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Relationship between Body Image and Mental Health of Women suffering from Premenstrual Syndrome

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Abstract:

The aim of present study examines the relationship between body image and Mental Health of women suffering from Premenstrual Syndrome. The random sample comprised of 200 married women in the age group of 25-45 years. The scales used were General Health Questionnaire, The Warwick-Edinburgh Mental Well-being Scale, Multidimensional Body-Self Relations Questionnaire-Appearance Scale (MBSRQ-AS) and Premenstrual Symptoms Screening Tool. The data for the study was analyzed by using the Correlation. Our results did not show any significant relationship between mental health and body image disturbances. There was no correlation between body image and Mental Health of women suffering from Premenstrual Syndrome but found significant positive correlation with age. In view of the above stated literature, the current study was planned to achieve the following objective and to test the stated hypothesis.

Key words: *Premenstrual Syndrome, Mental Health and Body Image.*

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Introduction:

Premenstrual Syndrome (PMS) was first described by the British physician, Dr Kathrina Dalton in 1964. She differentiated the condition from Frank's earlier (1931) description of premenstrual tension (PMT) by broadening the criteria to include the psychological changes that occur with the physical changes. Premenstrual syndrome covers a wide variety of cyclical symptoms which recur in the early days of menstruation, with rapid and complete relief at the onset of full menstruation.

Premenstrual syndrome is a common disorder of young and middle aged women characterized by cyclic occurrence in the luteal phase of the menstrual cycle of a combination of distressing physical, psychological and behavioural changes of sufficient severity to result in deterioration of interpersonal relationships and/ or interference with normal activities which remit upon onset or immediately after menstruation (Reid, 1993; Wyatt *et al,* 1999/2001; Frackiewitz & Shiovitz, 2001).

According to Campagne and Campagne (2007), "More women and their families are affected by the physical and psychological irregularities due to premenstrual symptoms than by any other condition".

Premenstrual Syndrome (PMS) is disorders characterized by emotional and physical symptoms that occur in the lateral phase of the menstrual cycle and subside following menstruation (Panay, 2005). Some common Physical symptoms include headaches, breast tenderness, abdominal bloating, constipation, swelling and general fatigue and Emotional disorders include irritability, mood swings, social withdrawal, insomnia, anxiety and depression (Dickerson, Mazyck & Hunter, 2003; Steiner, 1997).

More than 200 different symptoms have been associated with PMS, but the three most

prominent symptoms are: irritability, tension, and unhappiness (Dickerson, Mazyck, Pamela, Hunter & Melissa, 2003).

PMS is a recurrent luteal phase approximately 75 percent of all menstruating women experiences some symptoms that occur before or during menstruation (Deuster, Adera, and South-Paul, 1999).

Symptoms and discomfort level vary significantly from one woman to another with each woman reporting her own unique syndrome (Berke et. al., 2001), which may vary from month to month and there may even be symptom-free months.

In an international survey of women in Europe, South America, and Asia, the frequency of PMS symptoms was similar across countries and regions (Dennerstein, Lehert & Heinemann, 2011). It was concluded that European/Latin American women differ from Asian women in type of bothersome symptoms experienced and perception of severity.

PMS (premenstrual syndrome) symptoms usually begin between the ages of 20 and 30 years (Dickerson, Mazyck & Hunter, 2003).The symptoms of premenstrual syndrome may begin to subside after the age of 35 or worsen in the late 30s and 40s. (Sachdev, 2012)

Etiology of PMS remains unknown but cyclical ovarian activity and the effect of estradiol and progesterone on the neurotransmitters serotonin and Gamma-Aminobutyric Acid (GABA) appear to be key factors (Yonkers, O'Brien & Eriksson, 2008; Inoue, Terao, Iwata, Okamoto & Kojima et al., 2007).

The prognosis for women with premenstrual syndrome and premenstrual dysphoric disorder (severe form for premenstrual syndrome) is good. Women who are treated with this disorder do well.

