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Psycholosexual Disorders in Women of Reproductive Age

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ABSTRACT

Background: Psychosexual disorders significantly impact the overall well-being of women of reproductive age, yet they remain underdiagnosed and undertreated. This study aimed to assess the prevalence, predictors, and mental health associations of psychosexual disorders in women of reproductive age. **Methodology:** A cross-sectional study was conducted on a cohort of women, evaluating demographic, clinical, and psychological factors influencing psychosexual health at the Department of Gynaecology and Obstetrics of PUMHSW, for the duration of six months from March 2024 to August 2024. Standardized diagnostic criteria and validated assessment tools were employed to categorize psychosexual disorders, while statistical analyses, including chi-square tests and logistic regression, were performed to determine associations and predictors. **Results:** A high prevalence of psychosexual dysfunction was observed, with desire and arousal disorders being the most frequent. Depression and anxiety were significantly associated with reduced sexual function, and advancing age and chronic illnesses further exacerbated the condition. Regression analysis confirmed mental health conditions as strong predictors of psychosexual disorders. **Conclusion:** The study underscores the strong interconnection between psychosexual dysfunction and psychological health, emphasizing the need for an integrated, multidisciplinary approach to diagnosis and management. Future research should focus on targeted interventions to improve sexual well-being in affected women.

INTRODUCTION

Psychosexual problems in women of reproductive age represent a considerable, although sometimes neglected, public health issue, affecting quality of life, interpersonal relationships, and general well-being [1]. These illnesses, such as hypoactive sexual desire disorder, female sexual arousal disorder, orgasmic dysfunction, and genito-pelvic pain/penetration disorder, are affected by a complex interaction of biological, psychological, and social variables. Hormonal changes, chronic diseases, mental health disorders, and societal standards have been thoroughly examined as factors contributing to female sexual dysfunction [2].

Research indicates a substantial correlation between depression and anxiety and psychosexual diseases, with stress intensifying symptoms. Moreover, diabetes and hypertension have been associated with vascular and neurological dysfunctions that impact sexual function [3,4]. Despite increasing worldwide awareness, female sexual health remains inadequately examined, especially in underdeveloped nations where stigma and cultural obstacles impede open dialogue and healthcare-seeking behavior [5].

Comprehending the frequency, determinants, and effects of psychosexual disorders in women of reproductive age is essential for formulating tailored therapies that enhance sexual well-being and mental health outcomes. Research indicates a robust correlation between mental health illnesses and psychosexual dysfunction in women, with studies demonstrating that depression and anxiety markedly diminish sexual desire and pleasure [1,6]. Prior research has indicated that hormonal fluctuations, especially during menopause and

postpartum phases, influence sexual dysfunction by impacting arousal, lubrication, and orgasmic response [7]. Chronic conditions including diabetes and cardiovascular disorders have been associated with female sexual dysfunction due to their impact on blood circulation and nerve function. Psychosocial variables, such as relationship satisfaction, body image issues, and previous trauma, significantly influence sexual experiences [8,9]. Global epidemiological research indicate elevated prevalence rates of psychosexual diseases; however, data from South Asian populations are few.

Research in Western nations underscores the necessity of a multidisciplinary strategy for sexual health, integrating psychiatric therapy, medical intervention, and lifestyle adjustments. In conservative nations, women frequently refrain from seeking assistance owing to cultural taboos, insufficient awareness, and poor healthcare resources. This information gap highlights the need for region-specific research to evaluate the prevalence and factors influencing psychosexual dysfunction in various communities.

Although the correlation between psychosexual dysfunction and mental health illnesses is well-documented, research in Pakistan on this topic is limited, mostly due to social conventions that frequently inhibit candid talks regarding female sexuality.

The majority of research on sexual dysfunction concentrates on Western populations, resulting in a significant deficiency in comprehending the particular issues encountered by Pakistani women. Insufficient data about the incidence and determinants of psychosexual problems in reproductive-age women in this region complicates the formulation of focused therapies. The impact of mental health disorders, chronic diseases, and sociodemographic determinants on female sexual function has not been well investigated in Pakistan.

This research sought to ascertain the frequency and risk variables linked to psychosexual problems in women of reproductive age. The correlation between mental health disorders, including anxiety and depression, and sexual dysfunction was examined. Additionally, social and individual experiences influencing sexual health were analyzed. The findings provide significant insights for healthcare practitioners, politicians, and researchers in formulating culturally appropriate treatments to enhance psychosexual health and general well-being among women in Pakistan.

