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RELATIONSHIP BETWEEN QUALITY OF LIFE & JOB PERFORMANCE AMONG WOMEN WITH PREMENSTRUAL DYSPHORIC DISORDER

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KEYWORDS

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ABSTRACT

The Premenstrual Dysphoric disorder (PMDD) is characterized by recurrent, varying physical, psychological, and emotional symptoms that appear 7–14 days prior to the start of menstruation and are relieved by the onset of menstruation in women, typically between ages of 20 and 40. The present study aimed to investigate the impact of Quality of Life on Job Performance among women with PMDD. In the present study following the survey design, questionnaire was used for data collection. The present study consisted of 400 working women wherein 193 (48.3%) were married and 207 (51.7%) were unmarried females. The women were selected from 6 different designations including teachers, doctors, nurses, bankers, lawyers and office assistants. The study was conducted in different areas of KPK. Informed consent was taken from participants. The data was analyzed on SPSS, and results were computed by applying t-test and correlation and hierarchical regression. The results show that there is significant relationship among premenstrual dysphoria, quality of life and job performance. Similarly, it was concluded that premenstrual Dysphoria was negatively correlated with quality of life and job performance. The quality of life had a positive correlation with the job performance.

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INTRODUCTION

The Pakistan Bureau of Statistics (PBS) reported that among the total population, 49% comprises females, and 22.33% of women of reproductive age fall between 15–45 years (PBS, 2021). The productivity and well-being of women are crucial for family functioning. Thus, due to the hormonal imbalance, most women experience the premenstrual stage characterized by fluctuations such as

increased estrogen & decreased progesterone. These hormonal changes may result in premenstrual symptoms. Premenstrual Dysphoric Disorder (PMDD) affects 3–9% of menstruating females and represents a disabling and severe form of the premenstrual syndrome (Thakrar, Bhukar & Oswal, 2021). PMDD negatively influences psychological, physical, occupational, and social functioning (Robinson & Ismail, 2015). The Premenstrual Dysphoric Disorder, also known as late luteal phase dysphoric disorder, that involves recurring mood, behavioral, and physical symptoms that appear during the luteal phase and resolve shortly after the onset of menstruation (American Psychiatric Association, 2013).

These symptoms can lead to poor academic performance, strained professional relationships, and interpersonal difficulties among young women (Tsegaye & Getachew, 2019). Studies indicate that up to 75% of women of child-bearing age experience premenstrual symptoms of varying severity (Gao, Gao, Sun, Cheng, An & Qiao, 2021). The DSM-IV diagnostic criteria for PMDD were revised and updated in the DSM-5 to improve the diagnostic clarity and reliability (American Psychiatric Association, 2013). In general, quality of life (QOL) refers to the extent to which people or groups perceive satisfaction or dissatisfaction in various life dimensions and this decline is closely related with impaired job performance (Costanza, Fisher, Ali, Beer, Bond & Boumans, 2007). According to the World Health Organization (WHO), QoL represents an individual's perception of their position in life within the context of cultural and social systems, personal goals, expectations, and concerns (Malibary, Zagzoog, Banjari, Bamashmous & Omer, 2019; Post, 2014). It encompasses physical and psychological well-being, independence, social relationships, as well as effective interactions with environmental factors.

The job performance is among the most widely researched constructs in the organizational behavior (Carpini, Parker & Griffin, 2017). It refers to observable behaviors that contribute to organizational goals and outcomes (Campbell & Wiernik, 2015). The job performance may also be defined as the degree to which an employee meets the expectations of organizational standards (Afzali, Motahari & Hatami, 2014). The performance is a multidimensional concept that distinguishes between task performance, behaviors contributing directly towards technical core and contextual performance behaviors supporting the organizational, emotional, and social environment (Sonnentag & Frese, 2002; Abun, Nicolas, Natividad, Ancheta, Acidera & Fredolin, 2023). Contextual performance encompasses tasks that support the organizational, emotional, and social environment in which the organizational goals are pursued but do not directly contribute to the technical core (Sonnentag & Frese, 2002). encompasses tasks that support the organizational, emotional, and social environment in which organizational objectives and leading goals are pursued but do not contribute directly to the technical core.