The World Health Organization defines Mental Health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organisation, 2001).

"Mental health is the foundation for well-being and effective functioning for an individual and community. It is more than the absence of mental illness. It is a resource vital to individuals, families and societies" (Ministry of Health, 2007). Mental health includes social determinants such as social connectedness, acceptance of diversity, freedom from discrimination, and economic participation (Wilkinson and Marmot, 2003).

World Health Organization suggests that nearly half of the world's population are affected by mental illness with an impact on their self-esteem, relationships and ability to function in everyday life (Storrie, Ahern, & Tuckett, 2010). An individual's emotional health can also impact physical health and poor mental health can lead to problems in life (Richards Campania, & Muse-Burke, 2010).

Mental Health status is determined by a complex interplay of individual characteristics, along with cultural, social, economic and family circumstances at both the macro (society) and micro (community and family) levels (Commonwealth Department of Health and Aged Care, 2000).

In India, the prevalence of major mental and behavioural disorders is estimated to be 65 per 1000 population, which translates to 70 million patients (Ganguli, 2000; Reddy and Chandrashekar, 1998), where rural rate is 64.4 and urban rate is 66.4. Thus the urban rate is marginally higher than the rural rate. (Murali, 2001-10 /2001-12). The urban morbidity rate was 2 per 1000 higher than the rural rate.

Many mental health problems starts early in life. Half of those with lifetime mental health problems first experience symptoms by

the age of 14 (kim-cohen, caspi & Moffitt et al., 2003) and three-quarters by their mid-20s (Kessler and Wang, 2007) People with severe mental illnesses die on average 20 years earlier than the general population (Brown, kim, Mitchell and Inskip, 2010).

Mental health is the capacity to think rationally and logically, and to cope with the transitions, stresses, traumas, and losses that occur in all lives, in ways that allow emotional stability and growth. In general, mentally healthy individuals value themselves, perceive reality as it is, accept its limitations and possibilities, respond to its challenges, carry out their responsibilities, establish and maintain close relationships, deal reasonably with others, pursue work that suits their talent and training, and feel a sense of fulfilment that makes the efforts of daily living worthwhile (Hales and Hales, 1995).

Good mental health buffers us from the stresses and hardships that are part of life for us all, and can help to reduce the risk of developing mental health problems and illnesses. Even when someone develops a mental health problem or illness, they can nevertheless experience good mental health and this can contribute to their journey of recovery (Provencher & Keyes, 2011).

Mental disorder is common to all countries and cause immense suffering. People with these disorders are often subjected to social isolation, poor quality of life and increased mortality (World Health Organisation, 2008).

Mental, social and behavioural health problems may interact to intensify each other's effects on behaviour and well-being. Substance abuse, violence and abuses of women and children on the one hand, and health problems such as heart disease, depression and anxiety on the other, are more prevalent and more difficult to cope with in conditions of high unemployment, low income, limited education, stressful work conditions, gender discrimination, unhealthy lifestyle and human rights violations (Desjarlais et al., 1995).

Body Image was first coined by the Austrian neurologist and psychoanalyst Paul Schilder in his book 'The Image and Appearance of the Human Body' in 1935. Body image scholars, past and present, increasingly agree that body image is a multidimensional phenomenon. It is far more complex than implied by Schilder's definition as “the picture of our own body which we form in our own mind” (Schilder, 1935/1950).

Body image refers to a person's perceptions, thoughts and feelings about his or her body and the psychological importance they place on their appearance (Cash, Morrow, Hrabosky, & Perry, 2004; Grogan, 2008).

Lightstone (2001) defined body image as body image involves our perception, imagination, emotions, and physical sensations of and about our bodies. It's not static- but ever changing; sensitive to changes in mood, environment, and physical experience. In other words it is how you feel others perceive you, what you believe about your physical appearance, how you feel about your body, and how you feel in your body.

