Chapter 13
Psychiatric Comorbidity in Adults with Gender Identity Problems

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Abstract For many decades of the twentieth century, gender dysphoria was seen as an intrinsic symptom of another psychiatric disorder (e.g., schizophrenia) that should be resolved by addressing the "underlying" psychiatric disorder. DSM-III (American Psychiatric Association, 1980) broke with that view and classified the gender identity disorders as a separate category of psychopathology. In contrast, many argue today that gender nonconformity and even gender dysphoria are not (psycho)pathology per se and that sex reassignment therapies are the most effective therapies for gender dysphoria (e.g., World Professional Association for Transgender Health, 2011).

However, based on the prevalence rate of comorbidity, many are convinced that the diagnosis and treatment of psychiatric comorbidity is of paramount importance for a proper diagnosis and for a successful treatment of gender dysphoria.

This chapter reviews the prevalence rate of comorbid Axis I and II disorders in persons with gender dysphoria (GD), explores theoretical models to explain comorbidity,

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and describes clinical implications. The central message is that we should avoid two pitfalls: First, we should avoid the assumption that all patients with GD must have comorbid disorders, and second, we should not assume that patients with GD will not have comorbid disorders. However, to ensure the best possible outcome of sex reassignment therapy and to prevent regret, comorbidity should be diagnosed and treated properly.

13.1 Introduction

For most of the twentieth century, transsexualism has been conceptualized as a severe symptom of a psychiatric disorder (e.g., schizophrenia, borderline personality disorder, identity disorder) and was treated accordingly (see Chap. 12; e.g., Socarides, 1969, 1970, 1988; Stoller, 1996; Volkan & Greer, 1996). Since 1980, this viewpoint is no longer shared by the Diagnostic and Statistical Manual of Psychiatric Disorders. In that year, DSM-III classified transsexualism as a separate and independent psychiatric disorder (see Chap. 7 for an overview of the nosological classification and terminology). Transsexualism was characterized by "an incongruence between anatomic sex and gender identity" (DSM-III, 1980, p. 261). Although transsexualism was no longer considered to be a symptom per se of another psychiatric disorder, it was assumed in the DSM-III (1980, p. 263; see also p. 265) that psychological factors, and especially a disturbed parent child relationship, were major developmental determinants of transsexualism. Furthermore, DSM-III (1980) stated that many persons with transsexualism experienced anxiety and depression and had in general a "moderate to severe co-existing personality disturbance" (DSM-III, 1980, p. 262). Unfortunately, DSM-III (1980) did not provide information on how the prevalence of comorbidity in adults with gender identity problems was measured and what clinical implications comorbidity has.

Today, transsexualism/transgenderism is, in general, no longer seen as a symptom of psychopathology. The World Professional Association for Transgender Health (2011) expressed, in the 7th edition of the Standards of Care (SOC), the view that

> "*the expression of gender characteristics, including identities, that are not stereotypically associated with one's assigned sex at birth is a common and culturally-diverse human phenomenon [that] should not be judged as inherently pathological or negative*." (SOC 7 2011, p. 4)

It is specified further that

> Gender nonconformity *refers to the extent to which a person's gender identity, role, or expression differs from the cultural norms prescribed for people of a particular sex*. Furthermore,
>
> "Gender dysphoria *refers to discomfort or distress that is caused by a discrepancy between a person's gender identity and that person's sex assigned at birth (and the associated gender role and/or primary and secondary sex characteristics)."* It was expressed that only

> some *"nonconforming people experience gender dysphoria at* some *point in their lives"* and *"Some people experience gender dysphoria at such a level that the distress meets criteria for a formal diagnosis that might be classified as a mental disorder. Such a diagnosis is not a license for stigmatization or for the deprivation of civil and human rights*" (SOC 7 2011, p. 5).

This is quite a different view than that of most professionals during the twentieth century who considered transgenderism as part of another psychiatric disorder. Gender nonconformity is definitely no longer considered as a psychiatric disorder per se. Although there remain different answers to the question of whether gender identity problems should be classified as a psychiatric disorder (DSM-5 will still classify gender dysphoria as a psychiatric disorder), there seems to be an agreement that sex reassignment therapies are effective and should be tailored to the specific needs of an individual (e.g., Bockting, 2008; Byne et al., 2012; Lev, 2004; Murad et al., 2010; Selvaggi & Bellringer, 2011; but see á Campo, Nijman, Merckelbach, and Evers (2003) for an opposing view). One aspect of good care is, according to the SOC 7, that "other mental health concerns" should be screened, diagnosed, and treated (by psycho- or pharmacotherapy). So, clearly, the SOC 7 recognizes that psychiatric comorbidity is an important topic in treating persons with gender dysphoria. This is not without reason because research showed that comorbidity is rather common in patients. For example, Bockting, Coleman, and Benner (2007) found that 35 % of a transgender population reported anxiety and that 44 % felt depressed. Dhejne et al. (2011) reported that persons with transsexualism have a much higher risk of suicide and suffer from more psychiatric comorbidity than matched controls. The greater suicide risk in transgender populations was also signaled in a recent review by Haas et al. (2011) that revealed the suicide rate among transsexual persons to be much higher than in the general population. Based on the empirical literature, Haas et al. (2011) estimated the prevalence of suicidal deaths in transgender people to be 800 for every 100,000 transsexuals after surgery compared to 11.5 suicides per 100,000 people for the overall US population. Associated factors were depression, anxiety, substance abuse, discrimination, violence, and stigma. Furthermore, these authors concluded that approximately one third of self-identified transgender persons made at least one suicide attempt. It is also important to note that, even in persons with a gender identity disorder and no psychiatric comorbidity, the life rate of suicidal ideation was 72 % in a Japanese sample of 500 persons (Terada et al., 2012). Also, the fact that (severe) psychiatric comorbidity is a predictor of regret after sex reassignment (e.g., Gijs & Brewaeys, 2007; Pfäfflin, 1992) and a worse outcome after sex reassignment therapy (Murad et al., 2010) points to the importance of attention to psychiatric comorbidity in the care of people with gender dysphoria.