Problem Statement

The women suffering from premenstrual disorders have the lower health related quality of life; the appropriate support should be given to them. PMDD effects job performance, low productivity and increased absenteeism in work context. In Pakistan only few studies are available on PMDD, job performance and quality of life in working women. But unfortunately, with reference to Pakistani culture not a single study is available which have studied all the research variables. Besides this,

menstruation is associated with some cultural taboos, as menstruation depicts that a woman enters into stage of adulthood and social behaviour of women is being imposed by strict rules by society. There might be a conflict in female's attitude toward menses because of psychological and physical symptoms that most of women experiences in child bearing age. This study is an attempt to provide awareness about PMDD, its impact on QOL and Job performance and how social support moderates between them.

Research Question & Hypothesis

1. The PMDD will have significant negative relationship with the QOL amid working women.
2. There is negative correlation between PMDD and Job performance among working women.

LITERATURE REVIEW

Premenstrual Dysphoric Disorder (PMDD) has been extensively researched due to its significant effects on women's emotional, physical, social, and occupational functioning. PMDD is considered a severe subtype of premenstrual syndrome (PMS), affecting 3–9% of menstruating women (Thakrar et al., 2021; Robinson & Ismail, 2015). It is characterized by recurrent affective, behavioral, and somatic symptoms that appear during the luteal phase of the menstrual cycle and resolve shortly after menstruation begins (American Psychiatric Association, 2013). Research consistently shows that PMDD adversely affects the women's quality of life (QOL). Delara et al. (2012) found that adolescents with premenstrual disorders reported significantly lower QoL in emotional, social, and physical domains. Similarly, Sut and Mestogullari (2016) demonstrated that PMDD negatively influences work-related QOL among nurses, contributing to enlarged fatigue, emotion instability, & decreased daily functioning. QOL is broadly defined as individual's perception of their position in life, influenced by cultural, social, physical, and psychological factors (Post, 2014; World Health Organization, 1997).

Women with PMDD often experience impaired subjective well-being, strained interpersonal relationships, and difficulty managing everyday responsibilities (Hardy & Hardie, 2017). These findings emphasize the multidimensional burden PMDD places on the women's overall functioning. Multiple studies indicate that PMDD significantly impairs job performance. Dean and Borenstein (2004) reported strong associations between PMS symptoms and reduced workplace productivity, including the decreased concentration, increased presenteeism, and overall working impairment. Conversely, persistent workplace difficulties, job-related stress, and lack of support can intensify emotional distress and further deteriorate quality of life. Hardy and Hunter (2021) further noted that women with PMDD commonly struggle to meet work expectations, resulting in higher rates of absenteeism, decreased task efficiency, and increased conflict in professional environments. Job performance is theorized as multidimensional construct consisting of task performance, contextual performance, and counterproductive working behaviors (Campbell & Wiernik, 2015; Sonnentag & Frese, 2002).

Similarly, PMDD-related symptoms such as irritability, cognitive difficulty, and fatigue can disrupt all these performance dimensions, leading to decreased workplace productivity and occupational dissatisfaction. Many studies have linked overall well-being and quality of life to job performance.

Employees with higher life satisfaction and psychological health tend to show greater productivity and workplace engagement (Abun et al., 2023). Conversely, reduced QOL, common among women experiencing PMDD, predicts lowered work performance and increased job strain organizational sensitivity to the women's reproductive mental health issues. Hardy and Hardie (2017) found that women with PMDD often report disruptions in emotional regulation, sleep, and social functioning, which indirectly hinder their job performance. Addressing the PMDD effectively can significantly enhance both the subjective well-being and workplace productivity, allowing women to function more fully in both personal as well as professional domains. Similarly, Sut and Mestogullari (2016) indicated that work-related QOL mediates the relationship between premenstrual symptoms and occupational functioning.

RESEARCH METHODOLOGY

Premenstrual dysphoric disorder (PMDD) is a disabling and severe form of premenstrual syndrome (PMS) with the prevalence of 3% to 9% among menstruating women (Robinson & Ismail, 2015). PMDD is triggered by fluctuating levels of sex steroids that accompany an ovulatory menstrual cycle, and the disorder consists of a cluster of affective, behavioral, and somatic symptoms (Thakrar et al., 2021). According to Diagnostic and Statistical Manual of Mental Disorders (5th ed.; American Psychiatric Association, 2013), at least five symptoms must be present during the final week before onset of menses, begin to improve within a few days after menstruation starts, and become minimal or absent in the week after menses. Symptoms include affective symptoms such as mood swings, irritability or anger, depressed mood, feelings of hopelessness or self-deprecation, anxiety, and tension, and somatic and behavioral symptoms including loss of interest, exertion focused, lethargy, changes in appetite and sleep, feeling overwhelmed, breast tenderness or swelling, joint or muscle pain, and bloating.

