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Impact of Attitude towards Menstruation on Emotional Distress and Obesity among Female Adults

1. **Ruqia Nadeem Mir** Student at the Department of Applied Psychology, Riphah International University, Islamabad.
2. **Ayesha Malik** Faculty at the Department of Applied Psychology, Riphah International University, Islamabad.

Abstract

The present study focused to examine the attitude towards menstruation on emotional distress and obesity among female adults. Participants (N = 200) were selected in the study. Age range was from 25-44 years. Cross-sectional research design was used and data was collected through purposive sampling technique. Menstrual Attitude Questionnaire (MAQ) (Brooks-Gun & Ruble, 1980), Kessler Psychological Distress (K10) (Kessler & Mroczek,1992), and Obesity Related Well-Being (ORWELL 97) (Mannucci et al., 1999) scales were used. Pearson correlation, independent sample t-test, and linear regression were done for analysis. Results showed that menstrual attitude had notable positive correlation with emotional distress and obesity and; menstrual attitude significantly predicted obesity among female adults. Moreover, there was no significant difference of menstrual attitude among marital status. This study will help to understand how women perceive different menstrual attitude and how their attitude linked with their physical or psychological health. This study will also help the female adults of different profession to properly guide and give awareness to the young female generation about menstruation, different attitudes towards menstruation, and their impact on physical or psychological health. However, there were some limitations, the participants in the study came from some particular universities of Rawalpindi and Islamabad, and so the result may not be generalized to a larger population. The present study was purely quantitative in nature which limited the in depth knowledge of relation between menstrual attitude, obesity, and emotional distress. Further researchers should focus on mixed method approach to understand the relationship more comprehensively. Moreover, they should focus on all the demographic variables to get the in-depth knowledge. A comparative study should be conducted on women of different age range in the future attitude towards mensuration of every woman depends on their physical health, environment and education.

Keywords: Menstruation, Emotional Distress, Obesity

Introduction

Menstruation is a normal biological phenomena for females that starting with menarche and continuing until menopause. Before the start of menstruation or during menstruation, females come across different emotions and attitudes due to the changes that occur in their bodies. The attitudes and emotions vary from woman to woman according to her body and hormonal changes. Those women who experience intense pain, heavy bleeding, abdominal bloating and anxiety and stress before or during menstruation have negative attitude towards menstruation and those women who have normal menstrual cycle, normal bleeding and no stress and anxiety have positive attitude and natural attitude towards menstruation. Attitude towards menstruation and their perception vary across culture to culture. There is still some taboos related to the topic menstruation and still the event of menstruation has cultural and social restrictions (Kumar & Srivastava, 2011; Leena, 2016; ÖZKAN et al., 2015). Female's menstrual attitudes are influenced by multiple factors such as personal experience, knowledge regarding menstrual event, social learning, and cultural beliefs (Wong & Khoo, 2011). According to studies, a woman's attitude towards menstruation has a strong impact on the discernment and rigorousness of the bodily or psychological symptoms that occur during menstrual phase (Kulakac¸ et al. 2008). The current study explores the impact of attitude towards menstruation on emotional distress and obesity.

Menstrual Attitudes

Menstruation is the regular shedding of the endometrium that occurs in reproductive-age females. For more than half of their lives, females go through a typical cycle known as menstruation. Menstruation plays an important role in woman's overall physical health (Cheng et al., 2007). Menstrual attitudes are viewed from a variety of angles. Females' attitudes towards menstruation vary according to their experiences, personal knowledge, social learning, and cultural beliefs (Wong et al., 2011). Some women from various cultural backgrounds reported positive attitude towards menstruation (Moronkola, 2006; Padmanabhanunni & Fennie, 2017); Despite the fact that a number of studies found negative attitudes around menstruation,(Aflaq & Jami, 2012; Fehintola et al., 2017). Young adult girls have mixed feelings about their periods, expressing both happiness and unhappiness. Students of Chinese junior high school in Hong Kong who were menstruating felt more feminine, mature, and less ashamed of themselves. Good attitudes regarding menstruation are related with pleasant emotional reactions to menarche, whereas negative reactions are associated with viewing menstruation as a sick event (Tang et al., 2003). Menstrual preparation is linked to both attitudes towards menstruation and the experience of menarche. Women who felt ready for menarche reported more positive menarche experiences and attitudes towards menstruation than those who did not (Marván & Molina-Abolnik, 2012).