These worrisome trends led us to the following questions: How many adults with gender dysphoria have psychiatric comorbidity? What is the nature of that comorbidity? Are there specific processes that cause the associations between psychiatric disorders and gender dysphoria? What are the diagnostic and treatment implications of psychiatric comorbidity? And what are the burdens of psychiatric comorbidity for the clinician treating persons with gender dysphoria? In this chapter, we will

focus on the prevalence of the co-occurrence of gender dysphoria and psychiatric disorders, the conceptualization of this co-occurrence, and the diagnostic and therapeutic implications of psychiatric comorbidity in persons with gender dysphoria.

13.2 The Co-occurrence of Gender Dysphoria and Psychiatric Disorders (Prevalence)

It is important to note that different terms are used for the description of the occurrence of (at least two different) psychiatric disorders in one adult: covariation, co-occurrence, and comorbidity (Trull, Scheiderer, & Tomok, 2012). Some prefer one of these three terms and that preference is mostly associated with the idea that the term with the least etiological connotation should be used (see Trull et al., 2012). In this chapter, the terms comorbidity and co-occurrence are used interchangeably and descriptively without implying common etiological paths or determinants. Unless directly relevant for the topic of this chapter, we will not go into methodological aspects of comorbidity research (see Hyman, 2010; Links, Ansari, Fazalullasha, & Shah, 2012; Trull et al., 2012).

13.2.1 Comorbidity on Axis I

The prevalence of comorbid Axis I problems varies greatly across different studies (Heylens et al., 2013; Lawrence, 2007; Lawrence & Zucker, 2012). For example, Cole, O'Boyle, Emory, and Meyer (1997) reported comorbid schizophrenia in 1 % of patients with gender dysphoria, while á Campo (2003) reported schizophrenia in 24 % of patients with gender dysphoria. In contrast, Heylens and colleagues (2013) found that in a large group of 721 patients in four European gender centers, psychotic disorders were rare (1.5 %). Mood and anxiety disorders are probably the most frequent comorbid disorders in patients with GD: Heylens and colleagues (2013) found that 38 % had a co-occurring Axis I disorder. Of those 38, 61 % suffered from an affective disorder and 17 % from an anxiety disorder. Lawrence (2007) and Lawrence and Zucker (2012) concluded in two reviews that comorbidity in adults with gender dysphoria varies between 6 and 80 % on Axis I. Terada et al. (2012) found that of 603 consecutive patients who consulted an academic gender identity clinic, 579 fulfilled the diagnostic criteria for gender identity disorder (GID) and 13.6 % had Axis I comorbidity. Also, Gómez-Gil, Vidal-Hagemeijer and Salamero (2008) found in their Spanish study that most of their patients (75 %) had no significant psychopathology on the MMPI-2 (besides atypical scores on the Masculinity-Femininity Scale). Besides methodological differences between studies, as, for example, differences in measurement of comorbidity, the time point when comorbidity is assessed, differences in inclusion and exclusion criteria for the

admission to start the diagnostic process, and different sample sizes, we do not know how to conceptually explain this great variation in comorbidity on Axis I.

How does the prevalence rate of co-occurring Axis I disorders in patients with GD on average compare to the general population? Heylens and colleagues (2013) reported a higher prevalence of Axis I disorders in patients with GD than in the general population mainly due to the high prevalence of affective and anxiety disorders, which are up to three times higher. In the general population, current affective problems are found in 6 % (for Belgium and the Netherlands) and in around 10 % (for Germany and Norway), whereas 27 % of the patients with GID in the four countries had current affective problems (Heylens et al., 2013).

In this multicenter European study, the lifetime prevalence of Axis I disorders was almost 70 % (Heylens et al., 2013). A figure much higher than in many earlier studies: Lawrence and Zucker (2012), for example, reported, in their overview, a lifetime prevalence between 21 and 55 % in people with gender dysphoria. Despite these differences, Lawrence and Zucker (2012) agree with Heylens and coworkers that the lifetime prevalence of comorbid Axis I disorders is higher in patients with GD than in the general population. Heylens et al. (2013) reported that, in the general population, a lifetime prevalence for mental disorders is found in 25 % (in Norway, Germany, the Netherlands, and Belgium, compared to the almost 70 % in their patients with GD). Interestingly, and in clear contrast with some earlier studies (e.g., Smith, van Goozen, Kuiper, & Cohen-Kettenis, 2005b), they did not find a different prevalence of Axis I disorders between different types (early versus late onset; male-to-female versus female-to-male) of patients with GD. This result reminds us that, in recent studies, the satisfaction with sex reassignment surgery was as good for homosexual as for heterosexual transpersons (e.g., Lawrence, 2003; Smith, van Goozen, Kuiper & Cohen-Kettenis, 2005a; Smith et al., 2005b), which was explained by Lawrence (2003) as the result of an improved social tolerance and acceptance of transgenderism and homosexuality than in earlier days.

13.2.2 Comorbidity on Axis II

If one—as in DSM-III (1980)—assumes that persons with gender dysphoria have a disturbed personality, one would predict a higher rate of personality disorders in gender dysphoric persons. Indeed, some studies found elevated rates of personality disorders in transwomen and transmen. For example, Hepp and colleagues (2005) reported a prevalence rate of 42 % of personality disorders in patients with GD, and Madeddu and coworkers (2009) reported an even higher rate of 52 % personality disorders in a sample of 50 patients with GD. More precisely, they found that (of that 52 %) 22 % had a cluster B disorder, 12 % a cluster C disorder, 2 % a cluster A disorder, and 16 % had a not otherwise specified personality disorder. Lawrence (2007) and Lawrence and Zucker (2012) concluded in their reviews that comorbidity

on Axis II in adults with gender dysphoria varies in different studies between 20 and 70 %.

