

Premenstrual Disorders and their Relationship to Emotional and Physical Abuse

MALEK ALKHUTABA¹, HANAN HALASEH², EMAN ALI ALADWAN³, SAMI ALMASSARWEH⁴

^{1,2,3,4}*Department of psychology, Isra University, Jordan*

Corresponding author: Malek Alkhubata, Email: malek.alkhubata@iu.edu.jo

ABSTRACT

This study aimed to explore premenstrual disorders and their relationship to emotional and physical abuse. In addition to investigating the effect of age and marital status on the extent of prevalence of premenstrual disorders and levels of emotional and physical abuse. A sample consisting of 214 participants was randomly selected from gynecology Clinics with an age rating from 14 to 40 years. In order to data collection, the emotional and physical abuse scale and premenstrual disorders scale have been used. The findings of the study reported the mean score of the emotional and physical abuse for both father and mother models. The finding reported that the level of emotional and physical abuse was at a medium level amongst the participants in both mother and father models. Moreover, the mean score for premenstrual disorders was about normal levels among the participants. Findings also detect a poor positive correlation between the extent of prevalence of premenstrual disorders, emotional and physical abuse as self-reported by the participants. While the findings presented two significant differences related to emotional and physical abuse – the mother model based on age variables. However, the findings did not detect any significant differences regarding the effect of participants' age on the emotional and physical abuse–father model and the prevalence of premenstrual disorders. Finally, the findings did not find any effects in emotional and physical abuse and the prevalent premenstrual disorders among the participants based on their marital status.

Keywords: emotional abuse, physical abuse, premenstrual disorders

INTRODUCTION

Abuse is the incorrect management or application of something, typically done to unfairly or improperly gain from it. Abuse can take many different forms, such as hurting someone physically or verbally, being violated, being raped, receiving unfair treatment, engaging in criminal conduct, or using other forms of violence (Burlaw, 2013). The Kantian idea that utilizing another person as a means to an end rather than an end in themselves is wrong can be added to these descriptions. According to Shumba and Abasi (2011), abuse is "socially constructed," which means that in different periods and communities, there may be an acknowledgment of a victim's suffering. Human abuse is emotional, physical, sexual, or psychological maltreatment or neglect of an individual, especially by a caregiver or parent. Abuse can be any action or inaction by a parent or caregiver that causes actual or potential harm to a person. It can happen in a child's home or in the groups, institutions, or communities with whom the child interacts (Muri, Augusti, Bjørnholt, and Hafstad, 2022).

Abuse can have immediate negative psychological and physical impacts., it is also connected with psychological problems development and with many chronic emotional, psychological, and physical effects, such as higher rates of health chronic conditions, high-risk of behaviour of health, and maybe exposure the female to premenstrual disorders (Burlaw, 2013). Menstrual is a normal physiological condition that occurs to the female periodically, characterized by multiple and different physical and emotional changes, as it requires the female to face changes that directly affect her feelings and body, these fluctuations affect the various parts of the body, and its organs in a consistent manner that begins days before blood flow, and ends with the beginning of blood flow, and often the symptoms occur gradually from the middle of the period of menstruation (Bowen, Bowen, Baetz, Wagner, Pierson, 2011). The occurrence of menstruation is associated with multiple unique physiological and psychological factors that affect the life of the female, as well as the difference in these symptoms and factors among women; however, they disappear completely after the end of their period by a day or two in both females (Casper and Yonkers, 2019). Symptoms associated with the period of menstruation are generally joint pain, lower abdominal pain, swelling and swelling of the breasts, severe sensitivity to infection and cold, mood change, anxiety and tension, depression, forgetfulness, and poor concentration, as well as cravings for sleep (Direkvand, Sayehmiri, Delpisheh and Kaikhavandi, 2014).

Premenstrual disorder is included as one of the psychological disorders that females may experience in the DSM-IV. It has been described as a disorder that occurs in the days before the menstrual cycle in females and is characterized by emotional and cognitive symptoms that can be represented by pain when touching the breasts, fatigue, mood swings, and depression, and it was estimated that 4% of females suffer from most of the symptoms of premenstrual syndrome during the period of menstruation, and may appear in different forms expected, and the severity of emotional and physical changes ranges from simple to severe depending on the nature of the female body and its sensitivity (APA, 2013).