The beginning of menstrual cycle is also linked to discernment of eventual menstruation in adult women. Adult women who are more satisfied with their bodies and have better overall health behaviors must have positive menstrual experiences than those women who are not satisfied with their bodies and hence have negative menstrual experiences (McPherson & Korfine, 2004).

Emotional distress

Emotional distress is a subset of psychological distress that is frequently associated with strain, stress, and distress (Yamada et al., 2014). The term **STRAIN** refers to the effect of stressors on an individual, such as caring for a conduct disorder child (Bussing et al., 2003). **STRESS** is a physical and emotional state that a person experiences as a result of living; it is escalated in a general response to an any kind of change or threat (Ridner, 2004). **DISTRESS** denoted negative stress. It is also used to describe pain or suffering that can be physical or mental in nature (Dorland, 1925). Psychological distress is defined as an infer negative mental state comprised of multidimensional fabrication such as depression and anxiety (Kessler et al., 2002). Many factors such as social demographics, social relationships, and physical and functional health status has an impact on the development of this distress (Paul et al., 2006). Many factors contribute to emotional distress. Many adolescents reported emotional distress as a result of menstruation, and the frequency of such distress increased with age (Flug et al., 1985; Tabassum et al., 2005).

Emotional distress includes a wide range of symptoms, the most common of which are depression and anxiety. Menstruation is linked to a wide range of emotional distress symptoms, including irritability, tension, depression, and anxiety (Woods et al., 1982). As compared to males females are most likely to be victims of stress and depression (Rehman et al.,2022). All menstruation-related issues, including menopause, are strongly linked to psychological distress (Bromberger et al., 2001).

Obesity

Obesity is an unusual accumulation of body fat that can be damaging to one's health. Obesity and its forerunner, overweight, are widespread in developed countries and becoming increasingly dangerous in developing countries (Jayawardena et al., 2020). Obesity is a multifactorial disorder that plays a principal and occasional role in the pathogenesis of many diseases, including diabetes, hypertension and other heart diseases, osteoarthritis, and certain cancers.

Obesity is associated not only with diseases, but also with the female reproductive system. Obesity and being overweight are likely to play a role in the aetiology of some menstrual problems. The android fat distribution in the body is linked with less menstrual bleeding (Kafaei-Atrian et al., 2019). Obesity has been linked to early menarche, adolescent menstrual irregularities, polycystic ovary syndrome, infertility, and suboptimal hormonal contraceptive efficacy (Kulie et al., 2011; Lash & Armstrong, 2009; Pettigrew & Hamilton-Fairley, 1997; Zaadstra et al., 1993). Extremes in BMI have been linked to menstrual disorders (MIRBOLOUK et al., 2009).

Obesity is four times more likely to be occurred in women who had irregular menstrual cycles than those women who had regular menstrual cycles. In 26638 women, anovulation was strongly

linked with obesity, with obese women 3.1 times more likely than normal weight women to have menstrual irregularity (Norman & Clark, 1998). Menstrual disorders are twice as common in women with a BMI of 24-25 and five times as common in women with a score of 35 or more in BMI (Rowland et al., 2002). The type of obesity characterizes menstrual disorders. Menstrual irregularities are more common in women who have upper body fat that is visceral fat obesity than in those women who have lower body fat that is subcutaneous fat obesity (Douchi et al., 2002).

Literature Review

Menstruation is a physiological event that indicates the start of fertility in women. It is considered as a formal dividing line of puberty in many cultures (Dhingra et al., 2007). Menstruation is viewed differently in different societies (Turan & Ceylan, 2007). Menstruation still has some taboos and cultural and social constraints. In some cultures, the beginning of menstrual cycle is associated with many negative events which includes menstruation, physical discomfort, moodiness, and, in some cases, a decline in social activities and interactions, whereas in others, it is seen as a symbol of sexual maturity or femininity (Marván et al., 2017). According to many researches, most of the societies have a negative menstrual attitudes (Houston et al., 2006)**.** Personal knowledge and experiences, social learning, and cultural ideas are all factors that contribute to negativity (Wong & Khoo, 2011). In some cultures, menstruation is seen as a debilitating event and as an outward sign of women's inherent weakness (Chrisler & Gorman, 2016)**.**

More than half of Taiwanese women believed that menstruation had an impact on their social interactions, daily activities, emotions, and academic performance. The attitude of Taiwanese women's towards menstruation and menstrual symptoms were found to be significantly correlated in this study (Chang & Chen, 2009).