If this high prevalence rate would be replicated, the diagnosis and treatment of personality disorders should be a major target in the care of transgender persons. However, there are also studies that reported a low prevalence of personality disorders in patients with GD [e.g., Hoenig and Kenna (1974), 18 %; Haraldsen and Dahl (2000), 20 %]. In the biggest study to date, an even lower prevalence was found in Germany, Norway, and Belgium: ±15, 3 % of the patients with GD had a personality disorder at admission (Heylens et al., 2013). Prevalence rates were not very much higher than the prevalence rate for personality disorders in the general population, which is approximately 10.5–12 % Torgersen, 2012; see also Heylens et al. (2013). If these results are replicated, this will cast further doubt on the idea that persons with gender dysphoria always or very often have a disordered personality.

13.3 Models of Comorbidity

Taking into account the results of the research conducted thus far, there can be little doubt that psychiatric comorbidity is rather common in persons with gender dysphoria. However, it is important to realize when comorbidity was measured, for example, when the gender identity disorder started and when a person consulted a professional for diagnosis and help, during hormonal treatment, before or after sex reassignment surgery, or at follow-up. In the literature, it is often not very clear at what moment comorbidity is exactly measured, but Murad and coworkers (2010) concluded on the basis of 28 studies, with 1,833 transpeople (1,093 transwomen and 801 transmen) and an average follow-up of 6 years, that 78 % of transitioned transpersons showed less psychiatric comorbidity after treatment of gender dysphoria than before. A similar result was found in the earlier outcome studies under the leadership of Cohen-Kettenis (Smith et al., 2005a, 2005b).

How do we understand this comorbidity? Although formal models of comorbidity have been developed (Links et al., 2012), to our knowledge these models have not been systematically applied to the field of gender dysphoria. However, within the field of gender dysphoria, different models explaining the comorbidity of gender dysphoria with other psychiatric disorders have been used. For example, Lawrence and Zucker (2012) gave four explanations: (1) Social stigma as a result of an atypical gender identity leads to the development of other psychiatric disorders, (2) the presence of another psychiatric disorder contributes to the development of gender dysphoria, (3) the comorbidity is the result of biological or social risk factors that makes a person vulnerable for the development of various psychiatric problems, and (4) gender dysphoria causes other psychiatric problems. Here, we will focus on the following models: (1) gender dysphoria as a symptom of another psychiatric disorder (the historical model), (2) comorbidity as the result of common pathways that

Fig. 13.1 Gender dysphoria as a symptom of an underlying or more pervasive psychiatric disorder

makes a person vulnerable to the development of different psychiatric problems (a combination of explanations 1 and 3 of Lawrence and Zucker (2012), in which we view stigma also as a social risk factor), and (3) gender dysphoria leads—if not recognized early and treated properly—to the development of psychiatric comorbidity.

13.3.1 Gender Dysphoria as a Symptom

This model, which has lost most of its followers today, is the model that dominated the professional literature roughly between 1945 and 1970 [see Meyerowitz (2002), for a historical account] and conceptualizes gender dysphoria as a symptom of (severe) underlying psychopathology (see Fig. 13.1). Psychodynamic and behavioral models have been influential models for this notion.

13.3.1.1 Psychoanalytic Models

Psychodynamic models (e.g., Chiland, 2003; Socarides, 1988; Stoller, 1996) view transsexualism as a defense mechanism against unresolved developmental conflicts in early childhood. A well-known representative of this view is Socarides who views transsexualism as the result of a failure of the separation-individuation phase between 6 months and 3 years of age due to the failure to give up the primary identification with the mother. Socarides further conceptualizes the other "perversions" as oedipal, but congruent upon the earlier problems in the individuation-separation phase. In other words, this model predicts that transsexual persons should have more severe psychopathology than persons with other "perversions" and less reality testing and predicts a high comorbidity between the different "perversions." Some even argued that there was a close connection between transsexualism and schizophrenia, but not all psychoanalysts shared that view [see for reviews Chiland (2003), Socarides (1988) and Stoller (1996)]. Not restricting herself to transwomen, Chiland (2003, p. 162) summarized the general view on the developmental disorder underlying transsexualism quite well:

> "*It seems to me that the driving force in transsexuals of both sexes is the failure to overcome a terrifying primal scene, and that they imagine the penis, to a much greater extent than the vagina, to be dangerous; this compels them either to idealize a feminine image, out of the*

reach of the penis, such as the long, swirling dress that represents narcissistic plenitude—an image with to conform (in the case of male-to-female transsexuals)—or to expel every vestige of femininity from themselves with a view to finding it again in a female partner who will have nothing to fear from penetration, which has been ruled out once and for all (in the case of female-to-male transsexuals). In most of the described psychopathological models thus far transsexualism is seen as a symptom of a developmental disorder."

A more radical psychopathological view is the perspective that considers transsexualism not as a disruption of the development of a normal gender identity but as a symptom of a psychotic disorder. Volkan and Greer (e.g., 1996), for example, sees the transsexual phenotype as the symptomatology of "an encapsulated infantile psychotic self" (p. 167). This means, according to Volkan and Greer (e.g., 1996), that the core of transsexualism is a defense against the internal representation of a depressed mother, associated with emotions such as sadness, rage, or helplessness, which affects the person so negatively that, in an attempt to cure this "negative mother," the person seeks relief by changing the body.