The quality of life (QOL) represents "either how well human needs are met or the extent to which individuals or groups perceive satisfaction or dissatisfaction in various life domains" (Costanza et al., 2007). QoL is also defined as an individual's subjective perception of their position in life within a socioeconomic and cultural context, influenced by personal goals, expectations, standards, and concerns (Post, 2014). QOL may also refer to happiness, personal satisfaction, life conditions, and lifestyle (Post, 2014). The job performance refers to the behaviors through which workers carry out organizational tasks while adhering to workplace norms. It is understood as realistic & measurable accomplishment that reflects the degree to which an employee meets organizational performance expectations (Afzali et al., 2014). The purposed study aims at exploring the effect of PMDD on the quality of life and job performance among working women. Survey research design has been used in the present study. The purposive sampling was done to select the participants. Participants were selected conveniently.

In current study, the sample comprised of N=400 Working women. The sample was selected among working population of females from various cities of Pakistan. Further Division of Sample was made according to their (marital status, age and symptom severity, working hour per week etc). All the participants included in the study were educated and working women. The study was subjected to only few categories of job designations including teachers, doctors, nurses, bankers, lawyers and

office assistants. As one of the purposes of conducting the study was to measure job performance so all the non-working women were excluded from study. All the other job categories were excluded from proposed study. Any other chronic mental or physical health conditions that could potentially affect job performance or confound the study results were excluded from the study.Participants undergoing significant personal stress or life changes (e.g., recent divorce, bereavement) were not included in study.

The questionnaire consisted of following demographic information of the participants; Age, Marital Status, Locality (Urban, Rural), working status (Government, private), designation (teacher, doctor, nurse, banker, lawyer, office assistant) and working hours per week. For the proposed research four questionnaires was used to collect data. The questionnaires are described Premenstrual Symptoms Screening Tool (PSST): This screening tool was developed by Steiner, Mcdougall and Brown (2003). This is a simple and user-friendly scale to screen out the females who are suffering from PMDD or PMS and appropriate medical and psychological interventions to improve both quality of life and job performance for affected women. PSST is the reflection/translation of criteria for PMDD/PMS from DSM-V in form of rating scale with varied degree of severity ranging from not at all to severe. Scoring of PSST for the diagnosis of PMDD should have the following conditions; at least item 1, 2, 3 or 4 must be severe.

Additionally, four of item 1 to item 14 should be moderate/severe. Thirdly, at least one item must be severe among item A, item B, item C, item D or item E. World Health Organization Quality of Life Scale (WHOQOL-BREF): This scale has 26-item assessing four domains: i-e physical health, psychological health, social relationships & environmental health (along with few general health items). This scale is using the 5-point Likert scale depicted as ordinal scale. The Individual Work Performance Questionnaire (IWPQ): This scale was developed by Koopmans using 5 point rating scale, having 18 items and assessing job performance in 3 basic dimensions i-e counter-productive work behavior, contextual performance and task performance. This scale is using 4-point Likert scales for measuring all three dimensions. All scores can be summed up and then divided by each number in the scale. In order to collect data Informed consent was taken from sample over proper ethical consideration.

In order to obtain inform consent from the working women were personally approached by the researcher, ensuring the confidentiality of data study subjects were given briefing regarding the purpose study. Inform consent was taken, then, the participants were ensured that data will be collected solely for research purpose. In order to collect the data, the study conducted by using purposive sampling method. The participants were approached individually and informed about research study. Questionnaires were distributed among working women across six different work designations including teacher, doctors, nurses, bankers, lawyers and office assistants. Data was collected from both the rural and urban areas. The females were assisted for ambiguities related to questionnaire items. In the end participants were thanked for their cooperation. In this connection, the data were analyzed by using SPSS. The Pearson correlation and hierarchical regression were run to assess the data.

