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Review article

Body dysmorphic disorder in different settings: A systematic review and estimated weighted prevalence

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ABSTRACT

Our aim was to systematically review the prevalence of body dysmorphic disorder (BDD) in a variety of settings. Weighted prevalence estimate and 95% confidence intervals in each study were calculated. The weighted prevalence of BDD in adults in the community was estimated to be 1.9%; in adolescents 2.2%; in student populations 3.3%; in adult psychiatric inpatients 7.4%; in adolescent psychiatric inpatients 7.4%; in adult psychiatric outpatients 5.8%; in general cosmetic surgery 13.2%; in rhinoplasty surgery 20.1%; in orthognathic surgery 11.2%; in orthodontics/cosmetic dentistry settings 5.2%; in dermatology outpatients 11.3%; in cosmetic dermatology outpatients 9.2%; and in acne dermatology clinics 11.1%. Women outnumbered men in the majority of settings but not in cosmetic or dermatological settings. BDD is common in some psychiatric and cosmetic settings but is poorly identified.

Contents

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Introduction

Body dysmorphic disorder (BDD) consists of a preoccupation with a perceived defect. The 'defect(s)' is not noticeable to other people (or is minimal); however, it is associated with shame, depression, and a poor quality of life. BDD can be a chronic disorder, which persists for many years if left untreated, with surveys at specialist centres concluding high rates of psychiatric hospitalisation, suicidal ideation, and completed suicide (Phillips, Coles, et al., 2005; Phillips & Menard, 2006; Veale, Boocock, et al., 1996).

Many resources are wasted on those with BDD who attend dermatological or cosmetic surgery settings in an attempt to "fix" their imagined defect and receive physical treatments instead of the psychiatric help they actually need (Phillips, Dufresne, Wilkel, & Vittorio, 2000; Sarwer, Pertschuk, Wadden, & Whitaker, 1998). Such patients are often dissatisfied with their cosmetic procedure and symptoms of BDD persist. However, BDD appears to be relatively uncommon as a presenting problem in psychiatric services or it is poorly identified (Veale, Akyüz, & Hodsoll, 2015). This may be because of stigma so that it presents in psychiatric services because of comorbidity (for example depression). Knowledge of the most common co-morbid presentations may assist in identifying BDD. The reported sex ratio also appears to differ widely. Thus the sex ratio is reported as equal in a specialist BDD service (Phillips & Menard, 2006) compared to a ratio of 2.58 female to male in the community (Schieber, Kollei, de Zwaan, & Martin, 2015). Therefore, knowledge of the epidemiology of BDD would be important for public health in order to identify settings in which it would be necessary to screen for BDD, the most appropriate screening measures, the most common co-morbid diagnoses and the sex ratio.

Screening for possible symptoms of BDD was never included in the early large catchment area surveys of psychiatric morbidity (Kessler et al., 1994; Singleton, Bumpstead, O'Brien, Lee, & Meltzer, 2001; Wells, Bushnell, Hornblow, Joyce, & Oakley-Browne, 1989). However, despite the fact that BDD was not identified in epidemiological surveys of psychiatric morbidity, a number of prevalence studies have since been conducted. These prevalence studies investigate BDD in a range of settings; however prevalence rates and sex ratios within each setting appear to vary widely. This has created a confused overall picture of how common or rare BDD actually is. The aim of this systematic review was therefore to determine (a) the weighted prevalence rate of BDD in different settings, (b) the type of screening question or questionnaire used for identifying BDD, (c) comorbidity through which it may present in psychiatric services, and (d) the sex ratio in different settings.

Method

Eligibility Criteria

Studies were included if two of the authors agreed on the following criteria: (a) BDD was diagnosed or screened using a validated measure or interview; (b) an estimated prevalence and a total number of the population affected was provided; and (c) the study was published in the English language. Studies were excluded if: (a) they were published in a language other than English; (b) BDD prevalence was not provided; (c) they were a systematic or literature review; (d) they were a case study; or (e) they were a comorbidity study.

Information Sources

Ovid Medline, Embase and PsychINFO were used to obtain separate literature searches up to June 2015. The results from the three databases were subsequently collated and duplicates removed. In addition, the authors inspected the reference sections of relevant papers retrieved through the database search.

Search

The search strategy was: (a) epidemiology OR epidemiologic studies OR incidence OR prevalence OR occur* OR frequenc* OR proportion* OR rate* OR number* OR percent*; (b) body dysmorphic disorder.sh. OR body dysmorphi$ OR dysmorphophobi$ OR imagine$ ugl$.mp; (c) a AND b.

Study Selection

The title and abstract of retrieved studies that contained search terms from both (a) and (b), that is (c), were screened by one author according to perceived relevance. The full-text articles of relevant studies were then reviewed by two authors and only included if they met the study inclusion and exclusion criteria.