13.3.1.2 Behavioral Conceptualizations

Conceptualizations from a behavioral therapeutic viewpoint saw transsexualism, just like the other sexual deviations, as the result of an atypical learning history (e.g., Barlow, Reynolds, & Agras, 1973; 1979; Barlow & Abel, 1976; Brownell & Barlow, 1980). Transsexualism was defined as the phenomenon in which a normal biological man or woman thinks, feels, and acts as a person of the other sex. As such, transsexualism was seen as the most severe form of sexual deviancy and as the result of behavioral deficits and excesses. Four dimensions were thought of as crucial for sexual deviance: (1) excessive deviant sexual arousal, (2) inadequate normative sexual arousal, (3) deficits in heterosocial skills, and (4) abnormalities in gender role behaviors. As far as our knowledge goes, in the case of transsexualism, behavior therapists thought that the most salient features of transsexualism were (sometimes) homosexual arousal (which was often not accepted by the person) and gender deviant role behavior. Therapy was directed to normalizing behavior on all four dimensions with the result that transsexualism would disappear. A clinical illustration is given by Andrade, Kumaraiah, Mishra, Chatterji, & Andrade (1995). They treated a 24-year-old male student, who felt that she was a person trapped in a male body. Gender atypical behavior was present since childhood, and the child was treated in the family of origin as a girl and allowed to take up a feminine role. Initially, there was no distress. But from the age of 17, the person wished to have breasts and female genitalia. After learning that it was not possible to become pregnant and give birth, the person agreed to a therapeutic program aimed to cure his transsexualism. After being treated for epileptic seizures, a behavioral program was applied. The program had two aims: (1) to reverse the female role (and in consequence the female identity) and (2) to change the homosexual orientation of the person to a heterosexual one. The therapy consisted of 20 sessions of relaxation training to counter depression and frustration, 20 sessions of electric aversion therapy

to reinstall heterosexuality and to extinguish homosexuality, and 40 sessions of a combination of modeling, hypnosis, orgasmic reconditioning, behavioral counseling, and sex education. According to Andrade and coworkers (1995), therapy was successful: The person accepted a male gender identity and role, but retained a homosexual orientation. After a follow-up of 2 years, the male gender identity had not changed.

For approximately 30 years now, behavioral conceptualizations have lost their popularity for explaining transsexualism, and behavioral treatments "to cure" transsexualism are seldomly used in clinical practice (Andrade et al., 1995). Possible reasons for the declining interest in behavioral conceptualizations and treatments are: (1) the view that transsexualism can be cured is no longer held; (2) rather than curing transsexualism, the body should be aligned with the mind to solve gender dysphoria or gender incongruence; (3) there are no outcome data proving that behavior therapy is effective; and (4) in contrast to the earlier behavioral conceptualizations, gender identity problems are no longer seen as disorders of sexual desire, sexual arousal, or sexual orientation.

13.3.2 Comorbidity as the Result of Common Developmental Determinants

In this model, the comorbidity between gender dysphoria and psychiatric disorders is the result of a common set of determinants (compare Cochran & Mays, 2006; Cramer, Waldorp, Han, Van der Maas, & Borsboom, 2010; Hyman, 2010; McLaughlin, Hatzenbuehler, Xuan, & Conron, 2012). However, not all models assume the same common determinants or the same temporal order. We differentiate between a vulnerability model in which risk factors lead to the common but independent development of gender dysphoria and comorbidity, and a model in which vulnerabilities lead to the development of a psychiatric disorder which makes the person vulnerable to the development of gender dysphoria. Of course, it will be no surprise that some models put more weight on biological factors, others on environmental factors, and still others on the interactions between both (Hines, 2011).

13.3.2.1 Gender Dysphoria and Comorbid Psychopathology Are Separate Disorders

The basic idea of this view is that the same risk factors are contributing to the development of gender dysphoria and other psychiatric disorders. For example, some would argue that problematic and inconsistent upbringing by parent figures is a risk factor for the development of both gender identity problems and borderline personality disorder (Neeleman, 2007; compare Singh, McMain, & Zucker, 2011),

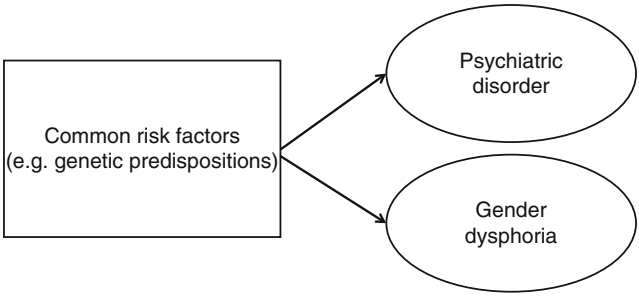

Fig. 13.2 The same risk factors lead to comorbidity between gender dysphoria and psychiatric disorders

two conditions in which identity problems are key symptoms (DSM-IV-TR, American Psychiatric Association, 2000) (see Fig. 13.2).

Other psychosocial variables which are mentioned as risk factors for the development of psychiatric problems are affective neglect, sexual abuse, or attachment problems. However, there is at this moment no solid evidence that this model provides a good explanation for the comorbidity of gender dysphoria and psychiatric disorders. For example, the co-occurrence of borderline personality disorder and gender dysphoria has not always been found. Singh et al. (2011) did not find a single case of GD in a series of 100 females with a diagnosis of borderline personality disorder. But even if comorbidity is strongly and consistently associated, it is not known which factors are responsible for the comorbidity, because prospective longitudinal research on this topic is nonexistent. And of course, besides common psychosocial determinants or pathways, one could also think of common biological pathways (compare Hyman, 2010; South, Reichborn-Kjennerud, Eaton, & Krueger, 2012).

13.3.2.2 Vulnerabilities for Psychiatric Disorders as a Precursor of Gender Dysphoria

Another model is based on the idea that psychiatric disorders and gender dysphoria are linked as a common pathway in the sense that (some) psychiatric disorders are risk factors for the development of gender dysphoria (see Fig. 13.3).