Banfield and McCabe (2002) concurred that body image is multidimensional, however they identified three aspects: cognitions and affect regarding body, body importance and dieting behaviour, and perceptual body image. The cognitive dimension relates to thoughts and beliefs about body shape and the affective dimension includes the feelings that a person has towards their bodies' appearance.

Body image may be defined as the combination of an individual's psychosocial adjustment experiences, feelings and attitudes that relate to the form, function, appearances and desirability of one's own body which is influenced by individual and environmental factors (Horgan & MacLachlan 2004).

Body image not only provides a sense of "self", our body image also affects how we think, act and relate to others (Wald 2004).

Body image can be defined as the internal view that one hold about their outer appearance (Garner, 1997). This internal view is subjective, and may be influenced by a variety of factors including norms prevalent in ones' culture, biology, history of weight fluctuations, media, social pressure, and individual characteristics; all of which interact in complex way to form an unstable representation of one's body shape and size (Slade, 1994; Rievers and Cash, 1996).

Pelusi (2006) said that the body image also encompasses a person's feeling of "wholeness, functionality, and ability to relate to others". Therefore, body image is a complex issue; it is not only about a person's judgement about the body but also the connectivity between a person's body and the relation to others.

Evidence has indicated that a combination of perceptual and attitudinal/affective measures of body image proved to be better predictors of body image disturbance, drive for thinness, and disordered eating than either of them alone (Sands, 2000) .

Grogan (1999) concluded from several studies that body image is influenced by many factors (family, friends, teacher, peer and society) and as a person gets older the influences on body image change and may become stronger or weaker, thus creating flux in body image over the life-span.

Poor body image is associated with self-reported low self esteem, elevated anxiety, depression and somatisation (Newman et al., 2006).

Thus the literature has repeatedly found the significance of body image issues in young females, and the Premenstrual period, with its implications on body image, may play a significant role, not just on body image but also on perceived personal mental health.

In view of the above stated literature, the current study was planned to achieve the following objective and to test the stated hypothesis.

Objective:

To study the relationship between body image and mental health of women suffering from premenstrual syndrome.

Hypothesis:

The study aims to test the validity of the following hypothesis:- *It is hypothesized that mental health of women with premenstrual syndrome would be negatively related to body image disturbances.

Method:

Sample:

For the current study, 200 married females, with age ranging from 25 to 45 years were randomly selected and evaluated using the following tools.

Tools:

The investigator selected the following tools for collecting the data required for the present research area:-

1. General Health Questionnaire (GHQ-28):- The 28-item version of the General Health Questionnaire (GHQ-28) developed by Goldberg and Hillier in 1979. It consists of 28 items scored on a scale ranging from 'not at all', 'no more than usual', 'rather more than usual' to 'much more than usual'. Items are scored using the likert scale (0-1-2-3). Test-retest reliability has been reported to be high (0.78 to 0.9) (Robinson and Price 1982) and interrater and intrarater reliability have both been shown to be excellent (Cronbach's 0.9-0.95) (Failde and Ramos, 2000).High internal consistency has also been reported (Failde and Ramos 2000).
2. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Tennant et al., 2007):- WEMWBS is a 14 item scale of mental well-being covering subjective well-being and

psychological functioning, in which all items are worded positively and address aspects of positive mental health. The scale is scored by summing responses to each item answered on a 1 to 5 Likert scale. The minimum scale score is 14 and the maximum is 70. The Responses are made on a 5-point scale ranging from 'none of the time' to 'all of the time'. Scores range from 0 to 1 and are measured by Cronbach's alpha coefficient. The higher the co-efficient, the more highly correlated the items in the scale. A coefficient of 0.7-0.8 is ideal (Nunnally, 1978).