The experience of menarche shapes Turkish women's attitudes towards menstruation (Çevirme et al., 2010). Previous research found that only 2% of women received menstruation-related information from their health care providers (Houston et al., 2006). According to one study, inadequate puberty preparation was linked to negative pubertal milestone expectations (Houston et al., 2006). A study conducted in Turkey on the topic of perception of menarche and attitudes towards menstruation among married Turkish women revealed that 64.2% of married women described their menarche as an unpleasant experience, 48.8% of married women felt they had to hide their menstrual event, and 2.2% thought menstruation was a castigation from God (Çevirme et al., 2010). Studies showed that negative or positive menstrual attitudes affect the perception and severity of bodily and psychological symptoms that women experience during this time (Öztürk & Güneri, 2021).

Most women of childbearing age experience physical or emotional symptoms before menstruation. Some of these women who are so severely affected have a disturbed mental health and interpersonal relationships (Mohib et al., 2018). According to a study by Pal et al, Pakistani women experience physical symptoms predominated in the premenstrual experience in which bloating and cramps, irritability, and mood swings are being the most common symptoms (Purdue-Smithe et al., 2016).

Menstruation is linked to a slew of physical and psychological issues. Menstrual irregularities are significantly associated with lifestyle and psychological risk factors such as obesity, smoking, and stress (Bae et al., 2018). Obesity is a physical health problem that is strongly linked to menstrual problems. Obesity is a main forecast of earlier menarche, whereas amenorrhea has been reported in women with low BMI (Allison & Hyde, 2013). Obesity and menstrual disturbance studies revealed that menstrual disturbance and obesity both are positively correlated (Zhang et al., 2012).

Obese women have higher rates of menstrual bleeding. Furthermore, being overweight increases the likelihood of severe discomfort and is a significant contributor to uterine cramps during menstruation (Kafaei-Atrian et al., 2019).

Researchers have concentrated on the timing of menarche as well as girls' attitudes and experiences with menstruation. Early menarche is associated with increased anxiety at menarche, increased concerns about menstruation, and increased menstrual cramp symptoms (Natsuaki et al., 2011). The majority of researchers who have studied emotional responses to menarche around the world have discovered that the majority of girls have a negative or ambient reaction to menarche (Tang et al., 2003). Lee, on the other hand, recently conducted a study in the United States and discovered that, contrary to previous research findings, women are now reporting more positive experiences with menstrual cramps (Marván & Alcalá-Herrera, 2014). The experience of menarche is

also related to adult women's perceptions of subsequent menstruation. Adult women who are more satisfied with their bodies and have better overall health behaviors must have positive menstrual experiences than those women who are not satisfied with their bodies and hence have negative menstrual experiences (McPherson & Korfine, 2004).

Period irregularities have been linked to mental health issues such as depression (Yamamoto et al., 2009). Previous research has linked premenstrual syndrome and menstrual symptoms to mental illness and depression, particularly in young women (Ghiasi et al., 2018). Many women experience premenstrual tension (a collection of physical and emotional symptoms that begin 7-14 days before menstruation and end with menstruation). Irritability, migrains, anxiety, fatigue, depression, difficulty concentrating, weight gain, breast tenderness, back pain, and skin disorders are some of the most common symptoms of dysmenorrheal (Jain et al., 2019).

Research Question

1. Is there any significant impact of attitude towards menstruation on emotional distress and obesity among female adults?

