice or school problems, relationship problems at home or with peers, and romantic involvements are also addressed. In this phase general aspects of the child's functioning (problem-solving abilities, interpersonal functioning, reality testing, stability of the SRS wish, etc.) can be observed, along with his or her gender role behaviour. All children are given a psychodiagnostic assessment, consisting of intelligence and personality testing and, if necessary, neuropsychological testing. Our standard test battery also contains some specific instruments, such as a body image scale (Lindgren & Pauly, 1975), and a self-developed gender dysphoria scale (see Cohen-Kettenis & Van Goozen, 1997).

When there is any doubt as to the diagnosis, the second phase of the SR procedure does not take place. Instead, various forms of psychological or psychiatric treatment are offered, depending on the outcome of the first diagnostic phase. Such treatment is also offered to diagnosed transsexuals with major co-morbidity or a very unfavourable environment, instead of an immediate start with the second phase. In the Standards of Care of the Harry Benjamin International Gender Dysphoria Association (HBIGDA) the second phase is referred to as the 'real life experience' (Meyers et al., 2001). For referral to the second phase additional criteria are used compared with the procedure for adults. These are:

1. A life-long extreme and complete cross-gender identity/role.
2. Around puberty, an aggravation rather than amelioration of the gender dysphoria.
3. Psychological stability (with the exception of problems which can be a consequence of their living in the unwanted gender role) and adequate social functioning.
4. A supportive environment (family, school) at the time of the second SR phase.

The second phase implies the start of the real-life experience, supported by a staged hormone treatment (Cohen-Kettenis, 1994). Hormones given in the first stage block the action of sex steroids in a reversible way: the male-to-females (MFs) do not masculinize any further, the female-to-males (FMs) do not feminize any further (Cohen-Kettenis & Van Goozen, 1998; Gooren & Delemarre-van de Waal, 1996). Cross-sex hormones, given in the next stage, have irreversible effects. Androgens masculinize the female body, whereas estrogens feminize the male body. This is given between the ages of 16 and 18 years only when the applicant has responded favourably to the partial hormone treatment.

During the real-life experience phase applicants live full time in the desired gender role. Thus, they can discover whether they are able to pass as someone of the opposite sex and experience all advantages and disadvantages of the new situation. Depending on the situation, the role change may occur gradually or at once. If the real-life experience has been successful the applicant is referred for surgery. Surgery takes place when applicants are aged over 18 years. When adolescents apply for SR shortly before their 18th birthday, they usually start hormone treatment after they reach 18 and thus follow the adult procedure. In that case the minimal duration of the real-life experience period is one year for FMs and one and a half years for MFs, counting from the start of the full cross-sex hormone treatment. This difference is due to the fact that the gender-role change seems to have more impact on the life of MFs than on that of FMs, and MFs therefore need more time to adjust to the new situation.

In the debate about the desirability of early hormone treatment, an often-heard additional argument against SR in general and early SR in particular is that transsexualism and severe psychopathology are necessarily associated. Transsexualism has been viewed as a delusion, as borderline pathology, a narcissistic disorder, a psychological defence against anxiety-provoking gender-role incompetence and/or a result of unsuccessful separation/individuation from the mother (e.g. Chiland, 2000; Kubie & Mackie, 1968; Lothstein, 1984; Meerlo, 1967; Meyer, 1974; Person & Ovesey 1974a, 1974b; Springer, 1981). It is argued that the underlying pathology should be cured, not the 'transsexual symptom', and that chances for this cure are better at younger ages.

If transsexualism and psychopathology were so inherently related one would expect that applicants (adolescents included) would score in the clinical range on various instruments. For adolescents this assumption was, however, not corroborated in studies that employed questionnaire data. Cohen-Kettenis and van Goozen (1997) and Smith, van Goozen and Cohen-Kettenis (2001) measured psychological functioning at the time of application and 1–5 years after sex reassignment surgery. Though, at pre-test, elevations on a few subscales were found, all scores dropped within normal levels after treatment. Because it is often argued that even psychometrically sound questionnaires may be filled out in a socially desirable way, we also tested various hypotheses regarding psychopathology in transsexuals with another instrument, the Rorschach, according to Exner's Comprehensive System (Cohen, de Ruiter, Ringelberg, & Cohen-Kettenis, 1997). The advantage of this instrument over questionnaires is the impossibility of consciously steering responses, and the fact that it concerns an unstructured instrument. According to Lothstein (1984), the borderline characteristics of transsexuals would only become manifest in unstructured situations. However, the transsexual adolescents were not found to show much psychopathology, except for a score in between normal controls and psychiatric patients in the perception of reality. Interestingly, this elevation disappeared after treatment (Smith, Cohen, & Cohen-Kettenis, 2002). So the pre-treatment discrepancy between body and gender identity may have been related to their elevated reality (mis)perception scores.

