BEYOND THE STIGMA: EXPLORING THE COMPLEX RELATIONSHIP BETWEEN ANXIETY AND ERECTILE DYSFUNCTION IN KHYBER PAKHTUNKHWA

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Abstract

Introduction: Erectile Dysfunction is one of the most significant issues facing the male population across the globe. Several issues are associated with ED in which the most common are psychological issues. It has been found that men who suffer from anxiety problems have a significantly increased likelihood of getting erectile dysfunction (ED). *Objectives:* This study aimed to access the prevalence of anxiety among patients with ED and its association with ED. Methodology: A cross-sectional study was carried out in the urology department of a private hospital of Peshawar. Data was collected from 385 participants using two standard questionnaires. Consents were granted from all the participants. **Results:** The majority (58%) of the participants were reported moderate level of anxiety while more than half (51%) of the participants were reported mild to moderate ED. There was significant association (P=0.01) among level of anxiety and ED. Mild to moderate and severe anxiety is significantly associated with moderate and severe ED. Conclusion: Erectile dysfunction is mostly prevalent among the men and it is associated with psychological consequences such as anxiety. The findings of this study have proved that erectile dysfunction is significantly associated with anxiety.

INTRODUCTION

Inability to achieve or maintain a sufficient erection to execute sexual activity that can please both sides is known as erectile dysfunction (ED) (1). Now, erectile dysfunction has become a widespread condition with a high documented morbidity rate all over the world (2). An estimated 41 percent of patients diagnosed with ED were found to be Chinese men aged 40 and older (3). One of the multiple pathophysiology processes that might have a comorbid and simultaneous deleterious impact on ED is the psychogenic pathway (4).

In consequence, with 63.1% of ED patients having psychiatric symptoms, ED may in turn

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have an effect on psychosocial health and may have a noticeable impact on the quality of life of the ED patient and his sex companion (5). There is a strong correlation between depression and erectile dysfunction (ED); it is believed that 25% of men who suffer from depressive symptoms also suffer from ED (6). The correlations between depression and ED are interactive: depression can diminish libido, which can lead to ED; at the same time, an unsatisfactory sexual life can provoke despair (7).

The sexual side effects that are generated by antidepressants contribute to the promotion of this association. Even in cases when syndrome depression is not identified, there is a possibility that the relationship between depressed symptoms and ED will continue to exist (8).

ED has been shown to have a correlation with a number of other anxiety conditions. Numerous studies have demonstrated a strong correlation between eating disorders and the widespread

Methodology:

A cross-sectional study was carried out in Peshawar, Khyber Pakhtunkhwa Pakistan. Overall, 385 participants were recruited in the study from urology outpatient department using consecutive sample technique. Male, under the age of 18, and having lived with a sexual partner for more than six months were the requirements for all patients who were enrolled in the study. Face-to-face interviews were conducted at urology clinic for about 20 to 30 minutes. Each

Socio-Demographic Profile:

A total of 385 participants were included in the study. The mean age of the participants was 32.45 years. The majority (54.80%) of the participants were from the age group of 25 to 35 years old. 77.4% of the participants were reported normal Body Mass Index (BMI), anxiety illness known as social phobia, which is characterized by feelings of unease in social settings (9). Likewise, many individuals who suffer from generalized anxiety symptoms are at an increased risk for developing ED. It's possible that stress associated to sexual activity is a major contributor to erectile dysfunction (10).

In recent years, in spite of the fact that a great number of studies on the connection between ED and psychological issues have been carried out, certain issues have not been completely demonstrated. It is not known how degrees of depression and anxiety correlate with patients who have varying ED severities (11). Therefore, we randomly recruited male populations at a urology clinic in Dir, Khyber Pakhtunkhwa, Pakistan in order to detect the levels of depression and anxiety in men with various degrees of ED severity. We then assessed the relationship between psychological distress and ED.

participant must complete the following information: Age, height, weight, and estimated BMI are baseline data. Duration and severity of ED are assessed by the IIEF-5. Anxiety was assessed using the Beck anxiety inventory.

Permission of data collection was granted from hospital administration of concern hospital. Before participating in our study, all patients who were recruited volunteered, agreed to follow the instructions, and completed an informed consent form.

Results:

followed by overweight (11.16%), underweight (8.31%) and obese (3.11%). More than half (51.94%) of the participants were having secondary education and 8.83% of the participants were illiterate. In addition, 54.80% of the participants were from rural areas (Table 1).