Theoretical Background

Beck Cognitive Therapy

Beck stated that people's negative thoughts cause them to have a negative view of themselves, the world, and the future (McKay & Tryon, 2002). Emotional distress is defined as a complex neural interactions that coordinated with the activities of the psycho-behavioral, physiological, and hormonal systems (Scher & Harel, 2008). Emotional distress disrupts all coordination systems. Studies have shown that 50% of female students agree that menstruation is an "unpleasant" event that leads to psychological stress (Bhattacherjee et al., 2013). Women who have a positive attitude towards menstruation mainly consider menstrual-induced changes to be desirable. Lack of knowledge about menstruation and how to deal with pain, which affects about 90% of Pakistani women, is a major factor in their negative attitudes (Aflaq & Jami, 2012).

According to Beck, when negative thoughts arise from negative experiences, the result is emotional distress. Similar to women's attitudes towards menstruation, those who have a negative experience of menstruation have a negative attitude towards menstruation. Early menarche is associated with higher levels of anxiety around the time of menstruation, increased menstrual anxiety, and increased symptoms of dysmenorrhea (Natsuaki et al., 2011). Researchers who studied the linkage of emotional responses to menstruation around the world have found that most girls have a negative or conflicting response to menstruation (Tang et al., 2003).

Bio-psycho-social Model

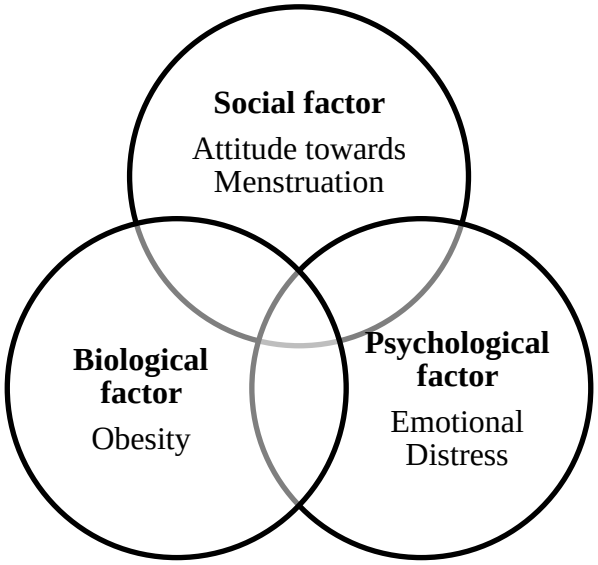
The psychosocial model has traditionally been considered relevant for obesity because all elements of the model are linked. Several factors can lead to overweight or obesity, and psychosocial biopsy patterns can help you understand them. Biological factors include genetic susceptibility, an increase in the number of fat cells formed during childhood, hormonal imbalances such as thyroxine produced by the thyroid gland, and more (Martin et al., 2010). Although much progress has been made to look into the pathophysiology of obesity, treatment and prevention have mainly focused on two components that are psychological and social. Psychological aspects include so many examples such as eating habits, physical activity habits, health awareness or knowledge. People eat foods high in sugar and fat when they are stressed out or depressed (Belar et al., 2013).

This model concerns the relationship between menstruation, menstrual attitudes, obesity, and emotional distress. Biological factors including menstruation, obesity, and various obesity-related menstrual problems. Obesity plays a role in the root cause of some menstrual problems. The distribution of fat in the android body is related to the least amount of menstrual blood (Kafaei-Atrian et al., 2019). Obesity is correlated with early onset of menstruation, menstrual irregularity in adolescent girls, polycystic ovary syndrome, suboptimal hormonal contraceptive efficacy, and infertility (Kulie et al., 2011; Lash & Armstrong, 2009; Pettigrew & Hamilton-Fairley, 1997; Zaadstra et al., 1993).

Psychological factors include menstrual-related stress and obesity. Women experience psychological symptoms during menstruation. Numerous studies have shown that North American women associate the onset of their period with a number of unpleasant physical and emotional symptoms. For example, it is believed that during the menstrual cycle, women are more likely to experience headaches, abdominal pain and bloating, as well as restlessness, mood swings, and stress

(McFarland et al., 1989). Early menarche is associated with higher levels of anxiety around the time of menstruation, increased anxiety about menstruation, and increased symptoms of dysmenorrhea (Natsuaki et al., 2011).

