

The Association of Anxiety With the Subtypes of Premature Ejaculation: A Chart Review

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ABSTRACT

Objective: Premature ejaculation is one of the most common forms of male sexual dysfunction. Recent clinical and genetic evidence suggests that it can be classified into 4 subtypes, which may have distinct clinical profiles. Psychological factors, such as anxiety, may play a specific role in the acquired subtype. The objective of this study was to assess the association between psychological factors, particularly anxiety and marital disharmony, and the various subtypes of premature ejaculation.

Method: The case records of 28 men presenting with premature ejaculation to a clinic for psychosexual disorders in India between January 2012 and January 2013 were reviewed. The patients were classified into 4 subtypes (lifelong, acquired, natural variable, and premature-like ejaculatory dysfunction) and compared in terms of demographic and clinical profile.

Results: Performance anxiety during intercourse was significantly associated with the acquired subtype of premature ejaculation ($P = .011$, Fisher exact test). Marital disharmony was equally common in the lifelong and acquired subtypes of premature ejaculation ($P =$ not significant, Fisher exact test) and, in most cases, could be attributed to the distress caused by premature ejaculation itself.

Discussion: Our results are consistent with existing literature that shows an association between anxiety and premature ejaculation, particularly the acquired subtype. Anxiety may play a causal or perpetuating role in these patients. If replicated, such a finding would have important therapeutic implications.

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Premature ejaculation is one of the most common forms of male sexual dysfunction.¹ Broadly speaking, premature ejaculation refers to persistent or recurrent ejaculation occurring before, at, or shortly after penetration and causing distress to the patient and his partner. Some cases of premature ejaculation have a medical cause, but most appear to be related to unknown physiologic or psychological factors. Occasional rapid ejaculations, especially during initial sexual experiences, do not qualify for a diagnosis of premature ejaculation.^{1,2}

A question that has been raised in the literature is whether premature ejaculation is a single condition, or whether it can be meaningfully divided into categories. The earliest such proposal divided premature ejaculation into 2 groups: primary or lifelong and secondary or acquired.³ Lifelong premature ejaculation was characterized by persistent rapid ejaculation from the beginning of sexual activity, whereas acquired premature ejaculation developed following a period of normal ejaculatory function. This classification was adopted by the *DSM-IV*, which also added 2 specifiers: situational (when premature ejaculation occurs only in 1 context, such as with 1 partner) and generalized.⁴ Waldinger and Schweitzer^{5,6} proposed a new taxonomy of premature ejaculation based on clinical presentation. This classification provides 4 subtypes of “true” premature ejaculation (2 of which have already been described): (1) the lifelong type that is linked to putative genetic factors^{6,7}; (2) the acquired type that may be caused by endocrine, urologic, or psychological factors; (3) natural variable premature ejaculation in men who have occasional rapid ejaculations; and (4) premature-like ejaculatory dysfunction in men who have a normal ejaculation latency but who subjectively report rapid ejaculation. More detailed specifications of these subtypes can be found in the articles cited previously.^{5,6} This classification is more useful in general practice than the simple “primary/secondary” dichotomy, as it minimizes the risk of overdiagnosing premature ejaculation.

As a psychological cause has been proposed for the acquired subtype, a higher frequency of relevant factors, such as anxiety and marital discord, would be expected in this group. However, the association between premature ejaculation and marital discord is complex, and the direction of causality is not clear. Similarly, despite evidence linking anxiety to premature ejaculation, there is no simple 1-to-1 relationship between them.

We tested the hypothesis that psychosocial factors such as anxiety and marital discord would be significantly associated with acquired premature ejaculation by examining the case records of 28 male patients who presented with premature ejaculation and retrospectively classifying them into 4 subtypes.

METHOD

The outpatient case records of 28 male patients diagnosed with premature ejaculation, who attended the Marital and Psychosexual (MAPS) Clinic of the Department of Psychiatry at Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India, between January 2012 and January 2013, were reviewed by a clinician, and patients were classified into 1 of the premature ejaculation subtypes (lifelong, acquired, natural variable, and premature-like ejaculatory dysfunction) on the basis of the clinician’s appraisal of the available information. The MAPS clinic evaluation also includes an assessment of symptom profile and comorbid psychiatric diagnoses

- Premature ejaculation can be divided into meaningful subtypes.
- Patients with acquired premature ejaculation have significantly higher rates of performance anxiety.
- Patients with acquired premature ejaculation may respond well to pharmacologic or psychological interventions aimed at lowering this anxiety.

based on the *ICD-10-CDDG* (Clinical Descriptions and Diagnostic Guidelines) criteria. On the basis of Waldinger and Schweitzer's proposal,⁵ we expected to find an excess of psychological or secondary physical factors in the acquired subtype compared to the other groups.

Statistical analyses were conducted using the WinPEpi version of the OpenEpi program (www.OpenEpi.com). All tests were 2-tailed, and a significance level of $P < .05$ was considered statistically significant.