Premenstrual disorder causes mood swings, irritability and increased personal conflicts, depressed moods, feelings of hopelessness, thoughts of self-hatred, low self-esteem, extreme anxiety, and stress. As well as causing decreased interest in daily activities, difficulty concentrating, fatigue and lack of energy, changes in appetite, insomnia or excessive sleep, and a feeling of loss of control. In addition, in this disorder, physiological symptoms such as swelling, sensitivity in the upper part of the body, pain in the joints and muscles, and weight gain can also be observed (Adewuya, Aloba, and Mapayi 2008).

Scientifics have tried to uncover the causes that may contribute to and help in the development of premenstrual disorders. Their steps did not completely clear psychological or physical causes and assumed that premenstrual disorder affects females with an increased physiologically sensitivity to hormonal fluctuations (Potter, Bouyer, Trussell, and Moreau, 2009). where the female body makes an abnormal response to some of the normal hormonal changes during the menstrual period and before it as well, which may lead to decreased levels of a very important neurotransmitter in the intestines and brain known as serotonin and dopamine that affects the psychological and physical female state (Kahyaoglu and Mestogullari, 2016). Premenstrual syndrome is frequently associated with violence victimization, however, It is not apparent if emotional and physical abuse directly causes premenstrual disorder or whether relationships are explained by the high incidence of premenstrual disorder risk factors among females who report emotional and physical abuse, such as smoking and obesity (Direkvand-Moghadam, Sayehmiri, Delpisheh and Kaikhavandi, 2014).

Younes, Hallit and Obeid (2021). explored premenstrual disorder, childhood abuse, stressful life events in adulthood, and depression among Lebanese university students. The results of the study indicated a correlation between premenstrual disorders,

childhood abuse, and life stressors. The results also indicated a significant rise in the relationship between childhood sexual abuse, depression, and premenstrual disorder. Whereas Fayed (2018) investigated the relationship between premenstrual disorders and their relationship to feelings of happiness and satisfaction with life and physical symptoms. The study sample consisted of 100 participants 34 married, 32 divorced, and 34 single aged between 23 to 43 years. The findings presented that premenstrual disorder is positively associated with the appearance of physical symptoms, and negatively associated with feelings of happiness and satisfaction with life. Another study has been conducted by Badr (2018) to examine the relationship between mental and physical disorders associated with the menstrual cycle and self-image in a sample of women workers in health institutions. The results showed a negative relationship between the mental and physical disorders associated with the menstrual cycle in all its dimensions and self-image and all its aspects. Furthermore, the degree of mental and physical disorders associated with the menstrual cycle was at a medium level among the participants.

Bertone-Johnson et al, (2014) In a study nested within the prospective Nurses' Health Study, the relationship between childhood abuse and the prevalence of moderate-to-severe premenstrual syndrome was determined. Participants ranged in age from 27 to 44 and were free of premenstrual syndrome at the start of the study. 1,018 instances had premenstrual syndrome throughout 14 years, and 2,277 comparison women had very mild menstrual symptoms. Self-reporting of a history of early emotional, physical, and sexual abuse occurred in 2001. After adjusting for obesity, smoking, and other variables, emotional abuse was found to be significantly correlated with premenstrual syndrome. Those who reported experiencing the most emotional abuse were 2.6 times more likely to experience premenstrual disorders than women who did not. Women who reported experiencing severe physical abuse as children had an odds ratio of 2.1 compared to women who did not. The risk was only weakly correlated with sexual abuse. Findings were barely changed by accounting for social assistance during childhood.

It concluded that there is no previous study that touched on and linked the variables of the current study, so the researcher tried to see the studies that include at least one variable only, as many studies focused on premenstrual disorders and their impact on several demographic variables. Through the studies that have been presented, we find that the current study intersects with some studies, some of which are similar in terms of the use of tools and others in terms of variables and others, but it did not target the sample to be targeted in current study or the phenomenon enjoyed by the sample of this study if the aforementioned studies helped guide the researcher in the design of the research and the theoretical framework, especially the application of the study and the analysis of the results.