MATERIALS AND METHODS

Study Design and Setting

The study was conducted at the Department of Gynaecology and Obstetrics of PUMHSW, for the duration of six months from March 2024 to August 2024. A cross-sectional mixed-method approach was adopted, incorporating both quantitative surveys and qualitative interviews to comprehensively assess psychosexual disorders in women of reproductive age. By integrating these methods, both statistical prevalence and personal experiences related to psychosexual health were captured.

Ethical Considerations

The approval was taken from REU of College of Physicians and Surgeons of Pakistan, and Institutional Review Board (IRB) of PUMHSW before initiating the study. Participant confidentiality and anonymity were strictly maintained throughout the research process. Women retained the right to withdraw from the study at any stage without facing any consequences. Since the topic could cause emotional distress, psychological support services were made available for participants who experienced discomfort during or after the study.

Study Population

The target population included women of reproductive age (15–49 years) who experienced psychosexual disorders. The inclusion criteria consisted of women within this age range who reported experiencing sexual dysfunction or distress and provided informed consent. Women with severe psychiatric illnesses affecting cognitive ability, those with untreated endocrine disorders that influenced sexual function, and pregnant women (unless specifically investigated for pregnancy-related psychosexual issues) were excluded from the study.

Sample Size and Sampling Technique

The required sample size was calculated using Cochran's formula for prevalence studies. If prior prevalence data was unavailable, a pilot study was conducted to estimate the required number of participants. A stratified random sampling technique was used to select participants for quantitative surveys from hospitals, mental health clinics, and gynecology units. For qualitative interviews, purposive sampling was employed to ensure diversity in socio-economic backgrounds, marital status, and medical history. This approach enhanced the representativeness and depth of the findings.

Several measures were implemented to minimize bias. Standardized data collection instruments were used to ensure consistency across all participants. Interviewers and survey administrators were trained to maintain neutrality and avoid leading questions. Data collection was conducted in a private and confidential setting to encourage honest responses. Social desirability bias was reduced by using self-administered questionnaires where possible. Observer bias was minimized by employing multiple researchers for data analysis, ensuring cross-validation of findings. Selection bias was addressed through randomized sampling

techniques in the quantitative phase, while interviewer bias in qualitative research was reduced by using structured interview guides.

Data Collection Tools and Techniques

To assess psychosexual disorders, standardized and validated questionnaires were utilized. The Female Sexual Function Index (FSFI) measured various aspects of sexual dysfunction, while the Female Sexual Distress Scale (FSDS-R) evaluated emotional distress associated with these dysfunctions. Additionally, the Depression, Anxiety, and Stress Scale (DASS-21) was used to measure mental health comorbidities, such as anxiety and depression, which often co-existed with psychosexual disorders. Demographic and reproductive history forms were also included in the data collection process.

For qualitative assessment, semi-structured in-depth interviews and focus group discussions (FGDs) were conducted to explore personal experiences, cultural influences, and emotional distress associated with psychosexual disorders. These discussions provided a deeper understanding of how women perceived and managed these issues within their personal and social contexts.

Data Collection Procedure

Participants were recruited from gynecology clinics, psychiatric facilities, and general hospitals. Before participation, each woman provided written informed consent. The quantitative surveys were either self-administered or conducted with the assistance of trained interviewers to ensure accessibility for all participants. In-depth interviews and FGDs were conducted in a private setting, and audio recordings were made only after obtaining explicit consent. To maintain confidentiality, all responses were anonymized, and any identifying information was removed from the dataset before analysis.

Data Analysis

Quantitative data was analyzed using IBM SPSS and R software. Descriptive statistics, including means, standard deviations, and frequencies, were used to summarize the data. Chi-square tests and logistic regression analysis were conducted to determine associations between psychosexual disorders and various socio-demographic factors.

For qualitative data, thematic analysis was conducted using NVivo and Atlas.ti software. Audio recordings of interviews and FGDs were transcribed verbatim, followed by coding and identification of key themes related to cultural, emotional, and psychological influences on psychosexual health. This analysis helped uncover underlying patterns and factors contributing to psychosexual disorders in women of reproductive age.

