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Depression and anxiety in men with sexual dysfunction: a retrospective study

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Abstract

Background: Comorbid anxiety disorders and depression are commonly seen in men with sexual disorders such as erectile dysfunction (ED) and premature ejaculation (PE). However, they are often undiagnosed and untreated, and their relationship to sexual dysfunction is complex. This study examines the frequency and correlates of comorbid anxiety and depression in men with ED or PE.
Methods: The case records of 64 men with ED or PE attending a clinic for psychosexual disorders in a general hospital psychiatry unit during the period 2010–14 were reviewed. Information on comorbid anxiety disorders and depression was extracted from these records, and their clinical and demographic associations were analyzed.
Results: Eight (12.5%) men had comorbid depressive disorders, and fifteen (23.4%) had anxiety disorders. These disorders predated the onset of sexual dysfunction in the majority of patients. Generalized anxiety disorder was the commonest anxiety disorder. Men with comorbid depression had significantly elevated rates of suicidal ideation or behavior related to their sexual dysfunction, and were more likely to report a lack of libido. Men with pre-existing anxiety disorders were more likely to experience performance anxiety related to sex, and to have PE without comorbid ED.
Conclusions: Depression and anxiety affect a substantial minority of men with sexual dysfunction. Men presenting for the evaluation of ED and PE should be carefully screened for these disorders. The links between anxiety disorders and sexual performance anxiety merit further investigation in this patient group.

1. Introduction

Premature ejaculation (PE) and erectile dysfunction (ED) are the two most common forms of sexual dysfunction in men [1,2]. Though these disorders, particularly ED, have traditionally been divided into "organic" and "psychogenic" categories [3,4], the distinction between these two is not clear, as neurobiological and psychological factors overlap substantially in individual cases [4–8].

Depression is strongly associated with male sexual dysfunction. Major depression is mainly associated with reduced sexual desire, though 25% of male patients with depression may also experience ED [9,10]. The relationship between depression and ED is bi-directional: depressed affect can impair sexual arousal and cause ED [11], while decreased sexual activity and lack of satisfaction with one's sexual life can trigger depressive symptoms [12,13]. Further complicating this relationship are the well-documented sexual side-effects of antidepressants [10,14]. Symptoms of depression are commonly associated with ED even in the absence of syndromal depression [15,16]. Depression has also been associated with PE [17,18] and may reflect the impaired self-esteem caused by PE [19].

Various anxiety disorders have also been associated with sexual dysfunction. Social phobia, a condition associated with significant anxiety in social or performance situations, is strongly associated with PE [20–22], and panic disorder has been linked to ED in several studies [22–24]. Likewise, a significant number of men with generalized anxiety disorder (GAD) experience erectile dysfunction [25]. Anxiety related specifically to sexual performance can be a significant contributor to both ED [7,26] and PE [27] even without a diagnosed anxiety disorder, and "free-floating" anxiety of

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the type seen in GAD has also been documented in this patient population [28].

Despite the large number of studies linking depression and anxiety to sexual dysfunction, it is unclear how depression and anxiety relate to other psychological factors in this patient group, or if they affect the presentation of ED or PE. In order to investigate these relationships, we performed a chart review of 64 men with a diagnosis of ED or PE of presumed psychogenic origin, to assess the frequency, chronology, and correlates of comorbid anxiety and depressive disorders in this patient population. Our study was confined to ED and PE as these are the sexual disorders which have the best documented associations with anxiety and depression, and because none of the other patients attending our clinic, as described below, were diagnosed with these conditions.

2. Methodology

The current study is a retrospective chart review of men presenting to a clinic for psychosexual disorders at a general hospital in Pondicherry, India. Patients are referred to the clinic from other departments, particularly urology and general surgery, after "organic" causes of sexual dysfunction have been ruled out. At the clinic, patients are evaluated using a semi-structured interview schedule that includes details of sexual dysfunction, comorbid psychiatric disorders or substance abuse, performance anxiety related to sexual function, details of current and past relationships, and any past history of parental loss, separation or marital discord. All interviews were carried out by a psychiatry resident, and all diagnoses were confirmed by one of the authors using ICD-10 clinical descriptions and diagnostic guidelines.

We reviewed 110 case records of patients attending the clinic in the period 2010–2014. Twelve case records were excluded as these patients had sexual dysfunction related to the use of antipsychotics or antidepressants; we did not encounter any patients whose sexual dysfunction was related to the use of other drugs, such as anti-hypertensives or hormonal agents. Thirty-four case records were excluded as patients did not have ED or PE, and sought consultation either for marital disharmony or for doubts and misconceptions related to sexual functioning. None of these patients had comorbid depression or anxiety. We finally extracted information from the case records of 64 men who attended the clinic during this period and received a diagnosis of sexual dysfunction (ED or PE) of presumed psychogenic origin. Though lack of sexual desire is known to be associated with depression, we did not include patients with this presenting complaint in our review, as only one such patient consulted us for this complaint during the study period. He was eventually diagnosed to have dysthymia and comorbid major depression, with no other sexual dysfunction, and his lack of libido resolved with antidepressant treatment. The study was conducted in accordance with the institute's Scientific Advisory Committee, which permits chart reviews of clinical data as long as confidentiality is not violated.

Information on diagnoses of ED and PE, their age at onset, comorbid anxiety and depression, and the temporal relationship between the two were tabulated and analyzed. PE was subtyped according to Waldinger's classification [29]. We also included information on the presence or absence of semen-loss anxiety, sometimes termed *Dhat* syndrome, as this is a common explanatory model for sexual dysfunction in Indian culture [30,31]. The independent samples *t*-test was used to compare normally distributed, continuous variables, and the chi-square test or Fisher's exact test was used for categorical variables. All statistical tests were two-tailed, and a value of $p < 0.05$ was considered statistically significant.

3. Results

3.1. Description of the study sample

The mean age of the 64 patients studied was 31.3 ± 6.2 years (range 22 to 46 years). Of these men, 30 were single, 31 married, one divorced and two were widowers. They had been educated for an average of 10.3 ± 4.1 years (range 0–18 years). Thirty-seven of these men (57.8%) had a diagnosis of premature ejaculation, and forty-four (68.8%) had erectile dysfunction; 17 patients (26.6%) had both PE and ED. The mean age at onset for ED was 27.2 ± 5.6 years, while it was 28.5 ± 4.6 years for PE. Semen-loss anxiety was documented in thirteen (20.3%) men, and was not significantly associated with any diagnostic category.

3.2. Frequency and correlates of comorbid depression

Depressive disorders were present in 8 (12.5%) of the entire sample: five men had dysthymia (ICD code F34.1), five had a mild or moderate depressive episode (ICD codes F32.0 and F32.1), and one had depressive disorder not otherwise specified (F32.9). Depressive preceded the onset of sexual dysfunction in five (62.5%) patients. Men with depression did not differ from the rest of the sample on any demographic variables, and comorbid depression did not affect the age at onset of sexual dysfunction or the presentation of PE or ED. However, comorbid depression was associated with a significantly elevated rate of suicidal ideation or behavior (4/8 vs 5/56; $p = 0.01$, Fisher's exact test), which was attributed in all cases to the inability to "perform" sexually. None of these associations changed when only those with pre-existing depression were considered separately.

Though it was not a presenting complaint in any case, lack of libido was reported by three of eight men with comorbid depression, as against one in the remaining group; this difference was statistically significant ($p = 0.005$,