RESULTS OF STUDY

The data were analysed after entering the completed questionnaire in statistical package for social sciences (SPSS). The alpha reliability of the scales was computed and descriptive inferential statistic were computed.

Table 1 Distribution of sample on the basis of demographic sheet (N=400)

N=400		
Characteristics	f	%
Age (in years)		
Minimum (18 years)	5	1.3
Maximum (45 years)	3	0.8
Marital Status		
Married	193	48.3
Unmarried	207	51.7
Locality		
Urban	204	51.0
Rural	196	49.0
Working Status		
Government	205	51.2
Private	195	48.8

Table 1A Distribution of sample on the basis of demographic sheet (N=400)

N=400		
Designation		
Teachers	70	17.5
Doctors	68	17.0
Nurses	65	16.3
Bankers	66	16.5
Lawyers	67	16.8
Office assistants	64	16.0
Working Hours/week		
Minimum (8 hours)	8	1.0
Maximum (86 hours)	86	0.3

Note. Table 1 shows the distribution of sample on the basis of Age, Marital status, Locality, Working Status, Designation and working Hours. The table shows the frequency and percentage of working women across demographic distribution.

Table 2 Mean, Standard Deviation and Reliability of PSST, WHO-QOL and IWPS Scales

Variables	n	M	SD	1	2	3	4
Working H/W	400	1.49	0.50	--			
PMDD	400	44.75	12.55	.033	--		
QOL	400	88.06	12.88	.010	-.39**	--	
IWP	400	58.33	12.29	.123*	-.17**	.44**	--

Note. PSST=Premenstrual Symptom Screening Tool; WHO-QOL=World Health Organization Quality of Life; MPSS=Multidimensional perceived Social Support; IWPS= Individual Work Performance Scale in the study.

In table 2 all scale premenstrual symptom screening tool, the world health quality of life scale and individual work performance scale have high reliability coefficients as evident from the results and outcomes of study.

Table 3 Descriptive Statistics and Correlations

Scale	M	SD	Range	Cronbach α
PSST	44.75	12.55	23-75	.92
WHOQOL-BREF	88.06	12.88	50-118	.87
IWPS	58.33	12.29	30-99	.89

The Descriptive Statistics and Correlations of Premenstrual Dysphoric Disorder, Quality of Life Perceived Social Support and Job Performance

Note. PMDD=Premenstrual Dysphoric Disorder; QoL=Quality of Life; IWP=Individual Work Performance; M=Mean; SD=Standard deviation $^{**}p < .01$. $^{*}p < .05$.

Table 3 shows results of correlation among working hours per week, age premenstrual dysphoric disorder, quality of life and job performance. Table shows that working hours/week have a positive correlation with work performance as per the results from the correlation analysis and outcome. The premenstrual dysphoria is negatively correlated with quality of life and job performance as per the results in particular context. Table indicates that quality of life is having positive correlation with job performance.

DISCUSSION & CONCLUSION

The focus of the Present study was to explore the quality of life as well as job performance among women with PMDD. To determine the effect of Quality of Life and Job Performance among Women having PMDD scales including the Premenstrual Symptoms Screening Tool (PSST), World Health Organization Quality of Life (WHOQOL) Scale, The Individual Work Performance Questionnaire (IWP) were used and scores of each participant were calculated by using SPSS. Reliability of PSST (.92), WHOOL-BREF (.87) and IWP (.92) showed that selected scales have good reliability, and are best suited for the present sample. The sample consisted of 400 working women who were accessed randomly. It is a well-known fact that due to the hormonal imbalance each women experiences the premenstrual stage that is a significant cycle having some symptoms i.e., the excessive estrogen hormone and decrease in progesterone. PMDD has an effect on 3–9% of menstruating female that shows the disabling and severe type of Premenstrual syndromes (PMS). In this connection, the PMDD causes deficient functioning in the psychological, physical health, occupational and social areas (Thakrar et al., 2021).