The most influential model of this kind is in all probability Zucker's model of the development of gender identity disorder in children [e.g., Zucker & Bradley, 1995; see also Wallien (2008)]. In Zucker's model, a gender identity disorder in children is thought to be the result of the interaction between general and specific factors. The general factors are twofold: A high level of insecurity or anxiety and sensitivity to parental affect make the child vulnerable for a GID. When there is a familial context (e.g., as a consequence of depression of the mother or intense relational conflicts between the parents) that increases the insecurity and anxiety in the child, the child will try to find a solution for his insecurities and anxieties. One way to

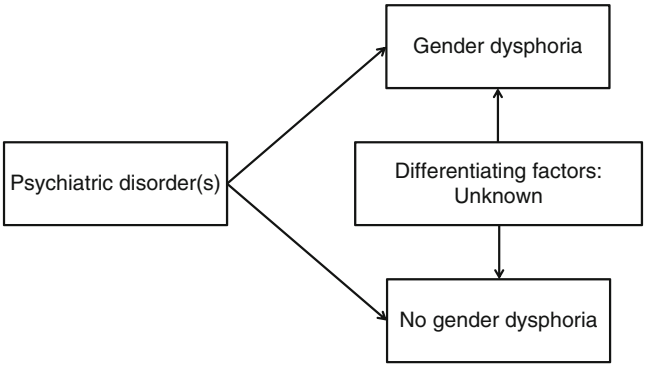

Fig. 13.3 Psychiatric disorder(s) as risk factor(s) or determinant(s) of gender dysphoria

reduce insecurity and anxiety is by adopting a gender identity of the other sex, because that "other gender identity" provides a strong relief from anxiety and insecurity. The reason for this is that in the perception, feelings, and thoughts of the child, the "other gender identity" is more nurtured, valued, and reinforced than the gender identity that is congruent with its natal sex. However, Zucker's model cannot explain why in some children gender dysphoria in childhood will continue into adulthood and in others it will not (see also Chap. 8 by Domenico Di Ceglie on the question "Who becomes a 'desister' or 'a persister'").

Other psychiatric disorders have recently received a lot of attention as vulnerability factors for gender dysphoria, most notably autism spectrum disorders (e.g., De Vries, Noens, Cohen-Kettenis, van Berckelaer-Onnes, & Doreleijers, 2010; Jones et al., 2012; see also Chap. 9), mental retardation (e.g., Parks & Hall, 2006), borderline personality disorder (e.g., Neeleman, 2007; Singh et al., 2011), and psychotic disorders (e.g., Baltieri & De Andrade, 2009; De Cuypere, 1993; Mizock & Fleming, 2011). Two empirical facts hamper the general applicability/validity of these models as general models of comorbidity: (1) Many persons with gender dysphoria do not have a(nother) psychiatric disorder, and (2) many persons with one of the mentioned psychiatric disorders do not have gender dysphoria. So unknown other factors are influencing the development of gender dysphoria.

13.3.2.3 Stress

What about stressors? It is conceivable that stigma, discrimination, oppression of gender variation, and being a victim of (sexual) violence contribute to the development of psychiatric disorders (including gender dysphoria) and their comorbidity. For example, in a recent longitudinal study, McLaughlin and colleagues (2012) found that higher rates of child abuse, housing adversities (i.e., being homeless or being forced out of the home by parents or caregivers), and intimate partner violence contribute significantly to higher rates of psychiatric disorders in LGB

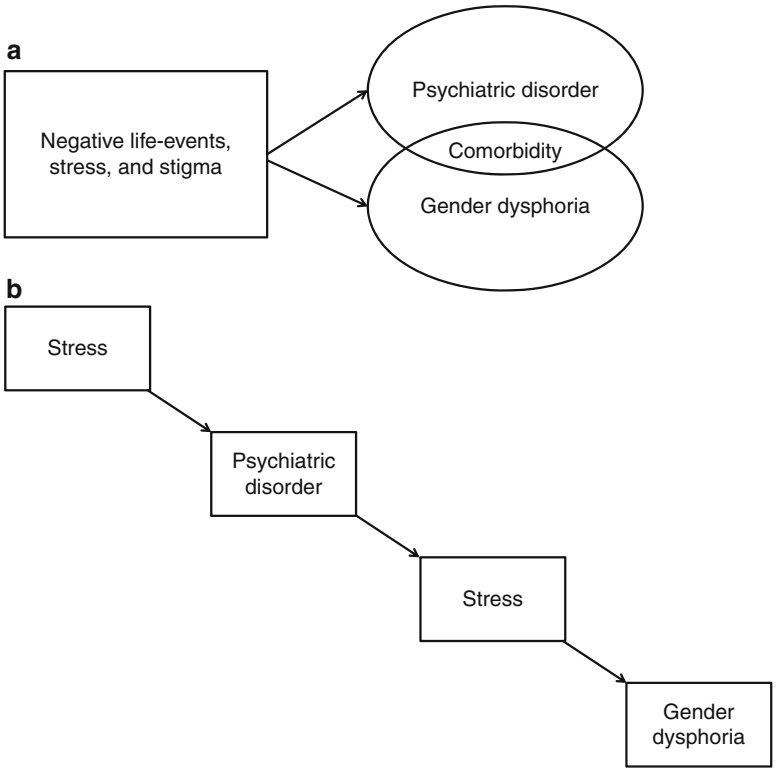

Fig. 13.4 Two models of the influence of negative life events (e.g., violence), stress, and stigma in the development of comorbidity between gender dysphoria and psychiatric disorders: (**a**) Negative life events, stress, and stigma lead to comorbidity; (**b**)Stress leads to a psychiatric disorder, which generates stress and leads to gender dysphoria

