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Comorbidity and quality of life in adults with hair pulling disorder

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ABSTRACT

Hair pulling disorder (HPD; trichotillomania) is thought to be associated with significant psychiatric comorbidity and functional impairment. However, few methodologically rigorous studies of HPD have been conducted, rendering such conclusions tenuous. The following study examined comorbidity and psychosocial functioning in a well-characterized sample of adults with HPD ($N=85$) who met DSM-IV criteria, had at least moderate hair pulling severity, and participated in a clinical trial. Results revealed that 38.8% of individuals with HPD had another current psychiatric diagnosis and 78.8% had another lifetime (present and/or past) psychiatric diagnosis. Specifically, HPD showed substantial overlap with depressive, anxiety, addictive, and other body-focused repetitive behavior disorders. The relationships between certain comorbidity patterns, hair pulling severity, current mood and anxiety symptoms, and quality of life were also examined. Results showed that current depressive symptoms were the only predictor of quality of life deficits. Implications of these findings for the conceptualization and treatment of HPD are discussed.

1. Introduction

Hair Pulling Disorder (HPD) is an obsessive-compulsive spectrum condition in which individuals pull hairs from their own body, resulting in significant hair loss (American Psychiatric Association, 2013). Subclinical hair pulling is relatively common (i.e., 11%) while clinical hair pulling, or diagnosable HPD, is less frequent (Woods et al., 1996). The lifetime prevalence rate of HPD as defined in DSM-IV-TR is estimated at about 0.6% (APA, 2000), but may be as high as 3.4% for women and 1.5% for men (Christenson et al., 1991b). Studies on the gender distribution of HPD suggest it is more common in females (9:1; Christenson, 1995; Duke et al., 2009; Reeve, 1999).

Research has identified two distinct styles of pulling: "automatic" and "focused" (Christenson et al., 1991a). Automatic pulling is a passive process in which pulling occurs with little conscious awareness. In contrast, focused pulling is an active and purposeful process, which some suggest, functions to regulate negative affect and/or aversive cognitions (Woods et al., 2006b). In either case, hair pulling can create a vicious cycle in which both types of pulling are present in the same individual: out of awareness (automatic) pulling leads to emotional consequences (e.g., sadness, anger, and guilt), which can lead to further (focused) pulling (Diefenbach et al., 2002).

HPD has been consistently associated with negative psychosocial consequences. Hair pulling is viewed negatively by peers (Woods et al., 1999), can lead to avoidance of social and recreational activities (Woods et al., 2006a), and can result in anxiety during intimate situations (Christenson and Mansueto, 1999; Diefenbach et al., 2005a; Duke et al., 2010). In addition, individuals with HPD experience academic, occupational, and psychological difficulties (Woods et al., 2006a). Research shows that the majority of people with HPD report feeling physical unattractiveness, depression, shame, and feelings of low self-worth (Stemberger et al., 2000).

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Beyond measuring specific facets of psychosocial functioning in HPD, researchers have also investigated the relationship between HPD and global indices of quality of life, with results being mixed. Keuthen et al. (2004) found no significant differences on quality of life measures between persons with HPD (N=58) and healthy controls (from published norms). In contrast, two other studies found that persons with HPD (n=28 and 70) had poorer quality of life scores than non-psychiatric controls (n=28 and 25) (Diefenbach et al., 2005b; Odlaug et al., 2010). Three studies (Diefenbach et al., 2005b; Keuthen et al., 2004; Tung et al., 2014) with various sample sizes (n=28, 58 and 187) found that depression severity significantly predicted quality of life, even while controlling for hair pulling severity, and a fourth study (Odlaug et al., 2010) (n=70) showed that persons with HPD who reported poor quality of life also reported higher scores on depression indices. Furthermore, in a related study examining life disability in HPD (N=153), focused hair pulling severity and pulling-related distress and interference predicted life disability while controlling for depression, but depression also correlated with life disability (Tung et al., 2015). These results indicate that quality of life and HPD might be at least partially mediated through an association with depression.

