ORIGINAL RESEARCH—EPIDEMIOLOGY

What can Prevalence Studies Tell Us about Female Sexual Difficulty and Dysfunction?

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ABSTRACT

Introduction. Many recent studies have investigated the prevalence of female sexual difficulty/dysfunction.
Aim. Investigate female sexual difficulty/dysfunction using data from prevalence studies.
Methods. We reviewed published prevalence studies excluding those that had not included each category of sexual difficulty (desire, arousal, orgasm, and pain), were based on convenience sampling, or had a response rate <50% or a sample size <100.
Main Outcome Measures. For each study we used the prevalence of any sexual difficulty as the denominator and calculated the proportion of women reporting each type of difficulty. For each category of sexual difficulty we used the prevalence of that difficulty lasting 1 month or more as the denominator and calculated the proportion of difficulties lasting several months or more and 6 months or more.
Results. Only 11 of 1,248 studies identified met our inclusion criteria. These studies used different measures of sexual dysfunction, so generating a simple summary prevalence was not possible. However, we observed consistent patterns in the published data. Among women with any sexual difficulty, on average, 64% (range 16–75%) experienced desire difficulty, 35% (range 16–48%) experienced orgasm difficulty, 31% (range 12–64%) experienced arousal difficulty, and 26% (range 7–58%) experienced sexual pain. Of the sexual difficulties that occurred for 1 month or more in the previous year, 62–89% persisted for at least several months and 25–28% persisted for 6 months or more. Two studies investigated distress. Only a proportion of women with sexual difficulty were distressed by it (21–67%).
Conclusions. Desire difficulty is the most common sexual difficulty experienced by women. While the majority of difficulties last for less than 6 months, up to a third persist for 6 months or more. Sexual difficulties do not always cause distress. Consequently, prevalence estimates will vary depending on the time frame specified by researchers and whether distress is included in these estimates. **Hayes RD, Bennett CM, Fairley CK, Dennerstein L. What can prevalence studies tell us about female sexual difficulty and dysfunction? J Sex Med 2006;3:589–595.**

Key Words. Hypoactive Sexual Desire Disorder; Female Orgasmic Disorder; Female Sexual Arousal Disorder; Dyspareunia

Introduction

Female sexual dysfunctions (FSDs), as described in the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition [1], include disorders of sexual interest/desire, arousal, orgasm, and pain. Current definitions of sexual dysfunction emphasize the importance of including both low sexual functioning and personal distress components for a diagnosis of desire, arousal, and orgasmic disorders [2]. In this article we reserve the term sexual dysfunction for those instances where it has been demonstrated that both low sexual functioning and distress are present. We use the

term sexual difficulties to refer to the more general concept of reduced sexual functioning where it may be unclear whether sexual distress is present or not.

A number of previous reviews addressing the prevalence of FSD have not focused on community-based studies [3,4] or neglected to examine significant types of FSD such as Hypoactive Sexual Desire Disorder [5]. Reviewers have also had to contend with an extremely heterogeneous body of literature [6]. In particular, there are substantial inconsistencies in the ways FSD has been measured making it very difficult to know if the differences reported between populations are real or the product of the different methods employed. In a relatively recent review, Dunn et al. [5] concluded that heterogeneity in methodology, study design, and case definitions made it impossible to determine reliable overall estimates of sexual dysfunction.

In the 3 years since the publication of that review, research in this area has continued, and a substantial number of new studies have been added to the available literature. Over half the studies, which met all the inclusion criteria for this review, were published in the past 3 years, even though we searched back as far as the 1940s. Our aim was to review all the relevant currently available literature to determine if this new influx of research allows us to determine reliable overall prevalence estimates and/or gain further insights into female sexual difficulty and dysfunction.

Methods

Search Strategy

The following electronic databases were searched: Ovid Medline (1966–2005), ISI Current Contents (1994–2005), PubMed (1950–2005), ISI Web of Science (1945–2005), and CSA PsychINFO (1960–2005). The search terms used were: sexual difficulties/dysfunction, woman/women/female, and prevalence/cross-sectional. In addition, relevant references cited within articles were obtained.

Inclusion Criteria

We included community-based, cross-sectional studies published in English that investigated the major categories of sexual difficulty/dysfunction (desire, arousal, orgasm, and pain). Only those studies that addressed all four major categories of sexual difficulty/dysfunction (and also reported a prevalence estimate combining these four categories) were included in this review so any overall estimate would include the same domains. Studies based on convenience samples; with an overall response rate of less than 50%; a sample size of less than 100 or those where the sampling procedure, response rate, or sample size were not reported, were excluded. Clinic-based studies that were not representative of the general community, including those restricted to women with a particular medical condition, were also excluded.

Main Outcome Measures

Meta-analysis was not possible as measures of sexual dysfunction and time frames differed between studies. For each study we used the prevalence of any sexual difficulty (i.e., the presence of one or more of the following sexual difficulties: desire difficulty, orgasm difficulty, arousal difficulty, and sexual pain) as the denominator and calculated the proportion of women reporting difficulty with desire, orgasm, arousal, and pain. Average proportions, weighted by sample size, were calculated.

For each study we used the reported sample size to calculate 95% confidence intervals for the prevalence estimates of sexual difficulties. We have previously reviewed the effect of aging on women's sexuality. In that review we found that most studies indicate that the prevalence of sexual difficulties does not change appreciably with age [7]. For this reason we have not listed prevalence estimates by age group.

To examine the relationship between the duration and prevalence of sexual difficulties, we compared prevalence data on sexual difficulties that lasted for 1 month or more, several months or more, and 6 months or more. In this analysis we included studies that specified these time periods when assessing the prevalence of sexual difficulties. For each category of sexual difficulty we used the prevalence of that difficulty lasting 1 month or more as the denominator and calculated the proportion of difficulties lasting several months or more and 6 months or more. To minimize the effect of differences in the methods employed to assess sexual difficulty, we only included studies where the questions asked about periods of sexual difficulty in the previous 12 months. Numerators and denominators for a given data point were derived from the same population. The prevalence estimates we used for sexual difficulties lasting sev-