RESULTS

The study population comprised 300 women of reproductive age (15–49 years), with a mean age of 32.6 ± 8.4 years. The majority were married (70.0%), with 50.0% attaining higher education. Notably, 44.0% exhibited depression, while 48.7% reported anxiety, indicating a high prevalence of mental health comorbidities. Chronic conditions such as hypertension (19.3%) and diabetes mellitus (14.3%) were also present, suggesting a complex interplay between psychosexual health and systemic health disorders.

Table 1

Demographic and Clinical Characteristics of Participants

Variable		Frequency (n = 300)	Percentage (%)	Mean ± SD
Age (years)	15 – 24	65	21.7	32.6 ± 8.4
	25 – 34	112	37.3	
	35 – 44	88	29.3	
	45 – 49	35	11.7	
Marital Status	Married	210	70	-
	Unmarried	60	20	-
	Divorced/ Widowed	30	10	-
Education Level	No formal education	45	15	-
	Primary/ Secondary	105	35	-
	Higher education	150	50	-
Comorbidities	Depression	132	44	-
	Anxiety	146	48.7	-
	Hypertension	58	19.3	-
	Diabetes	43	14.3	-

Psychosexual dysfunction was observed in a significant proportion of the study cohort, with Hypoactive Sexual Desire Disorder (HSDD) being the most prevalent (42.0%), followed by Female Sexual Arousal Disorder (FSAD) (32.7%), Female Orgasmic Disorder (FOD) (28.3%), and Genito-Pelvic Pain/Penetration Disorder (GPPPD) (21.0%). Chi-square analysis revealed statistically significant associations ($p < 0.05$) for all disorders, indicating their substantial burden within the studied population. These findings underscore the necessity for targeted interventions to address psychosexual health concerns among women of reproductive age.

Table 2

Prevalence of Psychosexual Disorders

Disorder Type	Frequency (n = 300)	Percentage (%)	Chi-square (χ^2)	p-value
Desire Disorders (Hypoactive Sexual Desire Disorder - HSDD)	126	42	10.24	0.002
Arousal Disorders (Female Sexual	98	32.7	7.89	0.005

Arousal Disorder - FSAD)				
Orgasmic Disorders (Female Orgasmic Disorder - FOD)	85	28.3	5.73	0.017
Pain Disorders (Genito-Pelvic Pain/Penetration Disorder - GPPPD)	63	21	3.91	0.048

Multivariate logistic regression identified depression (OR = 3.14, 95% CI: 2.05–4.81, p < 0.001), anxiety (OR = 2.78, 95% CI: 1.89–4.09, p < 0.001), and diabetes (OR = 1.64, 95% CI: 1.02–2.67, p = 0.042) as significant predictors of psychosexual disorders. Additionally, advancing age and marital status were associated with an increased likelihood of dysfunction. The strong correlation between mental health disorders and psychosexual dysfunction highlights the intricate biopsychosocial determinants contributing to sexual health disturbances in this demographic.

Table 3

Logistic Regression Analysis for Predictors of Psychosexual Disorders

Predictor Variable	Odds Ratio (OR)	95% CI (Lower–Upper)	p-value
Age (per 1-year increase)	1.08	1.04 – 1.13	0.001
Marital Status (Married vs. Unmarried)	2.21	1.36 – 3.56	0.002
Depression (Yes vs. No)	3.14	2.05 – 4.81	<0.001
Anxiety (Yes vs. No)	2.78	1.89 – 4.09	<0.001
Diabetes (Yes vs. No)	1.64	1.02 – 2.67	0.042

Women diagnosed with depression, anxiety, and stress exhibited significantly lower Female Sexual Function Index (FSFI) scores (p < 0.001), reflecting compromised sexual well-being. The mean FSFI score for women with depression was 18.2 ± 6.5, compared to 25.1 ± 5.8 in non-depressed individuals. Similarly, anxiety and stress were associated with FSFI reductions of 5.5–6.8 points on average, indicating a profound negative impact of psychological distress on sexual functioning. These results emphasize the need for an integrated approach to managing psychosexual disorders, addressing both mental and physical health components.