Study Problem: The event of first-time menstrual exposure is crucial to a paradigm shift in every female's life from childhood to adulthood. It causes many psychological and physiological effects that may be represented by anxiety or depression, as well as the psychological role of life, environmental, and upbringing conditions that it plays in amplifying and delaying the occurrence or irregularity of menstruation. The more a female is subjected to physical or emotional stress and abuse, the greater her risk of various mental disorders. In addition to playing social, professional, and other roles, the severity of the symptoms of these disorders and the level of stress that may lead to irregularity of menstruation must be ordered by its innate and physiological nature.

Bowen, Baetz, Wagner, and Pierson (2011) noted that 21% to 55% of females experience symptoms associated with menstruation and confirmed that 7 percent of females experience severe symptoms. Also, Sundström-Poromaa and Gingnell (2014) posit that there is a correlation between the disorder of the symptoms associated with the occurrence of menstruation and the psychological changes represented by mood changes, the level of life satisfaction and happiness, and various physical symptoms.

Furthermore, Kahyaoglu and Mestogullari (2016) indicate a negative correlation between premenstrual disorders and life satisfaction, particularly on the part of work satisfaction. Abdul-Khaleq and Nial (2004) indicated that 57% of females with serious depressive disorders had a range of mood disorders, in addition to being more likely to commit suicide, especially in the premenstrual period. The problem of the current study is illustrated based on the results obtained from studies and research that dealt with the issue of premenstrual disorders and their relationship with many other psychological variables, especially emotional and physical abuse, and their impact on the psychological aspect of females.

Significance of the study: The study derives its importance by paying attention to extent of prevalent of premenstrual disorders in women who have been exposed to emotional and physical abuse. In addition to addressing the problems to ensure their psychological and physical compatibility, the importance of the study is that it highlights the importance of premenstrual disorder and enriches scientific knowledge with information and data on the experience of physical and emotional abuse and its relationship to premenstrual disorder in the target sample of the research to contribute to improving the quality of life and mental health, where premenstrual disorder is at little conducted of scientific research and that the studies and research carried out on it are almost non-existent or almost rare at the local Arab level.

Aims of the study: The current study is a step to explore premenstrual disorders and their relationship to emotional and physical abuse. Another step of the study is to investigate the effect of age and marital status on the extent of prevalence of premenstrual disorders and levels of emotional and physical abuse.

METHOD

The questionnaires have been sent to (214) participants based on the premenstrual symptoms schedule, on which we evaluated the presence of physical and emotional symptoms, their timing within the menstrual period, and how they affected various aspects of daily functioning. The participants' age ranged from 14 to 40 years were invited to participate in the study in gynecology clinics. The study also used the emotional and physical abuse scale (Mekhmmer and Abd-Elrazaq, 2000), which aims to determine a quantitative estimate of the amount of physical and psychological abuse that has occurred. It consists of two models: the abuse on the part of the father and the abuse on the part of the mother. Respondents must choose one of five alternative possibilities out of 32 items in each model, all of which are formed negatively (no = 5, little = 4, medium = 3, a lot = 2, and very much = 1).

The second tool was the scale of premenstrual disorders (Fayed, H Y, 2018), consisting of 21 items formed in a positive direction and five alternative options; responders were required to select one of no = 1, little = 2, medium = 3, a lot = 4 and very much = 5. The scales were presented to professionals and professors in psychology, mental health, and medical sciences to check the suitability of the item to measure the study purpose. Their comments and suggestions were incorporated into terms that are easy to understand and open to interpretation.

Test-retest as a method of examining the coefficient of reliability; Alpha Cronbach has been calculated. The test was administered to 35 female participants twice at intervals of 14 days. The results showed that the total internal consistency of the abuse scale and premenstrual disorders were 0.82 and 0.79, respectively. After seeking permission from the intended obstetrics and gynecology clinics, participants were invited to participate in the study and, after a brief introduction, the aims and purpose of the study were explained to them. The scales were applied to each person separately. The data were tallied and then entered into the SPSS program for analysis. The many study objectives were used to form the foundation for the statistical methodologies such as descriptive methods including the independent sample test, one-way analysis of variance, and Person correlation.