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Items	Frequency	Percentage %	
Age of the participants		·	
Less than 25	24	6.23	
25-35 years	211	54.80	
36-46 years	100	25.97	
More than 45 Years	50	12.98	
BMI of the Participants			
Under weight	32	8.31	
Normal	298	77.40	
Over weight	43	11.16	
Obese	12	3.11	
Education status of the participants			
Illiterate	34	8.83	
Primary	111	28.83	
Secondary	200	51.94	
Master and More	40	10.38	
Residency of the participants			
Rural	211	54.80	
Urban	144	37.40	
Total	385	100	

Table 1. Socio-demographic profile of the participants n=385

Anxiety:

level of anxiety followed by mild to moderate anxiety (24%), Severe Anxiety (12%) and no Anxiety among the participants was accessed using Beck Anxiety inventory. The majority Anxiety (6%) (Figure 1). (58%) of the participants were reported moderate



Figure 1: Pie-Chart depicting anxiety level among the participants

Erectile Dysfunction:

ED among the participant was accessed using IIEF-5 scale. More than half (51%) of the

participants were reported mild to moderate ED, followed by moderate to severe ED (29%) no ED (20%) (Figure 2).

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Figure 2: Pie-Chart depicting ED among the participants

Association among erectile dysfunction and level of anxiety was accessed. There was significant association (P=0.01) among level of anxiety and

ED. Mild to moderate and severe anxiety is significantly associated with moderate and severe ED (Table 2).

	Non-ED (n = 77)	Mild-to-moderate ED (n = 196)	Moderate to Severe ED (112)	
GAD-7 (anxiety)				
Mild to moderate anxiety	8	5	10	
Moderate to severe anxiety	55	155	75	<0.01
Severe anxiety	14	36	27	<0.01
Total GAD-7 (anxiety) Scores	19 ± 25	titute for Excellence in Ed(65) ± 133 arch	37 ± 33	<0.01

Discussion:

Even though it has been established that psychological symptoms are present in a significant number of instances with ED, the fundamental mechanism that links psychological issues and ED has not been elucidated (12). It's possible that the anxiety brought on by the worry that one may fall short of expectations in their sexual life is one of the most important psychogenic elements. It has been proven that ED is connected with a lack of sexual privacy, even after correcting for other factors that could be confounding the relationship (13). ED is frequently linked to psychiatric disorders like schizophrenia, depression, and other psychiatric symptoms. It might be connected to receiving mental medication (14–16).

In this study, moderate anxiety was prevalent among 58% of the men while severe anxiety was prevalent among 12% men visited to urology department. Our research's findings on the prevalence of psychiatric

problems among ED patients were in line with those of a study by Nordin et al (17). Similarly, a study carried out by Simning et al, elaborated anxiety among the patients with ED. 19.2% of the participants with ED reported anxiety (18).

However, we did find a large variety of different estimates, which is most likely due to the fact that the included research used a variety of different methodologies. In addition, this echoes the findings of the research that was done on the prevalence of ED in general, which varies greatly depending on the age of the patient and the method that is used to make the diagnosis (19,20).

The level of anxiety that one has was found to have a strong correlation with the severity of ED. According to the results of our research, the severity of ED was correlated with an increase in the prevalence of anxiety. Additionally, a rise in ED severity was associated with an increase in GAD-7 and PHQ-9 scores. Similarly, the current findings of the study

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was supported by another similar study and it was reported by Yang et al, that anxiety and depression has significant association with ED (21).

Similarly, literature provided in line findings with the findings of the current study and revealed that psychological problems such as anxiety and depression has significantly associated with severe ED (22,23).

Conclusion:

The findings of the study concluded that 58% of subjects experienced moderate anxiety and 51% reported mild to moderate ED. ED was associated with anxiety (P=0.01). Both the prevalence of anxiety and the severity of its symptoms rose in parallel with the severity of the ED. In addition, we discovered that the younger age of the patient and the longer length of ED may both contribute to an increase in the prevalence of anxiety and depression in ED patients, as well as the severity of these conditions. On the basis of the high prevalence of anxiety in emergency department (ED) patients, clinicians are expected to take care of early diagnosis and therapy of psychiatric symptoms for ED patients. This is especially important in young patients and patients who have been treated in the ED for an extended period of time.

REFERENCES:

- Lotti F, Maggi M. Sexual dysfunction and male infertility. Nat Rev Urol. 2018;15(5):287– 307.
- Chen L, Shi G, Huang D, Li Y, Ma C, Shi M, et al. Male sexual dysfunction: A review of literature on its pathological mechanisms, potential risk factors, and herbal drug intervention. Biomed Pharmacother. 2019;112:108585.
- Zhang X, Yang B, Li N, Li H. Prevalence and Risk Factors for Erectile Dysfunction in Chinese Adult Males. J Sex Med. 2017 Oct;14(10):1201–8.
- 4. Allen MS, Walter EE. Erectile dysfunction: an umbrella review of meta-analyses of riskfactors, treatment, and prevalence outcomes. J Sex Med. 2019;16(4):531-41.