The quality of life can be analogous to happiness, personal satisfaction, the conditions of life, and lifestyle (Post, 2014). The way, by which workers perform any given tasks of the organization, also associating the behaviour with the norms of the organization itself is called job performance (Bashir et al., 2020). Researchers have found that in professional females there is a negative correlation between PMDD and work-related Quality of life (Sut & Mestogullari, 2016) In this study reliability of all the instruments were checked, by computing mean and standard deviation and results showed as in the table 2 that PSST (.92), WHOQOL-BREF (.87) and IWP (.92) is highly reliable and

suitable for the study participants during the luteal phase of the menstrual cycle. The first intention of study was to find out correlation amid PMDD and QOL for this purpose hypothesis assumed that "PMDD will have significant negative relationship with QOL among working women". Result of the study proved that there is negative correlation amid PMDD and quality of life and job performance (See Table 3).

In all domains, with exception of physical functioning, participants with PMDD had a significantly reduced quality of life, including emotional, role physical, social functioning, physical pain, and mental health (Dalera et al., 2012). A study also revealed a consistent and significant correlation between PMS symptoms and degree to which they interfere with a quality of life of females across all domains (Nisar et al., 2008). It was also Hypothesized that there will be a negative correlation between PMDD and Job performance among working women. Results approved that the hypothesis 2 (see table 3). A study found that Poor presenteeism, the intentional reduction in working hours, and higher work absenteeism which substantially reduce overall quality of life and interfere with occupational functioning (being late, time off, being, departing early), were all greatly correlated with the higher symptom severity (Hardy & Hunter, 2021). Many other studies are in agreement with this study.

The females with PMDD had significantly poor quality of life, high rate of absentees from work and reduced work productivity (Dean & Borenstein, 2004). Thus, the table 3 also showed the results of correlation among working hours per week, premenstrual Dysphoric disorder and Job Performance. It was indicated that working hours/week have a positive correlation with work performance. A study found that when work involvement was taken into account, working hours had no significant relationships with job performance. Although it diminished the link between working hours and productivity, work involvement did not reduce the impact of working hours on work productivity (Okazaki et al., 2018). Another study found substantial and positive correlation amid an employee's productivity and the number of hours they work, including both standard and extended hours. This shows that an employee's productivity is impacted by the number of hours they put in (Vallo & Mashau, 2020)

CONCLUSION

The present study was an attempt to assess the quality of life as predictor of job performance among women with PMDD. In instant, among women with PMDD, there is strong negative association amid quality of life and job-related difficulties. As PMDD symptoms intensify, quality of life tends to decline, and this decline directly and indirectly impairs job performance. After collecting the data, responses on all items were scored in standardized way by using SPSS. it is concluded that this data supported the present study hypothesis and indicated that there is significant relationship among premenstrual dysphoria, QOL and job performance. It was showed that quality of life had positive correlation with job performance among women with PMDD. The study provides sufficient data and knowledge to existing literature that highlights the importance of holistic interventions that target personal well-being and organizational support systems to boost occupational outcomes for women living with PMDD.

Limitations & Suggestions

This study aimed to find out the effect of PMDD on quality of life and job performantce. The result of study has been already discussed, there were certain limitations in study. As present study was conducted in a very short time it might have affect study findings. Data of our study were obtained from participants over self-reported questionnaire, which may result in subjective bias in reporting (participants may have underestimate or overestimate their level of PMDD symptoms). As the study was limited to few geographical areas of KPK including participants of Abbottabad, Peshawar and Mansehra and other areas of Pakistan were not included in study. So, because of cultural differences the results cannot be generalized on entire Pakistan. The data was collected from females who were willing to express their views about premenstrual experiences and their effect on quality of life and job performance.

As it is considered a taboo concept in Pakistani culture. In this regard, due to knowledge and stigma around menstrual difficulties, women tend to underreport having poorer mental health and other aspects of quality of life and mostly female become hesitant to talk about their menstrual issues that can play a crucial role in reducing stigma and enhancing productivity. So many of participants were not cooperating during the study. It is recommended that the study will provide awareness regarding PMDD, its impact on QOL and Job performance. In this study purposive sampling was used so may be chance of error in estimating results of entire population. But the use Premenstrual Symptom Screening Tool (PSST), World Health Organization Quality of Life (WHOQOL-BREF) and Individual Work Performance Scale (IWPS) make it possible to strengthen the reliability of the results in study.

Implications

The findings and results from the present study will help to provide important information for the further research. This study efforts to recognize the work highlights of a great number of females having premenstrual experiences and what impact this may have on their quality of life and work and what changes might be helpful to sustain their job performance and quality of life. This study will help in general awareness creation to improve health care seeking behavior among the women with PMDD.

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