3. Premenstrual Symptoms Screening Tool (PSST) (Steiner, Macdougall, & Brown, 2003):-Premenstrual symptoms screening tool is simple user friendly tool which help identify women who meet DSM-1V criteria for Premenstrual dysphoric disorder as well as women who experience clinically significant premenstrual syndrome It is less time consuming, more practical and an effective screening tool for further assessment. PSST has content and face validity with an intraclass correlation coefficient of 0.9410 (95% CI: 0.9326, 0.9489) and a Cronback's alpha of 0.9412.

4. Multidimensional Body-Self Relations Questionnaire-Appearance Scale (MBSRQ-AS):- Participants' body esteem was assessed using the MBSRQ-AS, (Cash, 2000) a 34-item scale that was developed to examine individual's attitudes towards their own body image and appearance. The scale consists of five subscales: Appearance Evaluation (AE), Appearance Orientation (AO), weight Preoccupation (WP), Self-Classified Weight (SW), and lastly, the Body Areas Satisfaction (BAS) (Cash, 2000).using a 5-pt Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The MBSRQ-AS has demonstrated strong reliability and validity, with Cronbach's α of the five subscales ranging from .79 to .89 (Cash, 2000).

Statistical Analysis:

The data for the study was analyzed by using the correlation.

Research Design:

Research design of this paper is to look at the research questions posed in terms of hypothesis. 200 married women respondents were selected randomly from Punjab region. Questionnaires were used to assess the overall mental health, positive mental health, Premenstrual Syndrome and body image of the respondents. Furthermore, correlation was used to calculate and examine the relationship between the mental health, body image and demographical variables.

Results:

The data collected was rendered to statistical analysis and the results have been presented in the below table:-

Table 1: Descriptive Statistics (N=200)

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Demographic Variables	frequency	percent	Demographic Variables	frequency	percent	Demographic Variables	frequency	Percent	Demographic Variables	frequency	Percent
Education			**Family Type**			**Socioeconomic status**			**Complication during pregnancy**		
1) 10th	8	4.0	1) Nuclear	84	42.0	1) Low			1) Difficulty in pregnancy	4	2.0
2) up to +12	20	10.0	2) Joint	116	58.0	2) Middle	3	1.5	2) Medical Complication	114	57.0
3) Graduation	58	29.0				3) High	191	95.5	3) Normal	82	41.0
4) Post Graduation	84	42.0					6	3.0			
5) Any Other(M Phil, Ph .D)	30	15.0									
Number of children			**Menarche**			**Year of marriage**			**BMI**		
1) 0	13	6.5	1) 11	5	2.5	1) 1	7	3.5	1) 14	1	0.5
2) 1	65	32.5	2) 12	27	13.5	2) 2	16	8.0	2) 18	8	4.0
3) 2	113	56.5	3) 13	51	25.5	3) 3	17	8.5	3) 19	4	2.0
4) 3	7	3.5	4) 14	65	32.5	4) 4	12	6.0	4) 20	15	7.5
5) 4	2	1.0	5) 15	34	17.5	5) 5	18	9.0	5) 21	11	5.5
			6) 16	11	5.5	6) 6	9	4.5	6) 22	18	9.0
			7) 17	6	3.0	7) 7	13	6.5	7) 23	13	6.5
						8) 8	16	8.0	8) 24	30	15.0
						9) 9	8	4.0	9) 25	26	13.0
						10) 10	7	3.5	10) 26	24	12.0
						11) 11	7	3.5	11) 27	16	8.0
						12) 12	6	3.0	12) 28	17	8.5
						13) 13	4	2.0	13) 29	5	2.5
						14) 14	11	5.5	14) 30	3	1.5
						15) 15	8	4.0	15) 31	5	2.5
						16) 16	5	2.5	16) 32	2	1.0
						17) 17	2	1.0	17) 33	1	0.5
						18) 18	7	3.5	18) 37	1	0.5
						19) 19	5	2.5			
						20) 20	10	5.0			
						21) 21	4	2.0			
						22) 23	4	2.0			
						23) 24	1	0.5			
						24) 25	3	1.5			

Table-1: As evident from the above table, Maximum data comprised of females having Graduation or Post-Graduation. All were literate. Women, who were selected in this research, mostly belong to joint family. The sample was largely belonging to middle socio-economic status. It can be seen that maximum women faced medical complications during their pregnancy and having 2 children. Sample of women started having their first period /menstruation in the age of 11 to 17 years and maximum women were having their menarche at the age of 14 years. Data were well distributed across different years of marriage. The Normal Range of Body Mass Index (BMI) for women is From 18.5 to 24.9. Here, most of the respondents had almost close to normal BMI range.