Social factors include women's menstrual attitudes based on their experiences with menstruation, physical and psychological conditions. In Taiwan, more than half of women believe that menstruation affects their ability to concentrate in class, feel happy, function in daily life and interact with others (Chang & Chen, 2009). Menstrual experience is also associated with the perception of subsequent menstruation in adult women. Adult women who are more satisfied with their bodies and have better overall health behaviors must have positive menstrual experiences than those women who are not satisfied with their bodies and hence have negative menstrual experiences (McPherson & Korfine, 2004).



Conceptual framework of the study

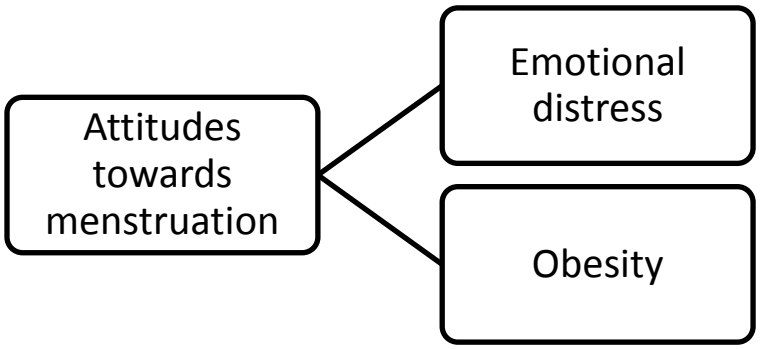


Figure No 1: Conceptual Framework of the Study

Significance

The aim of the current study was to explore the impact of attitude towards menstruation on emotional distress and obesity among female adults. Menstruation is a normal biological phenomena for females that starting with menarche and continuing until menopause. Before the start of menstruation or during menstruation, females come across different emotions and attitudes due the changes that occur in their bodies. The attitudes and emotions vary from woman to woman according to her body and hormonal changes. Those women who experience intense pain, heavy bleeding, abdominal bloating and anxiety and stress before or during menstruation have negative attitude towards menstruation as compared to those women who have normal menstrual cycle, normal bleeding and no stress and anxiety have positive attitude and natural attitude towards menstruation.

Menstruation is a taboo topic in Pakistani society and nobody wants to talk on it publicly and openly that's why when women experience their first menstruation, they do not have knowledge about menstruation and bodily changes associated with menstruation, so as the result they developed negative attitudes and discomfort beliefs regarding menstruation. Growing up with negative and

discomfort beliefs leads to so many problems in understanding the physical or psychological changes associated with menstruation. The current study helped to developed confidence in female adults to break that taboo and talked on this topic to spread awareness and educate the new generation to better understand menstruation, menstrual attitude, and all the physical and psychological aspects associated with it.

Method

Objectives

1. To find out the relationship between menstrual attitude, emotional distress, and obesity among female adults.
2. To determine the impact of menstrual attitude on obesity among female adults.
3. To explore the differences of menstrual attitude on marital status female adults.

Hypotheses

1. Menstrual attitude will be positively linked with emotional distress and obesity among female adults.
2. Menstrual attitude will significantly predict obesity among female adults.
3. Married female adults will have more negative menstrual attitude than unmarried female adults.

Sample

The current study used cross-sectional survey research method and it was purely quantitative in nature. The sample for data collection includes female teachers from the universities (Riphah International University, Islamabad, National University of Modern Languages, Islamabad, and Foundation University, Rawalpindi) of twin cities i.e. Rawalpindi and Islamabad. Data was collected from 200 female teachers through purposive sampling technique. The sample's age range was from 25 to 44 years old (onnet & scez, 2022).

Teachers other than the specified age range and belonging to a university outside the premises of Rawalpindi and Islamabad were excluded from the study. Only those participants who are included in the inclusion criteria of this were approached. Participants had free will to either participate in this study or not. Informed consent in written form was given to each participant and they were also informed about their rights to safety, confidentiality, and anonymity to this study. Participants also have right to withdraw from participation at any time. After data collection, data was analyzed by using SPSS-21 to test the hypotheses and the findings were reported in the results section.