Because, thus far, the sources of information have been the transsexuals themselves, we wanted to investigate the quantity and quality of psychological problems reported, if data were gathered from 'third parties' such as parents or other caretakers.

Method

Subjects

Of 73 patients with a diagnosis of transsexualism we had Child Behavior Checklist (CBCL) data for 29 patients, 11 MFs and 18 FMs. Before 1996 the CBCL could not be

used for adolescents older than 16 years. Therefore, we only have CBCL data for 16–18-year-old applicants after 1996.

The DISC-IV was only recently introduced in the clinical routine. We had DISC data for 21 of our most recent applicants. Eleven were diagnosed transsexuals (7 MFs and 4 FMs), who had started hormone treatment. Ten were probably transsexual (6 girls, 4 boys), but the diagnostic phase was not yet completed.

CBCL data for the very last applicants were not included in our database, so the DISC and CBCL groups are only partially overlapping. No CBCL data of gender dysphoric applicants that did not receive a diagnosis of transsexualism were included in this study.

Instruments

Background data These data were gathered in a semi-structured interview. For this study, the questions regarding education (reported on a scale from 1 to 7), age and sex at birth were used.

Utrecht Gender Dysphoria Scale To assess the degree of gender dysphoria the Utrecht Gender Dysphoria Scale (UGS) was used. This scale consists of 12 items; scores range from 1 to 5 with higher scores reflecting more gender dysphoria. For more details, see Cohen-Kettenis and Van Goozen (1997).

IQ tests Depending on their age, the applicants were administered the complete Wechsler Intelligence Scale for Children (WISC-R; Van Haasen et al., 1986) or the WAIS (Stinissen, Willems, Coetsier, & Hulsman, 1970).

Child Behavior Checklist To assess behavioural and emotional problems in a dimensional way a Dutch version of the 1991 Child Behavior Checklist (CBCL; Achenbach, 1991; Verhulst, Van der Ende, & Koot, 1996) was used. The questionnaire is filled out by parents.

DISC-IV Psychopathology was assessed in a categorical way using a standard parent interview (DISC-IV; Schaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000).

Procedure

Parents filled out the CBCL before they came to our clinic for the first time. IQ tests were administered during one psychological testing session, relatively early in the diagnostic procedure. Biographical data were gathered during a series of interviews with the adolescent. DISC-IV data were gathered by interviewing the parents at the same time as the adolescent was psychologically tested.

Results

Subject characteristics

For the CBCL data, the mean age at application was 15.1 for the MF group (SD = 2.0, age range 11–17 years) and 15.2 years for the FM group (SD = 2.1, age range = 11–18 years). The MFs had a mean total IQ of 99.4 (SD = 14.3), the FMs had a mean total IQ of 104.9 (SD = 14.5).

For the DISC data, the mean age at application was 12.9 for the MF group (SD = 2.3, age range 11–17 years) and 13.0 years for the FM group (SD = 2.3, age range = 11–17 years). MFs had a mean total IQ of 98.8 (SD = 12.5), FMs had a total IQ of 104.3 (SD = 11.9).

Table 1a. Mann–Whitney *U*-test comparisons of MF and FM groups on the CBCL scales of MF and FM transsexuals

CBCL	MF (n=11)		FM (n=18)		Z	p
	M	SD	M	SD		
Externalising problems	57.7	8.8	63.1	10.4	-1.08	ns
Internalising problems	62.6	10.6	64.9	9.2	-0.27	ns
Withdrawn	63.0	7.8	66.7	10.3	-0.83	ns
Somatic complaints	57.9	9.0	57.2	8.7	-0.45	ns
Anxious/depressed	62.6	10.4	64.2	9.0	-0.33	ns
Social problems	63.6	11.0	59.0	8.8	-1.02	ns
Thought problems	60.5	7.6	66.0	11.4	-1.18	ns
Attention problems	59.0	6.9	63.7	11.7	-1.29	ns
Delinquent behaviour	56.6	6.9	64.5	8.8	-2.3	.02
Aggressive behaviour	58.6	7.5	61.7	10.9	-0.45	ns

Table 1b. Mann–Whitney *U*-test comparisons of clinical and non-clinical groups on the CBCL scales

CBCL	Non-clinical (n=20)		Clinical (n=9)		Z	p
	M	SD	M	SD		
Externalising problems	56.6	7.7	71.0	7.0	-3.80	<0.01
Internalising problems	59.9	8.3	73.2	5.0	-3.80	<0.01

CBCL Both transsexual groups scored within the normal range of scores on the internalizing and externalizing subscales of the CBCL (see Table 1a). Moreover, FM and MF transsexuals differed only on the subscale delinquency, with FMs scoring higher than MFs.