(lesbian-gay-bisexual) populations. We know that transgender people are victims of high rates of sexual violence and stigma and oppression (e.g., Nuttbrock et al., 2009). So a model can be built in which comorbidity is (partly) explained by stress, stigma, oppression, and exposure to violence (see Fig. 13.4). In one variant, stress, together with the other variables, causes (or contributes) directly and simultaneously to the co-occurrence of both gender dysphoria and psychiatric disorders (independently). In another variant, stress contributes to the development of psychiatric disorders which in turn lead to the development of further stress and gender dysphoria. Not only can a theoretical model be built which explains the detrimental effects of stress, oppression, and violence, but increasing empirical research validates this viewpoint (see also Chap. 16). With regard to minority stress, we have learned from studies in homosexual and lesbian populations that stress, violence, stigma, and oppression are important determinants of psychological problems (e.g., Lehavot & Simoni, 2011; McLaughlin et al., 2012; Meijer, 2007; Newcomb & Mustanski, 2010). Here, we only give a prototypical illustration (for reviews see

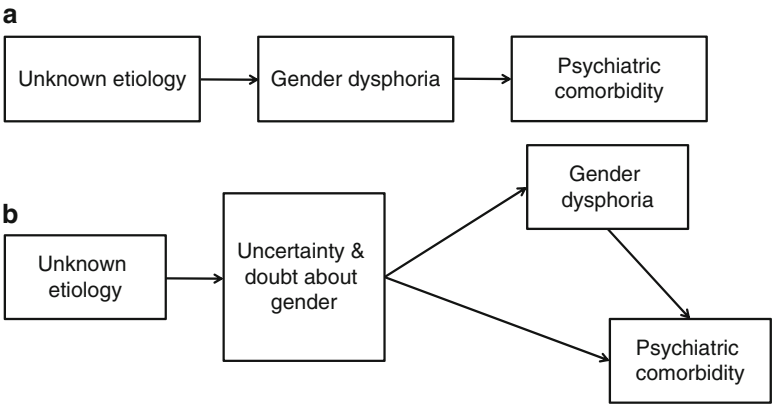

Fig. 13.5 Two models with gender dysphoria as the source of psychiatric comorbidity: (**a**) Gender dysphoria as the source of psychiatric comorbidity; (**b**) Uncertainty about gender and gender dysphoria as sources of comorbidity

Meijer, 2007; Bockting, this book). Nutbbrock and colleagues (2009) used the Life Chart Interview to study how many male-to-female transgender persons were victims of gender-related abuse and what the consequences of such abuse were. They found that no less than 78.1 % reported psychological abuse and 50.1 % had been a victim of physical abuse. In adolescence, most abuse was committed by parents and family members. Among adults, most abuse was perpetrated by strangers, neighbors, friends, and police officers. In general, the prevalence of abuse declined from adolescence to early middle age. The effects of abuse were very clear. In adolescence, abuse strongly contributed to the incidence of depression and suicidality and, in adulthood, the influence of abuse declined for depression but not for suicidality (Nuttbrock et al., 2009).

In our opinion, these empirical data have important implications: Regardless of coexisting psychopathology, stigma, oppression, and exposure to violence contribute negatively to mental health. From a public health perspective, it is important to develop strategies to prevent those negative impacts, and (also clinically) it is necessary to strengthen the resilience and coping strategies of people with gender problems (e.g., Singh, in press).

13.3.3 Gender Dysphoria as the Source of Psychiatric Comorbidity

A last model to consider is that gender dysphoria, especially the distress experienced by persons with gender dysphoria, may be a major source of psychiatric comorbidity (see Fig. 13.5). In other words, if the distress of gender dysphoria persists too long and/or is too intense, psychiatric comorbidity is very likely. Especially in persons with an onset of gender dysphoria later in life (late onset), it may take a

long time before persons understand what is going on with them and label themselves as gender variant, transgender, or gender dysphoric. The doubts and uncertainties surrounding this process may also contribute to the development of comorbidity, especially anxiety and affective disorders (Heylens et al., 2013). If it is the case that gender dysphoria itself is a major source of psychiatric comorbidity, it remains to be explained when, how, and to which psychiatric comorbidity gender dysphoria leads. Maybe, in some instances, psychiatric comorbidity is a strategy to protect or facilitate the experience of the desired gender. There are, for example, indications that eating disorders in persons with gender identity disorder are an attempt to bring the body as much as possible in line with the experienced/desired gender (Algars, Alanko, Santttila, & Sandnabba, 2012; Hepp & Milos, 2002). Furthermore, one would expect that finding an understanding of what is going on, giving it a name (e.g., transsexualism/transmen) and reaching a satisfying gender match between "mind and body," would lead to less (or at least less intense) psychiatric comorbidity. The improvement in psychological functioning after sex reassignment surgery is clearly in line with this viewpoint (Murad et al., 2010; Smith et al., 2005a, 2005b). Also in line with this approach is the fact that persons with early onset gender dysphoria have less comorbidity than persons with a late onset (e.g., Smith et al., 2005a, 2005b). However, a different prevalence rate of psychiatric comorbidity for early versus late onset was not found in the multicenter study of Heylens and colleagues (2013).

13.4 Diagnostic and Therapeutic Implications

What are the diagnostic and clinical consequences of the frequent co-occurrence between gender dysphoria and psychiatric disorders and the fact that we do not know what the causal links are between these phenomena? This question will be answered for three different periods around treatment: diagnostics, therapeutics, and aftercare. We want to mention explicitly—and we agree with Levine and Solomon (2010) and with Mizock and Fleming (2011)—that good empirical data about the relations between psychiatric comorbidities and outcome effects are lacking. But this does not free us from the obligation to be explicit about clinical decision making.

13.4.1 Diagnostic Implications

Two different questions need to be answered: (1) When would comorbidity be a contraindication for the start of sex reassignment therapy? (2) When would comorbidity be a signal to discontinue a sex reassignment treatment that is already initiated?