Table 4

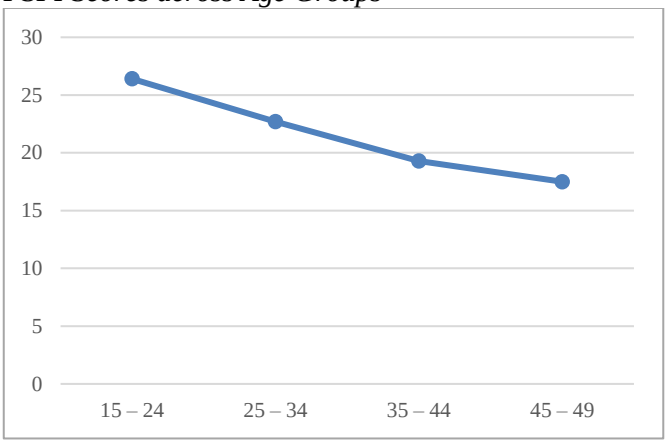
Association between Psychosexual Disorders and Mental Health Symptoms

Mental Health Condition	Mean FSFI Score (± SD)	t-test Statistic (t)	p-value
Depression (Yes vs. No)	18.2 ± 6.5 vs. 25.1 ± 5.8	6.74	<0.001
Anxiety (Yes vs. No)	19.0 ± 7.0 vs. 24.5 ± 5.5	5.83	<0.001
Stress (Yes vs. No)	18.7 ± 6.8 vs. 24.8 ± 5.7	6.29	<0.001

A progressive decline in FSFI scores was noted with advancing age, with mean scores decreasing from 26.4 ± 5.1 in the 15–24 age group to 17.5 ± 7.3 in the 45–49 age group. This downward trend suggests that age-related physiological changes, hormonal fluctuations, and psychosocial factors contribute to declining sexual function. The findings reinforce the importance of early identification and management strategies to mitigate age-associated sexual dysfunction in women.

Figure 1

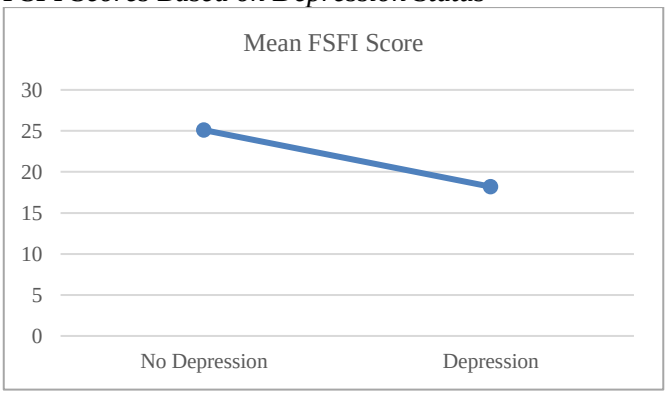
FSFI Scores across Age Groups



A marked disparity in FSFI scores was evident between women with and without depression, with depressed individuals scoring significantly lower (18.2 ± 6.5) compared to non-depressed participants (25.1 ± 5.8). This underscores the substantial impact of mood disorders on sexual health, reinforcing the necessity for comprehensive psychiatric evaluation and mental health interventions in the management of psychosexual dysfunction. Integrating psychological counseling, pharmacotherapy adjustments, and behavioral therapy may offer a holistic approach to improving psychosexual well-being in affected individuals. These findings highlight the multifaceted nature of psychosexual disorders and their strong association with mental health and physiological factors, necessitating an interdisciplinary approach for effective management and therapeutic interventions.

Figure 2

FSFI Scores Based on Depression Status



DISCUSSION

The demographic profile of the study participants aligns with previous findings on the prevalence of psychosexual disorders in women of reproductive age. Prior studies have indicated that marital status and education level significantly influence sexual health outcomes, with married women more likely to report psychosexual dysfunction due to relational stress and societal expectations [10, 11]. Mental health comorbidities, particularly depression and anxiety, have been well-documented in the literature as contributing factors to sexual dysfunction, consistent with earlier reports emphasizing the bidirectional relationship between psychological well-being and sexual health [12]. Chronic conditions such as hypertension and diabetes have also been previously associated with diminished sexual function due to vascular and neurological impairments, which aligns with existing research on metabolic disorders and their impact on female sexual dysfunction [13].