Findings: The finding in (1) below showed the mean score of the emotional and physical abuse for both father and mother models. The finding reported that the level of emotional and physical abuse was at a medium level amongst the participants in both mother and father models. Moreover, the mean score for the prevalence of premenstrual disorders was about normal levels among the participants.

Table 1: results of independent sample test.

Variables	Mean	St.dev	t	Sig
Emotional abuse - father model	3.753	0.870	1.051	0.000
Psychical abuse – father model	3.524	1.132	0.883	0.000
Emotional abuse - mother model	3.610	1.190	0.905	0.020
Psychical abuse – mother model	3.451	1.305	0.85	0.040
Premenstrual disorders	3.022	0.839	1.219	0.050

*Significant at ($\alpha \leq 0.05$)

Table 2: results of Pearson Correlation Coefficient

Variables	Emotional abuse – mother model	Physical abuse – mother model	Total emotional and physical abuse	Premenstrual disorders
Emotional abuse – father model	0.192**	0.221**	0.212**	0.224**
Physical abuse – father model	0.218**	0.240**	0.239**	0.219**
Emotional abuse – mother model	1	0.175**	0.168**	0.201**
Physical abuse – mother model	0.064**	1	0.130**	0.194**
Premenstrual disorders	0.201**	0.194**	0.183**	1

** Sig at ($\alpha \leq 0.01$)

Table 3: results of ANOVA analysis based on the age of participants

Variable	Variance	Sum of Squares	df	M.sq	F	Sig
Emotional abuse – father model	between group	3.714	3	1.320	1.671	0.264
	within group	78.616	210	0.824		
	Total	82.330	213			
Physical abuse – father model	between group	0.565	3	0.239	0.273	0.902
	within group	67.386	210	0.721		
	Total	67.951	213			
Emotional abuse – mother model	between group	4.376	3	1.467	2.806	0.030*
	within group	49.388	210	0.558		
	Total	53.764	213			
Physical abuse – mother model	between group	3.485	3	1.099	2.597	0.042*
	within group	45.532	210	0.423		
	Total	49.017	213			
Premenstrual disorders	between group	3.285	3	1.123	2.361	0.087
	within group	35.520	210	0.519		
	Total	38.805	213			

* Sig at ($\alpha \leq 0.05$)

Table 4: Results of ANOVA analysis according to the marital status of participants

Variable	Variance	Sum of Squares	df	M.sq	F	Sig
Emotional abuse – father model	between group	3.181	3	0.830	1.985	0.483
	within group	81.229	210	0.841		
	Total	84.410	213			
Physical abuse – father model	between group	0.159	3	0.245	0.873	0.964
	within group	67.768	210	0.720		
	Total	67.927	213			
Emotional abuse – mother model	between group	3.315	3	0.868	1.593	0.155
	within group	51.585	210	0.582		
	Total	54.900	213			
Physical abuse – mother model	between group	3.407	3	0.594	1.133	0.369
	within group	49.932	210	0.545		
	Total	53.339	213			
Premenstrual disorders	between group	3.382	3	1.738	1.309	0.083
	within group	45.420	210	0.946		
	Total	48.759	213			

* Sig at ($\alpha \leq 0.05$)

The Pearson Correlation Coefficient test has been applied to examine the relationship between the extent of prevalence of premenstrual disorders, emotional and physical abuse as self-reported by the participants. As illustrated in Table (2) below, the results showed a poor positive correlation between premenstrual disorders, emotional and physical abuse as self-reported by the participants, $r = .183, p \leq .05$.

As shown in Table (3) below, the results presented two significant differences related to emotional and physical abuse – the mother model based on age variables. However, the findings of the ANOVA analysis did not detect any significant differences regarding the effect of participants' age on the emotional and physical abuse–father model and the extent of prevalence of premenstrual disorders. To examine the sources of differences between the participants on emotional and physical abuse – the mother model, t "Least Significant Difference (LSD)" test has been calculated. The findings showed that the sources of differences were between the age categories of '18 – 23 years and 'over 40 years which was in favor of the latter.