Instruments

Menstrual Attitude Questionnaire (MAQ)

Menstrual attitude questionnaire (MAQ) was first established by Brook-Gunn and Ruble (Brooks-Gunn & Ruble, 1980). The MAQ Turkish version (Firat et al., 2009) was used to determine the attitudes towards menstruation among female adults. The scale consisted of 33 items; each item scored on 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). The MAQ contained five subscales: (1) menstruation is a natural event, (2) menstruation is a debilitating event, (3) menstruation is a predictable event, (4) menstruation is a bothersome event, and (5) denial of any menstrual effect. The alpha reliability of the MAQ was reported to be .73 to .79 (Firat et al., 2009).

Kessler Psychological Distress (K10)

Kessler psychological distress (K10) was established by Professor Ronald C. Kessler (Kessler & Mroczek, 1992). Kessler psychological distress (K10) was used to assess the emotional distress among female adults. The K10 consisted of 10 items; each item scored on 5-point likert scale (1 = none of the time, 5 = all of the time). The high score will indicate mental disorder (psychological distress). The alpha reliability of the K10 was reported to be .88 (Easton et al., 2017).

Obesity Related Well-Being (ORWELL 97)

Obesity related well-being (ORWELL 97) was used to measure the obesity related quality of life and look into the intensity and the subjective relevance of physical and psychological distress. ORWELL 97 was developed by E Mannucci (Mannucci et al., 1999). The scale consisted of 18 items each item scored 4-point likert scale (0 = not at all, 3 = much). ORWELL 97 consisted of two sub-scales; ORWELL 97-1 and ORWELL 97-2. ORWELL 97-1 consisted of 13 items and these items are related to psychological status and social judgment, and ORWELL 97-2 consisted of 5 items that are related to physical symptoms and impairment. The reliability of the scale was reported to be 0.93. The scale's internal consistency was reported to be .83.

Results

Table 01

Frequency and Percentage of Demographic Variables (*N = 200*)

Variables	Categories	*F (%)*
Age		
25-29		88 (44.0)
30-34		72 (36.0)
35-39		22 (11.0)
40-44		18 (9.0)
Marital Status		
Single		82 (41.0)
Married		118 (59.0)
Occupation		
Teacher		120 (60.0)
Doctor		36 (18.0)
Other		44 (22.0)
Do you ever feel any disturbance in your physical or psychological health due to menstruation?		
Yes		144 (72.0)
No		56 (28.0)

Note. F = Frequency, *%* = Percentage

Table 1 demonstrated the descriptive characteristics of the sample. Participants lie in the age range of 25-29 (88%) and 30-34 (72%) were higher as compared to other two age ranges. The sample comprised of both single and married females. Married females (59%) were higher in number as compared to single females (41%). Most of the female participants were teacher (60%), only few were doctors (18%) or belong to other professions (22%). In demographics, it was asked by the female adults that do they ever feel disturbance in their physical or psychological health due to menstruation, and majority of the female adults (72%) answered yes to this question and few female adults (28%) answered no.

After finding out the descriptive characteristics of the sample, psychometric properties of the study variables were mentioned in further Table 2.

Table 02

Psychometric properties of the scales (N = 200)

					Range			
Variables	*k*	*α*	*M*	*SD*	Potential	Actual	Ske	Kurt
Menstrual Attitude Questionnaire	33	.71	112.48	10.26	33-165	86-133	-.23	-.50
Obesity Related Wellbeing	36	.90	32.73	25.57	0-144	0-139	1.82	4.08
Kessler Psychological Distress	10	.89	26.09	8.62	10-50	12-44	.13	-1.06

Note. k = No. of items, *α* = Alpha reliability, *M* = Mean, *SD* = Standard Deviation, Ske = Skewness, and Kurt = Kurtosis

Table 2 showed the reliability coefficients along with the normality of the sample, all the scales showed satisfactory reliabilities within range of (α = .60-.90). The mean value of menstrual attitude questionnaire showed that the maximum mean value is obtained i.e., 112.48 and the minimum mean value is for Kessler psychological distress i.e., 26.09. The obesity related wellbeing has highest standard deviation i.e., 25.57. Kessler psychological distress has lowest standard deviation i.e., 8.62. A normal distribution of data is demonstrated by normal range of skewness and kurtosis and the normal range lies between +2 to -2. In the current study analysis, ORWELL-97 scale showed exceptional kurtosis i.e. 4.08 respectively.