Of the 29 CBCLs completed by the parents of the applicants, nine patients had a score in clinical range based on their CBCL total problem score. These were six FMs and three MFs. These nine applicants differed significantly from the other 20 on both the Internalizing and Externalizing subscales (Table 1b). They did not differ with respect to age, educational level, IQ, or gender dysphoria (UGS scores).

DISC-IV Among the 11 patients who had already started hormone treatment, 1 FM was reported to fulfil the criteria for a specific phobia (elevators) (DSM-IV 300.29), 1 MF had a transient tic disorder (307.21). Among the 10 that were probably transsexual, but had not yet been referred for medical treatment, 1 girl met the criteria for oppositional defiant disorder (DSM-IV 313.81), and 1 boy met the criteria for overanxious disorder (DSM-IV 300.02).

Discussion

We conducted this study in order to investigate the quantity and type of emotional and psychological problems at the time of application for SRS. In contrast to earlier studies we have now gathered data from a 'third party', in this case, parents or other caretakers. For this purpose we collected CBCL data for adolescent transsexuals and also used a

Table 2. Characteristics of caretakers

Subject	Socio-economic level	Parental skills	Opposition to SRS	Parental relationship
A	low	poor	no	no problems
B	low	poor	no	no problems
C	low	poor	yes	no problems
D	average	poor	yes	no problems
E	average	good	no	problematic
F	average	poor	no	problematic
G	average	poor/good*	yes/no*	problematic/no problems*
H	NA**	NA**	yes	NA**
J	average	good	no	problematic

* own parents/foster parents.

** not applicable because H lives in foster institution.

standardized interview schedule for parents to assess co-morbidity according to DSM-IV criteria.

Our patients, who, as a group, are of average intelligence, appeared not to score in the clinical range of the CBCL. This is in line with our earlier questionnaire and Rorschach studies indicating that transsexuals do not function psychologically very unfavourably, even before their treatment has started (Cohen-Kettenis & Van Goozen, 1997; Cohen et al., 1997; Smith et al., 2001) and that, after treatment, their psychological functioning improves. However, this does not mean that every single applicant was doing well at the time of application. Almost one third of the group did have a score in the clinical range, which is clearly elevated in comparison with percentages found in a non-psychiatric population (about 13%). The differences between the groups could not be explained by differences in age, intelligence or level of education. Neither was the clinical group more gender dysphoric than the non-clinical transsexuals.

In order to understand what factors may have influenced the high number of reported behavioural and/emotional problems in this subgroup, we give a (post hoc) description of their situation at the time of application. It is possible to do so, because only nine adolescents scored in the clinical range (Table 2).

Two MFs (A and B, age 15 and 18) and 1 FM (C, age 17) came from low socio-economic backgrounds and had parents with very poor parenting skills. Their parents had great difficulties in handling their children who could be moody or oppositional.

One FM (D, age 17) had strong disagreements with her mother, who did not want her to have SR. During the first diagnostic phase it appeared that these disagreements were a part of a wider (family) problem, needing intensive family therapy. After successful family therapy, D's behavioural problems disappeared.

One FM (E, age 15) had parents that were officially divorced. At the moment of application, however, the very intrusive father still had a very negative impact on the family. Despite the fact that he lived with a new partner and her children, he still tried to interfere with his family's life (and E's decision to undergo SR) in a negative, sometimes aggressive, way. It was only after the father had disappeared completely from their life that E's home situation became more peaceful and E started feeling better.

When (F, age 13) another FM applied, her parents were still married, but the relationship went through a crisis shortly after F's application. Her parents separated in a very

turbulent way (with suicide threats from the father and a short hospitalization of the mother). Though F very much wanted to attend our clinic, appointments were cancelled continuously, because of the family problems. Thus far, she has not started medical treatment.

Shortly before G (age 15), another FM, applied, she started living with foster parents. Her own parents had divorced. Her father was not Dutch. She was raised in his country. After the divorce G went to Holland with her mother. Her father did not approve of SR. In his country SR was seen as an outrageous solution to gender problems. When it became clear that G's mother, a psychologically unstable woman, also opposed G's treatment, G made a suicide attempt. Her foster mother (with excellent parenting skills) succeeded in getting her back on track quite soon. She was also supportive to G's wish for SR.