Given the difficulties in psychosocial functioning experienced by persons with HPD, perhaps it is not surprising that HPD patients are generally believed to suffer from comorbid psychiatric disorders at a higher rate than the general population. In reviewing the HPD literature, 20 studies reported comorbidity rates in adults with HPD, but these rates varied widely from study to study. For example, rates for comorbid depressive disorders ranged from 14% to 60% (Christenson and Mansueto, 1999; Keijsers et al., 2006; van Minnen et al., 2003; Odlaug et al., 2010), anxiety disorders from 2.3% to 57% (van Minnen et al., 2003; Christenson et al., 1991a), and OCD from 5% to 27% (Christenson et al., 1991a; Schlosser et al., 1994). It is unclear what factors contributed to these inconsistencies, but many of the studies reporting comorbidity rates in HPD possess methodological limitations. First, some studies used unstructured assessment instruments (e.g., Christenson et al., 1991b) or (online) self-report measures (e.g., Woods et al., 2006a). Second, some studies reported current comorbid disorders, while others reported on lifetime comorbidity. Third, not all studies were published in peer-reviewed journals (Hand et al., 1996). Finally, some study samples did not consist entirely of persons with HPD and failed to report statistics specifically for HPD (e.g., Grant and Christenson, 2007).

After 4 studies with significant limitations were set aside, there remained 16 studies of sufficient methodological scrutiny that report comorbidity rates in HPD. These studies were all published in peer-reviewed journals, used structured or semi-structured diagnostic assessments, used samples that clearly consisted of individuals with HPD, and provided clearly delineated results for specific diagnoses (e.g., “major depression” rather than “mood disorder”). A summary of the characteristics of these studies and their data are presented in Tables 1–3. Visual analysis of these tables showed that comorbidity rates and study characteristics (i.e., sample sizes) still vary considerably across studies. This variability could have been caused by the fact that several diagnostic classification systems were used in these studies. Also, most studies did not report data on many comorbid disorders. Finally, these studies used a variety of recruitment practices, meaning that selection bias likely impacted comorbidity rates.

Due to the limitations of the literature on comorbidity rates in HPD, there is a need to characterize comorbidity patterns in persons with HPD using larger and well-characterized samples with psychometrically sound and rigorous assessment instruments.

Table 1
Description of former studies examining comorbidity in HPD.

Reference	Sample size	Recruitment	Assessment
Christenson et al. (1991a, 1991b)	60	Referrals from outpatient or respondents to newspaper ads. Study completed at a trichotillomania specialty clinic.	Semi-structured interview based on DSM-III-R for HPD and comorbid disorders
Swedo and Leonard (1992)	43	Participants who had presented for research studies at the National Institutes of Mental Health	Schedule for Affective Disorders and Schizophrenia – Lifetime Version and the Diagnostic Interview for Children and Adolescents (based on DSM-III-R)
Schlosser et al. (1994)	22	Participants recruited through a psychiatric outpatient clinic (N=8) and newspaper advertisements (N=14)	Semi-structured interview focused on hair pulling, Diagnostic Interview Schedule for Axis I Disorders, and Structured Interview for DSM-III-R Personality Disorders
Christenson (1995)	186	Patients presented at a Trichotillomania Clinic	Minnesota Trichotillomania Assessment Inventory based on DSM-III-R
van Minnen et al. (2003)	43	Recruited through television ads. Self-referred to university outpatient clinic.	SCID for DSM-IV
Keijsers et al. (2006)	28	Waitlist control group from van Minnen et al. (2003)	SCID for DSM-IV
Lochner et al. (2005)	54	Referred to the research unit from a wide range of sources (e.g., OCD Association of South Africa, community-based primary care practitioners, and psychiatrists).	Semi-structured clinical interview and SCID-I
Diefenbach et al. (2005a, 2005b)	28	Recruited for participation in treatment study	TDI and SCID
Woods et al. (2006a, 2006b)	28	Unclear	SCID
Odlaug and Grant (2008)	24	Recruited from ongoing pharmacological treatment studies and a longitudinal study on impulse control disorders	SCID-I and semi-structured interview
Grant et al. (2009)	50	Recruited through newspaper ads and referrals from medical providers	Physician-administered TDI and SCID
Lochner et al. (2010)	80	Referred to the research unit from a wide range of sources (e.g., OCD Association of South Africa, community-based primary care practitioners, and psychiatrists).	SCID-I/P, SCID-II/P, SCID-OCSD, and Trichotillomania Behavior Profile
Odlaug et al. (2010)	70	Participants recruited from completed clinical trials	SCID and SCID-compatible modules for impulse control disorders
Keuthen et al. (2012)	38	Unclear	Semi-structured interviews for DSM-IV diagnoses. Minimum MGH-HPS score of 10, HPD symptoms for at least 1 year
Lochner et al. (2012)	84	Self-referred to specialty clinics	SCID-I/P for DSM-IV and proposed DSM-5 criteria
Tung et al. (2015)	153	Participants recruited for two research studies at Massachusetts General Hospital.	SCID for DSM-IV-TR Axis I Disorders Non-patient Edition (SCID-I/Np) and Keuthen Diagnostic Inventory for Skin Picking (K-DISP)