If gender dysphoria covaries solely with the occurrence of a psychiatric disorder with impaired reality testing, most clinicians will argue that it is imperative not to start a sex reassignment therapy, but instead to treat the psychiatric disorder first that is causing the gender dysphoria (Borras, Huguelet, & Eytan, 2007; De Cuypere, 1993). If this treatment is effective, the gender dysphoria will disappear (is the expectation) or remit [see the review of Marks, Green, and Mataix-Cole (2000); compare Marks and Mataix-Cole (1997)]. When the psychiatric disorder is more a consequence than a cause of the gender dysphoria (e.g., anorexia nervosa), it is sometimes effective to start with hormonal treatment anyway. By treating the gender dysphoria, the comorbidity may resolve or become less severe.

When gender dysphoria is a psychotic symptom or occurs in a psychotic episode, there is a worldwide consensus that sex reassignment therapy is contraindicated (e.g., WPATH, 2011). Also, in these cases, an effort must be made to improve the psychotic conditions first (e.g., with psychotropic medications). When, in a reevaluation of the patient's mental health status, the psychosis is deemed under control, but the gender dysphoria remains, a low-dose hormonal therapy (or antiandrogens) can be started. Risk factors and benefits will always be evaluated from a damage control perspective. Even if there is a close relation between another psychiatric disorder and gender dysphoria, it still may be indicated to start a sex reassignment treatment, if this intervention will lead to less gender dysphoria and as a consequence to more psychological stability of the person (e.g., Gijs & Brewaeys, 2007). Only when the psychosis is chronic and can't be kept under control, sex reassignment therapy will remain a contraindication. Mutatis mutandis, the same line of reasoning is followed for other severe psychiatric disorders as, for example, dissociative identity disorders (see vignette) or autism.

Unfortunately, until now, there is very little literature debating and arguing how to make decisions about therapy in these difficult cases (but see, e.g., De Cuypere, 1993; Mizock & Fleming, 2011).

13.4.2 Therapeutic Implications

Besides the diagnostic implications of comorbidity, there are also implications for the therapeutic relationship between the person with gender dysphoria and the psychological and/or medical professionals. In general, professionals have no gender dysphoria themselves and are not able to feel what gender dysphoria really means for a person. In that sense, it is not always easy for the therapist to empathize with the person with gender dysphoria. The occurrence of comorbidity may make this an even more challenging task for a clinician. How do therapists handle this task? We assume that most therapists are trying to be empathic toward their gender dysphoric patients but at the same time try to keep enough distance not to become gender confused themselves. We also assume that therapists who are counseling persons during gender reassignment are (mostly) not treating psychiatric comorbidity themselves, but are referring gender dysphoric patients to other specialized therapists to

treat the psychiatric comorbidity. However, in our view, this approach runs the risk of splitting and iatrogenic pathology; splitting in the sense that the patient and therapist have different views on what is going on and what should be done and are struggling with each other to define what will happen. Iatrogenic pathology is an underestimated risk, which deserves much more attention [see also Mizock and Fleming (2011)]. Therapists working from a so-called dual or separate approach to each disorder, without taking their interrelations and the ways in which different therapeutic strategies are integrated into account, take the risk that they are creating more pathology instead of less. Sometimes gender dysphoric persons are told that their gender problems are not gender problems, but, for example, symptoms of borderline personality disorder (and vice versa).

13.4.3 Implications for Care After Sex Reassignment

To date, debates and discussions on the role of comorbidity in the diagnosis and treatment of gender dysphoria have mainly concerned the diagnostic phase and treatment until genital surgery. This approach might result from the viewpoint that a sex reassignment treatment will diminish or solve gender dysphoria [see also Levine and Solomon (2010)] as well as the co-occurring psychiatric disorder. And indeed, Murad and Colleagues (2010) found in their review of 28 follow-up studies that sex reassignment not only reduced gender dysphoria strongly but also improved psychological functioning significantly. However, some recent research shows that the prevalence of comorbidity after gender reassignment surgery is higher than expected from the perspective that hormonal and gender reassignment would lead to the disappearance of psychiatric comorbidity. Dhejne et al. (2011), for example, found, in a recent Scandinavian long-term study with a mean duration of approximately 10 years, that in transpeople, psychiatric comorbidity remained much higher than in the general population. However, this study, as most studies in this field (e.g., Gijs & Brewaeys, 2007), had several methodological limitations; they inferred an unjustified linear relationship between gender reassignment therapy and later quality of life, without taking into account the contributions of discrimination, stigma, oppression, and violence, and they neglected studies that did find positive outcomes. Also, this study provides no information with regard to the outcome if surgery was unavailable. However, we agree that care after sex reassignment should get a greater priority than it had until now, and we agree that clinicians should stay mindful of comorbidity after sex reassignment surgery [see also Levine and Solomon (2010)]. But we do not agree with their conclusions that sex reassignment is not an effective method for treating gender dysphoria. Most people who have undergone sex reassignment experience a drastic reduction of gender dysphoria (e.g., Gijs & Brewaeys, 2007; Lawrence, 2007; Lawrence & Zucker, 2012; Murad et al., 2010; Selvaggi & Bellringer, 2011). This is a result that no other treatment can claim until now. Furthermore, one should take into account that a hostile

environment toward transgender people contributes to a higher prevalence of psychiatric disorders [and a lower quality of life; see also Kuhn et al. (2009)].

13.5 A Clinical Vignette

Jana, referred by her psychiatrist for a second opinion, was a 30-year-old person with a male body when she consulted a gender reassignment clinic for sex reassignment surgery. In a typical diagnostic procedure (regular monthly talks, writing a life story, completing a psychological test battery, and a heteroanamnesis), she told her clinician that she has felt gender deviant since she was 7 years of age. Now, after many years of struggling, she has found the courage and self-knowledge to go to a gender identity clinic. Her life has not been easy. She was sexually abused by her father and an uncle. She married when she was 18 and divorced when she was 25. She has two children. She has nearly no contact with her children and the contact with her ex-wife is very sporadic and negative. Furthermore, she has no work and has a slight, but permanent, cognitive impairment due to a traffic accident when she was working as a truck driver. The clinician was reluctant to advise his gender team to start with androgen deprivation therapy and estrogens to treat the strong and persistent gender dysphoria, despite the fact that Jana was living as woman for 3 years and that her well-being had greatly improved since the social transition to living as a woman, because he was worried about Jana's comorbidity. She has been diagnosed by many therapists with the following: dissociative identity disorder not otherwise specified, personality disorder not otherwise specified, with narcissistic and psychopathic traits, and as a person with a borderline personality disorder. She has been treated with different therapies with the result that her symptoms have become less severe. Furthermore, she has had problems with anger management and aggression regulation.