H, a MF (age 16), had been living in an institution since he was 5 because he had no father and his mother was not fit to take care of him. He began living in the last home at the age of 13. Here he was not allowed to indulge in his feminine interests. His caretakers feared that he would be teased too much. As a reaction he became more and more depressed and he started eating less, because he feared that he would look too muscular if he ate normally.

The last applicant (J, age 17) was a FM. J did not get along very well with her step-father. J also was depressed because she had thought there was no solution to her problem. Before she attended our clinic, she had been seen in various other mental health centres, where she felt her problem was not addressed properly.

All, except for F and H, now have completed their treatment.

Taking an overview of the backgrounds of these applicants they seem to have some factors in common. In all cases there were either (general or SR related) disagreements between the primary caretakers and the child, serious relationship problems between parents, poor parenting skills or combinations of these factors. So it may well be that such factors were important ingredients in the high CBCL scores of the child. It could be that these parents felt so hopeless, helpless or angry, that they tended to over-report the number of problems. The high scores, however, could also be indicative of a real elevation of emotional or behavioural disturbance, as a reaction to family problems that already existed or were a consequence of the child's gender dysphoria. Children that want to undergo sex reassignment can create a lot of complex situations within their families. Girls bring friends at home that are not aware of their child's sex at birth and request the family not to reveal this fact. Mothers of boys are asked to buy dresses for their sons. Parents repeatedly need to explain their child's cross-gender interests and behaviour to teachers, family and parents of other children. And, not least of all, parents need to emotionally deal with their own worries about the child's future, aversion to sex reassignment of their child, or shame towards the environment. Not all parents are able to adequately handle such complexities. One can imagine that already existing conflicts between parents or psychological vulnerability in parents will only increase the risk of family disturbance. This may induce or increase emotional problems in the child and may even shape or enhance the child's gender problem. For instance, paternal aggression may let a boy escape into the gentler world of women, or make an already effeminate boy only more determined to become unlike his father. Of course, our method does not allow us to conclude that family factors were the (only) cause of the elevated scores. First, we only described the most prominent characteristics of the clinical group, with knowledge of group membership (clinical or not). These seemed to be primarily family related, but other potential factors were not evaluated systematically. Second, at the moment we do not have easy access to independent data (e.g. of the children) that would support the

notion that family factors were less favourable in the clinical than in the other group. Our study only rendered a hypothesis that should be studied more extensively in the future.

Because CBCL scores do not tell much about psychiatric classification we also employed a diagnostic interview schedule, the DISC, to investigate how many applicants would fulfil DSM criteria. Our DISC data, although reflecting the results of only a small number of recent applicants, seem to corroborate other findings in adolescents. A minority (4 of 21) of the (probably) transsexuals, though not a negligible one, fulfilled DSM criteria. The number is still too low to allow for conclusions regarding main diagnoses. We know of one study among a large group of adult transsexuals. Cole, O'Boyle, Emory, and Meyer (1997) found that fewer than 10 percent of a group of 435 transsexuals had an Axis II DSM diagnosis. These were mainly internalizing disorders, such as depressive and bipolar disorder. Unfortunately, in this study no research instrument such as a diagnostic interview schedule was employed, so it is difficult to compare their numbers of clinical diagnoses with our numbers of DISC diagnoses. Yet, even if a higher percentage were to be found with research instruments, it seems that the majority of adult transsexuals also do not have a DSM diagnosis, despite the fact that, at application, many function psychologically worse than adolescent applicants. This was found by Kuiper (1991), who used the same questionnaires in his adult study as Cohen-Kettenis and Van Goozen (1997) and Smith et al. (2001) did in their adolescent studies.

As noted before, our data have obvious limitations. In addition to the earlier mentioned shortcomings of our post hoc analysis, the number of patients is still low and our sample could have been biased, as the 16–18-year-olds were not included in our earliest group of CBCL patients. Furthermore, we do not know whether our numbers are representative of the whole population of transsexual adolescents. It is conceivable that parents that were less able to solve problems surrounding the gender dysphoric child were over-represented in our sample, because they more easily make use of mental health services. Yet, taking the results together we conclude that a fair number of adolescent transsexuals apply for SR in a psychologically stable state of mind. A relatively large subgroup, however, does have problems. Their problems should be addressed in an appropriate psychological or family treatment before anything else.

When they come as healthy adolescents they deserve early medical interventions, provided that they have gone through a very extensive and careful diagnostic procedure and provided that the child and family are counselled until the very last surgical intervention. If such medical intervention is denied, the chances of developmental arrest, an unconvincing appearance in adulthood and psychopathology as a result of insufficient or inappropriate treatment are high. It is time to realize that iatrogenic damage is also possible when no medical treatment is given or when it is given too late.

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