Correlation between Study Variables

In order to investigate the correlation between study variables, further Pearson correlation analysis was conducted. Table 3 reported the analysis of pearson correlationa between the study variables.

Table 03

Pearson Correlation between all Study Variables (N = 200)

	Variables	1	2	3
1	Menstrual Attitude Questionnaire	-	-	-

2	Obesity Related Wellbeing	.31**	-	-
3	Kessler Psychological Distress	.26**	.16*	-

*Note.*p*<.05. **p*<.01.

The results of table 3 depicted that menstrual attitude questionnaire had significant and positive correlation (*r = .31**; p <.01*) with obesity related wellbeing (*r = .26**; p <.01*) and Kessler psychological distress (*r = .16*; p <.05*).

Linear Regression

To find out the prediction between study variables, further linear regression analysis was conducted. Table 4 demonstrated the analysis of linear regression between study variables.

Table 04

Linear Regression Analysis of Menstrual Attitude predicting Obesity (*N = 200*)

Variable	*B*	*SE*	*B*	*P*
Constant	-54.23	19.01		.00
MAQ	.77	.16	.31	.00
R	.31			
R^2	.09			
Δ*F*	21.10			

Note. MAQ = Menstrual Attitude Questionnaire, *B* = Unstandardized coefficient, *SE* = Standard error, R^2 = Correlation square, *β* = standardized coefficient, Δ*F* = F static, *R* = Correlation, *p* = significance

Table 4 demonstrated the predictive role of menstrual attitude on obesity among female adults. The linear regression analysis showed that menstrual attitude significantly predict obesity (*β = .31**, p <.05*), moreover value of (R^2 *= .09*) explained the 9% variance in the outcome variable by the predictor i.e. Menstrual attitude.

Mean Difference along Marital Status

In order to examine the mean difference of marital status on menstrual attitude, further Pearson t-test analysis was conducted. Table 5 demonstrated the Pearson t-test analysis of Menstrual Attitude along marital status.

Table 05

Difference along Marital Status of Menstrual Attitude (*N = 200*)

	Single	Married					
	(*n = 82*)	(*n = 118*)	*t*	*p*	*CI 95%*		*Cohen's d*
Variable	*M* (SD)	*M* (SD)			*LL*	*UL*	
Menstrual Attitude Questionnaire	113.41 (10.99)	111.83 (9.72)	1.07	.28	-1.32	4.49	0.15

Note. M = Mean, *SD* = Standard Deviation, *CI* = Class Interval, *LL* = Lower limit, and *UL* = Upper limit, *t* = Difference, *p* = Significance

*p< .05, **p< .01

Table 5 demonstrated the mean difference across study variable across marital status. The result demonstrated that menstrual attitude had non-significant difference (*t= 1.0, p >.05*) on marital status.

Discussion

Viewpoints on menstrual states of mind are multidimensional. Females have distinctive attitude towards monthly cycle depending on their encounters, individual information, social learning, and social convictions (Wong et al., 2011). There's impressive prove from the past considers that ladies in North America connect a begin of their period to a number of awkward physical and passionate side effects. For occurrence, it is thought that amid the menstrual stage of their cycle, ladies are more likely to have cerebral pains, stomach inconveniences, and swelling as well as more tumult, disposition swings, and pressure (McFarland et al., 1989). This study was done to find out the impact of attitude towards menstruation on emotional distress and obesity among female adults.

The first hypothesis stated that menstrual attitude will be positively linked with emotional distress and obesity among female adults. Results confirmed this hypothesis (see table 3). The results are consistent with previous literature as studies have proved that a negative or positive attitude towards feminine cycle impacts woman's discernment and seriousness of physiological or mental side effects that emerge amid their period (Öztürk & Güneri, 2021). Ladies with menstrual inconsistency have more negative attitude towards monthly cycle and as the result they experienced more unsettling

influence in their physical or mental wellbeing. Menstrual abnormalities was altogether related with ways of life and mental chance components such as smoking, corpulence, and push (Bae et al., 2018).