RESULTS

A total of 28 men with premature ejaculation underwent detailed evaluation in the specified period. The mean \pm SD age of the patients was 31.86 ± 5.92 years (range, 22–44 years). The mean duration of complaints was 3.18 ± 3.27 years (range, 2 months–10 years). A majority of the men (17/28) were married. Ten of the 17 married men with premature ejaculation reported marital disharmony or conflict, which was directly attributed to their symptoms in 8 patients (80%).

Comorbid diagnoses were present in 15 of the 28 patients. The most common comorbidity was psychogenic erectile dysfunction ($n = 10$). Other conditions reported by patients, in order of frequency, were Dhat syndrome ($n = 6$), nicotine dependence ($n = 5$), anxious-avoidant personality disorder ($n = 5$), generalized anxiety disorder ($n = 2$), and depression ($n = 2$). Six patients reported a family history of psychiatric disorder: alcohol dependence in 5 and depression in 1.

Among men with comorbid erectile dysfunction and premature ejaculation, half ($n = 5$) reported that erectile dysfunction preceded the onset of premature ejaculation, while the remaining half described both symptoms as beginning at almost the same time. There was no significant difference between patients with and without erectile dysfunction in terms of demographic or clinical variables.

Ten of the 28 patients reported prominent symptoms of anxiety immediately before or during intercourse, which accompanied their symptom of premature ejaculation. These symptoms included anticipatory anxiety ($n = 7$), tremors ($n = 5$), palpitations ($n = 4$), breathlessness ($n = 2$), and increased perspiration ($n = 1$). When men with and without anxiety were compared in terms of demographic and clinical variables, there were no significant differences between the 2 groups.

Patients' charts were examined retrospectively and classified into 1 of the 4 subtypes of premature ejaculation on the basis of available information. The majority of patients

fell into the lifelong ($n = 12$, 42.86%) and acquired ($n = 10$, 35.71%) subtypes. Five men (17.86%) fell into the natural variable premature ejaculation category, and 1 (3.57%) had premature-like ejaculatory dysfunction.

When the lifelong and acquired premature ejaculation groups were compared, men with acquired premature ejaculation were significantly more likely to experience symptoms of anxiety during intercourse (70% [7/10] vs 8.33% [1/12], $P = .006$, Fisher exact test). They had a shorter mean duration of illness (Mann-Whitney $Z = 2.09$, $P = .037$), but did not differ in terms of marital disharmony (4/8 vs 5/8, $P =$ not significant, Fisher exact test), demographic variables, psychiatric comorbidity, or family history of mental illness.

When the acquired premature ejaculation group was compared with all "nonacquired" premature ejaculation patients as a whole, the association with anxiety remained significant (7/10 vs 3/18, $P = .011$, Fisher exact test). No other significant differences were identified when comparing these 2 groups.

Two patients in the natural variable group (40%) also reported anxiety, but due to the small sample size, meaningful comparisons between this group and other subtypes could not be made. Four of these patients were single and had premature ejaculation in the context of initial sexual experiences, while the fifth was recently married.

DISCUSSION

In our study sample, the most common subtypes of premature ejaculation were the lifelong and acquired variants. These results are at variance with a study from China,⁸ which found that the premature-like and natural variable subtypes were the most common; however, the same group had reported higher rates of lifelong and acquired premature ejaculation in an earlier sample.⁹ Such differences could be explained either by the small size of our sample or by the sampling method, which used patient self-report rather than systematic screening of a larger sample of men.

Situational factors proved to be important in men with natural variable premature ejaculation; 4 had symptoms during their initial sexual experiences, which were not persistent, and 1 was newly married. Two of these men reported anxiety related to performance. The exact relationship between initiation of sexual activity, performance anxiety, and premature ejaculation in this subgroup needs to be investigated in a larger sample.

Erectile dysfunction was the most common comorbidity reported in this group and preceded the onset of premature ejaculation in half of those who reported it. However, patients with comorbid erectile dysfunction did not differ from those without it in our sample. This finding may reflect the small sample size of our study and needs to be replicated in larger samples given the association between acquired premature ejaculation and erectile dysfunction reported in an earlier study.⁹

Marital discord was common among married men with premature ejaculation in our sample. When the relationship between premature ejaculation and marital disharmony

was assessed, we found a direct link between premature ejaculation and conflict in 8 of 10 couples experiencing discord. This result is consistent with findings from a study suggesting that marital discord and partner dissatisfaction are generally the consequence, rather than the cause, of premature ejaculation.¹⁰

The most significant finding in our study was the high rate of anxiety (70%) in patients with the acquired form of premature ejaculation, which was significantly higher than in patients with lifelong premature ejaculation or in patients with other forms of premature ejaculation taken together. Given the apparent association of premature ejaculation with autonomic dysfunction,^{11,12} anxiety is a plausible mechanism to explain either the onset or the persistence of premature ejaculation. A study found a significant association between premature ejaculation and social phobia,¹³ another condition in which performance anxiety is prominent. Earlier studies also found a specific association between premature ejaculation and anxiety^{14,15} and a link between “free-floating anxiety” and premature ejaculation.¹⁶ One possibility is that, in a patient who is already anxiety prone, premature ejaculation generates performance anxiety, which in turn aggravates premature ejaculation, creating a positive feedback loop.¹⁷ Alternately, serotonergic dysfunction may underlie both anxiety and premature ejaculation, as shown by the effectiveness of serotonin reuptake inhibitors in these conditions.²