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- Shahraki Z, Tanha FD, Ghajarzadeh M. Depression, sexual dysfunction and sexual quality of life in women with infertility. BMC Womens Health. 2018;18(1):1-4.
- 6. Pyke RE. Sexual performance anxiety. Sex Med Rev. 2020;8(2):183–90.
- Kane L, Dawson SJ, Shaughnessy K, Reissing ED, Ouimet AJ, Ashbaugh AR. A review of experimental research on anxiety and sexual arousal: Implications for the treatment of sexual dysfunction using cognitive behavioral therapy. J Exp Psychopathol. 2019;10(2).
- 8. Jern P, Gunst A, Sandnabba K, Santtila P. Are early and current erectile problems associated with anxiety and depression in young men? A retrospective self-report study. J Sex Marital Ther. 2016;38(4):349– 64.
- Velurajah R, Brunckhorst O, Waqar M, McMullen I, Ahmed K. Erectile dysfunction in patients with anxiety disorders: a systematic review. Int J Impot Res. 2022;34(2):177–86.
- 10. Molina-Leyva A, Salvador-Rodriguez L, Martinez-Lopez A, Ruiz-Carrascosa JC, Arias-Santiago S. Association between psoriasis and sexual and erectile dysfunction in epidemiologic studies: a systematic review. JAMA dermatology. 2019;155(1):98–106.
- Manalo TA, Biermann HD, Patil DH, Mehta A. The Temporal Association of Depression and Anxiety in Young Men With Erectile Dysfunction. J Sex Med. 2022;19(2):201–6.
- 12. Ok F, Durmus E. A Randomized Study of Transrectal Prostate Biopsy in Left Lateral Versus Lithotomy Positions on Pain, Anxiety, and Erectile Function. Indian J Surg. 2022;1–6.
- Jagdish RK, Kamaal A, Shasthry SM, Benjamin J, Maiwall R, Jindal A, et al. Erectile dysfunction in cirrhosis: Its prevalence and risk factors. J Clin Exp Hepatol. 2022;12(5):1264–75.
- 14. Liu Q, Zhang Y, Wang J, Li S, Cheng Y, Guo J, et al. Erectile dysfunction and depression: a systematic review and meta-analysis. J Sex Med. 2018;15(8):1073–82.

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- 15. Klaassen Z, Arora K, Wilson SN, King SA, Madi R, Neal Jr DE, et al. Decreasing suicide risk among patients with prostate cancer: Implications for depression, erectile dysfunction, and suicidal ideation screening. In: Urologic Oncology: Seminars and Original Investigations. Elsevier; 2018. p. 60–6.
- Dumontaud M, Korchia T, Khouani J, Lancon C, Auquier P, Boyer L, et al. Sexual dysfunctions in schizophrenia: Beyond antipsychotics. A systematic review. Prog Neuro-Psychopharmacology Biol Psychiatry. 2020;98:109804.
- 17. Bin Nordin R, Soni T, Kaur A, Loh KP, Miranda S. Prevalence and predictors of erectile dysfunction in adult male outpatient clinic attendees in Johor, Malaysia. Singapore Med J. 2019;60(1):40– 7.
- 18. Simning A, Seplaki CL, Conwell Y. The association of an inability to form and maintain close relationships due to a medical condition with anxiety and depressive disorders. J Affect Disord [Internet]. 2016;193:130–6. Available from: https://www.sciencedirect.com/science/art.stance.medical/pii/S0165032715307254
- 19. Yehuda R, Lehrner A, Rosenbaum TY. PTSD and Sexual Dysfunction in Men and Women. J Sex Med. 2015 May;12(5):1107– 19.
- 20. Prins J, Blanker MH, Bohnen AM, Thomas S, Bosch JLHR. Prevalence of erectile dysfunction: a systematic review of population-based studies. Int J Impot Res. 2012 Dec;14(6):422–32.
- 21. Yang Y, Song Y, Lu Y, Xu Y, Liu L, Liu X. Associations between erectile dysfunction and psychological disorders (depression and anxiety): A cross-sectional study in a Chinese population. Andrologia. 2019;51(10):1–8.

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- 22. Jarullah FA, Yaseen M, Abdullah H, Yaqoob S. Erectile Dysfunction and Associated Anxiety and Depression in Male Hemodialysis Patients: A Cross-Sectional Study at Karachi Institute of Kidney Diseases. Cureus. 2020;12(10).
- 23. Fasola OE, Muyibi SA, Adebusoye LA, Fasola OA. Association between Psychosocial Factors and Domains of Sexual Function among Men with Erectile Dysfunction. Niger J Fam Pract. 2021;12(1):24–30.