After a long diagnostic period (of approximately 3 years), the clinician thought that it was too risky to start a hormonal therapy. This was not so much based on the fear that the patient was psychologically insufficiently stable to undergo sex reassignment therapy, but because the therapist couldn't answer the question if the gender dysphoria was a symptom of the dissociative disorder (as was thought by her psychiatrist, in which the clinician has a lot of confidence). After consultation with a psychiatrist within the gender team who had the same doubts about the psychological stability of the patient, the team decided that there was too much uncertainty to start a hormonal treatment. An external specialist in dissociative disorders was asked for an independent diagnosis, in particular to answer the following question: Is the gender dysphoria a symptom of the dissociative disorder?

The answer of this specialist was very clear: The gender dysphoria is a symptom of another psychiatric disorder, however not so much of the dissociative disorder, but much more of the borderline personality organization, which has led to a very weak and very unstable identity. As a consequence, the advice was to treat the borderline personality disorder and not to start gender reassignment therapy. After consultation

with her external psychiatrist, the gender team decided that it would not be wise to start a gender treatment. The communication of this message to the person led to a crisis in the therapeutic contact: The person could understand the carefulness and worries of the team but also felt deserted by the team. Nevertheless, Jana continued her contact with her psychiatrist and underwent an intensive treatment for her dissociative identity disorder and borderline personality disorder (with the expectation that her gender dysphoria would remit or at least would become much less intense). However, after 2 years, Jana was referred back to our team by her psychiatrist, who told us that Jana had been very compliant with therapy and had made good progress, but that her gender dysphoria had not disappeared. On the contrary, her female gender identity and gender dysphoria had grown stronger during therapy. Maybe, after all, a sex reassignment therapy was indicated. This time, the diagnostic procedure was much shorter. Although Jana still had psychiatric symptomatology, after a short period (approximately 4 talks during 4 months), the team reached a consensus that hormonal treatment was now indicated for Jana. She had always had a small social network, but has had a female partner for a few years, who is supporting her strongly.

After a successful real-life experience (of one year), the team agreed to gender reassignment surgery, very much to the delight of Jana. Nearly 10 years after her application/admission, she underwent gender reassignment surgery to create a neovagina, for which she longed for many years.

At this point, Jana is happy. She acknowledges that she still has psychiatric problems, but is very happy as a female (with breasts and a vagina).

13.6 Discussion and Conclusion

Conceptualizations of the "nature" of gender dysphoria have changed drastically during the last 50 years [see also Meyerowitz (2002)]. Three changes are paramount: (1) Gender dysphoria is no longer considered a symptom of another psychiatric disorder, (2) (hormonal or surgical) interventions to treat gender dysphoria are the most effective interventions today, and (3) people have a humanistic right to choose another gender or sex (Slatman & Widdershoven, 2009). Accordingly, clinical practice has also changed significantly. The crucial clinical questions no longer include the following: Of which psychiatric disorder is gender dysphoria a symptom, and which therapeutic intervention is necessary to restore normality or health? Health is no longer defined as accepting the sex of birth as normative for the gender identity (without gender dysphoria). Instead, the crucial questions have become the following: While people have a right to hormonal and/or surgical treatments for gender dysphoria, are there reasons to exclude an adult from a sex reassignment therapy (be it hormonal or/and surgical)?

Comorbidity is an important factor to consider in decisions of eligibility for sex reassignment treatment but even more in the counseling and treatment of gender dysphoric persons. In general, there is one reason with regard to comorbidity to exclude an adult from sex reassignment surgery: if gender dysphoria is solely/

mainly a symptom of another severe psychiatric disorder. In that case, the comorbid disorder will be treated first (or at least should be stabilized and controlled enough) with the expectation that gender dysphoria will disappear. If the gender problem is not a symptom of another psychiatric disorder per se, but the comorbidity is threatening the psychological stability and well-being of the person too much, one can start with hormonal therapy to see if the psychiatric comorbidity improves. Of course, this does not exclude psychotherapy or concurrent psycho-pharmacotherapy. Some clinicians, however, will prefer to require a certain level of psychological stability before starting with sex reassignment treatment.

Where do we go from here? Based on our view that people have an ethical right to be treated with hormonal and surgical interventions to diminish their suffering of gender dysphoria, and that sex reassignment treatments are the most effective treatments at the moment, we argue that it is necessary to improve our understanding of comorbidity and to give more effective care to people with gender dysphoria.

Some persons with gender dysphoria have psychiatric comorbidity before, as well as after, sex reassignment surgery. This comorbidity varies greatly, although the reasons for the variability are not well understood. We plead for future longitudinal research to understand the (determinants of the) interrelations between gender dysphoria and psychiatric comorbidity. From a developmental perspective, it seems especially imperative to study comorbidity before and after treatment for gender dysphoria, from adolescence through adulthood. From a sexological point of view, we know almost nothing about the sexual problems transgender people encounter pre- and post-sex reassignment surgery and how these problems are related to psychiatric comorbidity.

Therapeutically, studies about how to manage comorbidity to improve the effectiveness of sex reassignment surgery and the therapeutic relationship are urgently needed. So, our view on comorbidity can be summarized as follows: Let's be pragmatic, but also take comorbidity seriously. In doing so, we contribute to the well-being of our patients with GID.

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