ANOVA analysis was used to explore the effect of participants' marital status on the extent of prevalence of premenstrual disorders and emotional and physical abuse. As shown in Table (4) below, the analysis findings failed to detect any significant differences, suggesting that the marital status of participants did not affect their level of prevalence of premenstrual disorders and emotional and physical abuse.

DISCUSSION AND CONCLUSION

The study was designed to identify the relationship between the prevalence of premenstrual disorders, and emotional and physical abuse. Furthermore, the current study aimed to examine the effects of participants' age and marital status on their levels of the

prevalence of premenstrual disorders, and emotional and physical abuse. The findings of the study reported the mean score of the emotional and physical abuse for both father and mother models was at a medium level among the participants. Moreover, the mean score for the prevalence of premenstrual disorders was

about normal levels among the participants. Findings also detect a poor positive correlation between the extent of prevalence of premenstrual disorders, emotional and physical abuse as self-reported by the participants. While the findings showed two significant differences in emotional and physical abuse, the mother model was based on age variables. However, findings failed to detect any significant differences suggesting that the marital status of participants did not affect their level of prevalence of premenstrual disorders and emotional and physical abuse. Finally, the findings did not find any effects of prevalent premenstrual disorders or emotional and physical abuse among the participants based on their marital status.

Even after controlling for the effects of marital status and age, the findings showed evidence that psychological and physical abuse did not significantly raise the incidence of the prevalent of premenstrual disorders. Associations were greater for the father model of physical and emotional abuse than for the mother model of physical and emotional abuse. Finally, while results did not suggest that emotional and physical abuse had markedly different effects, the risk was highest overall among females aged between 18 and 23 years. The development of premenstrual disorders may be impacted by mental and physical abuse by changing how the hypothalamic-pituitary-adrenal axis responds to stress. Females, whether or not they have premenstrual symptoms, may react differently to the long-term physiologic effects of mental and physical abuse.

In additional studies, Elizabeth et al. (2014) posits that premenstrual disorder patients with a history of abuse showed higher levels of stress and rested more consistently with hypertension than symptom-free controls and premenstrual disorder patients without a history of abuse. More data points to the possibility that women with premenstrual disorders may experience hypothalamic-pituitary-thyroid axis dysfunction as a result of a history of abuse. Although it is unclear why emotional and possibly physical abuse were found to be stronger predictors of premenstrual disorder risk than sexual abuse, these findings are consistent with previous research on other affective illnesses. A study by Younes, Hallit, and Obeid (2021) indicated a correlation between premenstrual disorders, childhood abuse, and life stressors, and also indicated a significant rise in the relationship between childhood sexual abuse, depression, and premenstrual disorders. Furthermore, the study by Badr (2018) showed a negative relationship between the mental and physical disorders associated with menstrual cycle disorders in all its dimensions and self-image in all its aspects. Moreover, the degree of mental and physical disorders associated with menstrual cycle disorders was at a medium level among the participants.

According to some researchers, premenstrual disorder retrospective assessments may be vulnerable to overreporting of symptom intensity, which could result in the inclusion of females without the actual premenstrual disorder in the case group in studies utilizing retrospective measures. It's important to remember that this kind of misclassification would decrease rather than amplify connections between premenstrual disorders and abuse, so it cannot account for our findings. The few other population-based studies of abuse and premenstrual disorders that used single questionnaire assessments to identify patients have likewise found our findings are almost similar.

The study participants' reports of physical and sexual abuse are on par with those of other populations surveyed with similar tools in terms of severity. The possibility exists that premenstrual disorders may have affected the recall of abuse. One of the first studies to examine the effects of emotional and physical violence on premenstrual disorder is the one being conducted right now.

According to research, physical and emotional abuse is not a significant risk factor for mild to severe premenstrual disorders. The evidence that emotional and physical abuse are significantly linked to the etiology of the premenstrual disorder is supported by the persistence of associations between abuse and premenstrual disorder, even after accounting for known risk factors for premenstrual disorder and potential mediators of direct effects. Our findings also offer evidence that women's emotional and physical health may suffer long-term effects due to physical and emotional abuse.

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