The second hypothesis stated that menstrual attitude will positively predict obesity among female adults. The result supports the hypothesis (see table 4). According to the previous literature, many physical and psychological problems are associated with menstruation and menstrual attitudes. One of the physical wellbeing issues like weight is exceedingly related with menstrual related issues. Weight may be a noteworthy indicator of prior menarche, though ladies with moo BMI have been detailed to have amenorrhea (Allison & Hyde, 2013). The past ponders appeared that corpulence is more related with menstrual related issues. Classical thinks about appeared that compared to ladies with normal cycles, ladies with menstrual abnormalities had a four time higher predominance of corpulence. As it were 9-13% ladies with normal periods were overweight, compared to 45% of amenorrheic ladies who were corpulent (Hartz et al., 1979). Anovulation was exceedingly related with weight among the 26 638 ladies overviewed for the survey considered by (Hartz et al., 1979), with solely corpulent ladies encountering menstrual unsettling influences 3 times more as often as possible than ladies within the ordinary weight extend.

The third hypothesis stated that married female adults will have more negative menstrual attitude than unmarried female adults. Results showed (see table 5) non-significant difference between single female adults and married female adults on menstrual attitude. The results are not consistent with previous Turkish study that showed that on the basis of demographics such as age, marital status etc. 64.2% hitched ladies portrayed their menarche as an unfavourable involvement, 48.8% hitched ladies felt they had to keep their feminine cycle as a mystery, and 2.2lieved that discharging was a discipline given by God (Çevirme et al., 2010). Be that as it may a few past writing on Taiwanese ladies appeared that there are significant cross-cultural contrasts which menstrual states of mind in Taiwanese ladies are multifaceted. The physical, cognitive, behavioral, and mental changes involvement all through the premenstrual and menstrual stages are related to their demeanors toward monthly cycle (Lu, 2001).

Implications

Further researchers can take this study to get information about the impact of menstrual attitude on obesity and emotional distress among university's female teachers of Pakistan. The study will help to understand how women perceive different menstrual attitude and how their attitude linked with their physical or psychological health. This study will also help to better understand how menstruation is co-related with obesity and emotional distress. It will help the female adults to understand the menstrual related problems linked with obesity. The study will also helpful for the female adults to understand the emotional distress they experienced during menstruation. This study will also help the female adults of different profession to properly guide and give awareness to the young female generation about menstruation, different attitudes towards menstruation, and their impact on physical or psychological health.

Conclusion

The present study found out that there was a positive relation between menstrual attitude, obesity, and emotional distress. The study showed that most of the women do feel disturbance in their physical or psychological health due to menstruation which in turn leads to more disturbing menstrual attitude.

The present study found out that menstrual attitude have significant relationship with obesity and emotional distress moreover, menstrual attitude significantly predict obesity in female adults. In fact according to the previous literature menstrual related problems and disturbance in attitudes significantly predict obesity in women. Every woman possess different attitude towards menstruation and their attitudes vary according to their experiences. Every woman possess positive, neutral, or negative attitude.

The present study found out that there was no difference on demographic variable (marital status) that shows either woman has negative attitude or not. The present study will help to understand how women perceive different menstrual attitude and how their attitude linked with their physical or psychological health.

Recommendations

- As the present research targeted only working women (female teachers at the university level) therefore, a comparative study should be conducted on women of different age range in the

future attitude towards mensuration of every woman depends on their physical health, environment and education.

- There must be awareness/training sessions for women in educational institutions and different workplaces addressing the issues with their possible solutions.
- Policies regarding facilitation must be developed by government sectors agencies.
- Another recommendation for future researchers is to obtain data from other cities in Pakistan as this study only focused on teachers from Rawalpindi and Islamabad so that the results have greater generalizability.
- An experimental study should be conducted addressing implementation of same training/program in elementary, preparatory and secondary schools for improvement of student's attitude towards mensuration, knowledge and practice.
- The present study was purely quantitative in nature which limited the in depth knowledge of relation between menstrual attitude, emotional distress, and obesity. Further researchers should focus on mixed method approach to understand the relationship more comprehensively.
- Moreover, the research only saw the difference on one demographic variable (marital status), further researchers should focus on all the demographic variables to get the in depth knowledge.

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