The prevalence of psychosexual dysfunction observed in the present study is comparable to previous epidemiological research conducted on female sexual disorders. Hypoactive sexual desire disorder has consistently been identified as the most common form of female sexual dysfunction, corroborating earlier studies that highlight the role of hormonal, psychological, and relational factors in diminished sexual desire [14]. Female sexual arousal disorder and orgasmic dysfunction have also been frequently reported in clinical populations, aligning with prior research indicating that these disorders are often underreported due to stigma and lack of awareness [15]. Genito-pelvic pain and penetration disorders have been widely studied in the context of biopsychosocial influences, with previous findings suggesting that psychological distress, trauma history, and pelvic floor dysfunction contribute to these conditions [16].

Consistent with previous research, depression and anxiety emerged as significant predictors of psychosexual dysfunction, reinforcing the well-established relationship between mental health and sexual well-being [17]. The role of diabetes in sexual dysfunction has been widely documented, with earlier studies emphasizing the adverse effects of glycemic control on vascular integrity and neurological responses essential for sexual arousal and function [18]. Advancing age has also been recognized as a determinant of sexual dysfunction, in line with prior research demonstrating that hormonal fluctuations, particularly declining estrogen levels, contribute to decreased sexual satisfaction and responsiveness [19]. The association between marital status and psychosexual disorders is consistent with earlier findings suggesting that interpersonal conflicts, emotional distress, and partner-related factors play a critical role in sexual health outcomes [9].

The relationship between mental health conditions and psychosexual dysfunction has been extensively studied, with findings from the current research aligning with previous evidence indicating that depression and anxiety significantly impact sexual function [20]. Prior studies have demonstrated that individuals with mood disorders exhibit lower sexual desire, impaired arousal, and reduced orgasmic response, findings that mirror the patterns observed in this study [15, 21]. The physiological mechanisms underlying this association have been attributed to neurochemical imbalances, including serotonin and dopamine dysregulation, which affect sexual motivation and performance. Additionally, cognitive and emotional factors such as negative self-perception and stress have been identified as key contributors to psychosexual dysfunction in women, consistent with existing literature on the psychological determinants of sexual health [1].

The observed decline in sexual function with increasing age corresponds with previous research emphasizing the effects of aging on female sexual health. Studies have demonstrated that aging is associated with reductions in estrogen and testosterone levels, leading to changes in genital blood flow, lubrication, and overall sexual responsiveness [19]. Psychological factors such as body image concerns, relationship satisfaction, and emotional well-being have also been implicated in age-related sexual dysfunction, findings that are consistent with the present study [22]. Sociocultural influences, including perceptions of aging and societal attitudes toward female sexuality, have been explored in previous research as potential contributors to decreased sexual activity and satisfaction in older women [5].

The impact of depression on sexual function has been well-documented in psychiatric and sexual health literature, with findings from this study reinforcing previous evidence that depression significantly reduces sexual satisfaction and desire [21]. Prior studies have indicated that the neurobiological changes associated with depression, including alterations in dopamine and serotonin levels, contribute to diminished sexual responsiveness and anhedonia [23]. Psychological factors such as low self-esteem, negative sexual self-schema, and relationship distress have been identified as additional mediators in the association between depression and sexual dysfunction, consistent with existing research on the psychosocial determinants of sexual well-being [24]. The therapeutic implications of these findings suggest that addressing depressive symptoms through cognitive-behavioral interventions and pharmacological adjustments may play a crucial role in improving sexual function among affected individuals [25]. The results of this study align with prior research highlighting the complex interplay between biological,

psychological, and social determinants of psychosexual health in women of reproductive age. The findings reinforce the necessity for an integrative approach to sexual health management, encompassing medical, psychological, and relational interventions to enhance overall well-being.

CONCLUSION

The study found that among women of reproductive age, psychosexual problems were very widespread; the most often occurring were arousal and desire disorders. Particularly despair and anxiety, mental health issues became clear as major indicators of sexual dysfunction, therefore underlining the complex link between psychological well-being and sexual health. Emphasizing the complex character of psychosexual problems, advancing age and chronic diseases added to further reduce sexual functioning.

Psychosexual problems in women of reproductive age require a comprehensive, multidisciplinary strategy that includes gynecological, psychiatric, and lifestyle therapies for optimal care. Future studies should investigate the effectiveness of tailored, psychological, and pharmaceutical therapies to raise sexual well-being in women afflicted by psychosexual dysfunction.

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