The results of this study must be interpreted in light of certain limitations. First, as patients were assessed on the basis of self-report and clinical history, intravaginal ejaculation time could not be accurately measured. Second, the recruitment of the study sample from a general hospital setting could have led to a bias in favor of patients with more persistent or severe symptoms. Third, the classification of patients into subtypes was based on a clinician’s review of existing information, as no structured instrument for this purpose has been developed. Fourth, although Waldinger and Schweitzer’s description of the subtypes suggests that they are mutually exclusive, this may not be the case; for example, a patient initially diagnosed with natural variable premature ejaculation could later evolve into acquired premature ejaculation. This possibility can be examined only through longitudinal studies.

Our findings are at variance with those of an earlier study, which found that anxiety levels, including performance anxiety, were higher in patients with primary (lifelong) premature ejaculation.¹⁸ The reason for this discrepancy is unclear.

Further research is required to confirm the association between performance anxiety and acquired premature ejaculation and its genetic and biological correlates. If replicated, such a finding would have important therapeutic and prognostic implications. Patients with lifelong premature

ejaculation may respond better to specific medications, such as serotonin reuptake inhibitors, that delay ejaculation, while patients with acquired premature ejaculation might respond best to medications or psychotherapeutic interventions aimed at lowering anxiety related to sexual performance.

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REFERENCES

- Serefoglu EC, Saitz TR. New insights on premature ejaculation: a review of definition, classification, prevalence and treatment. *Asian J Androl*. 2012;14(6):822–829.
- Giuliano F, Clément P. Pharmacology for the treatment of premature ejaculation. *Pharmacol Rev*. 2012;64(3):621–644.
- Godpodinoff ML. Premature ejaculation: clinical subgroups and etiology. *J Sex Marital Ther*. 1989;15(2):130–134.
- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition. Washington, DC: American Psychiatric Association; 2000.
- Waldinger MD, Schweitzer DH. Changing paradigms from a historical DSM-III and DSM-IV view toward an evidence-based definition of premature ejaculation: part II—proposals for DSM-V and ICD-11. *J Sex Med*. 2006;3(4):693–705.
- Waldinger MD. Toward evidence-based genetic research on lifelong premature ejaculation: a critical evaluation of methodology. *Korean J Urol*. 2011;52(1):1–8.
- Zhu L, Mi Y, You X, et al. A meta-analysis of the effects of the 5-hydroxytryptamine transporter gene-linked promoter region polymorphism on susceptibility to lifelong premature ejaculation. *PLoS ONE*. 2013;8(1):e54994.
- Gao J, Zhang X, Su P, et al. Prevalence and factors associated with the complaint of premature ejaculation and the four premature ejaculation syndromes: a large observational study in China. *J Sex Med*. 2013;10(7):1874–1881.
- Zhang X, Gao J, Liu J, et al. Distribution and factors associated with four premature ejaculation syndromes in outpatients complaining of ejaculating prematurely. *J Sex Med*. 2013;10(6):1603–1611.
- Revicki D, Howard K, Hanlon J, et al. Characterizing the burden of premature ejaculation from a patient and partner perspective: a multi-country qualitative analysis. *Health Qual Life Outcomes*. 2008;6(1):33.
- Rowland DL. Genital and heart rate response to erotic stimulation in men with and without premature ejaculation. *Int J Impot Res*. 2010;22(5):318–324.
- Xia JD, Han YF, Zhou LH, et al. Sympathetic skin response in patients with primary premature ejaculation. *Int J Impot Res*. 2014;26(1):31–34.
- Corretti G, Pierucci S, De Scisciolo M, et al. Comorbidity between social phobia and premature ejaculation: study on 242 males affected by sexual disorders. *J Sex Marital Ther*. 2006;32(2):183–187.
- Dunn KM, Croft PR, Hackett GI. Association of sexual problems with social, psychological, and physical problems in men and women: a cross-sectional population survey. *J Epidemiol Community Health*. 1999;53(3):144–148.
- Lotti F, Corona G, Rastrelli G, et al. Clinical correlates of erectile dysfunction and premature ejaculation in men with couple infertility. *J Sex Med*. 2012;9(10):2698–2707.
- Corona G, Mannucci E, Petrone L, et al. Psychobiological correlates of free-floating anxiety symptoms in male patients with sexual dysfunctions. *J Androl*. 2006;27(1):86–93.
- Strassberg DS, Mahoney JM, Schaagaard M, et al. The role of anxiety in premature ejaculation: a psychophysiological model. *Arch Sex Behav*. 1990;19(3):251–257.
- Cooper AJ, Cernovsky ZZ, Colussi K. Some clinical and psychometric characteristics of primary and secondary premature ejaculators. *J Sex Marital Ther*. 1993;19(4):276–288.