Table -2 showing the correlations between all subscales of body image with mental health and Demographical variables.

Body Image	WEMWBS	Somatic Symptoms	Anxiety	Social Dysfunction	Severe Depression	Age	BMI
Appearance Evaluation	-0.083	-0.02	-0.013	0.02	-0.067	-0.032	0.094
Appearance Orientation	-0.031	-0.07	-0.021	0.043	0.02	0.018	-0.039
Body Area Satisfaction	-0.058	-0.031	-0.044	-0.077	-0.017	-0.054	0.028
Self classified Weight	0.111	-0.085	0.058	0.066	-0.051	.391**	0.102
Weight Preoccupation	0.11	-0.065	-0.044	0.049	0.114	.195**	-0.005

** signifies 0.01 level of significance
* signifies 0.05 level of significance

In above table, there is significant positive correlation of Self Classified Weight and Weight Preoccupation, subscale of body image with Age while all other variables were found to be Non-significant.

Discussion:

It was hypothesized that Mental Health of women with Premenstrual Syndrome would be negatively related to body image Disturbances. As is evident from above table, our results did not show any significant relationship between mental health and body image disturbances. But some studies and previous literature supported our hypothesis that mental health of the women suffering from premenstrual syndrome negatively related with body image disturbances. Studies such as Carr-Nangle, Johnson, Bergeron & Nangle in 1994 have indicated that body dissatisfaction may be elevated during the pre-menstrual period as a result of psychological factors (e.g., increased negative affect), increases in food intake, or common physical changes (e.g., bloating) that occur during these phases. Study revealed that premenstrual syndrome affect body image and can cause of body image disturbances or dissatisfaction. Atabe and Thompson (1990) & Jappe and Gardner (2009) defined that Body dissatisfaction was found to be highest in the pre-menstrual phase (pre-menstrual plus menstrual phases) compared to the follicular/mid-luteal phases. Survey indicates that about three-fourths of women experience some physical or emotional changes premenstrually, most have mild to moderate

symptoms, no different in type or intensity than the changes in body or mood that from time to time affect everyone. Typical emotional symptoms may include changes in body image and feelings of being unable to cope or having lost control in premenstrual period (Brody, 1989). Studied have been shown that body satisfaction linked with premenstrual period. In premenstrual period, body image dissatisfaction going to increased. Women with premenstrual syndrome/premenstrual dysphoric disorder exhibited significantly poorer appearance evaluation and body satisfaction (Berardis and Ferro, 2005). Some evidence shown that body image disturbance for the high menstrual distress subjects was greater in premenstrual phase. Menstruation time especially premenstrual period is associated with body image problems of the women (Altabe and Thompson, 1990).The hypothesis was proved wrong due to many factors one of which was Age, due to age factor women often tend to be busy in their daily life routines and have already found their partners and are raising their kids which hardly leaves them with any time to bother about their looks and hence they pay very less importance to their body images. Another important factor which can be held responsible for the hypothesis to turn out wrong is the cultural difference, which means that the respondents that have been chosen for the study belong to such cultural backgrounds which does not give more importance to the physical appearance of women, rather they tend to give more importance to the other traits of women like their homely expertise, maternal qualities etc. Another factor which can be held responsible for this hypothesis to prove wrong is the small sample size taken for the study, there is every possibility that this hypothesis may have turned out to be right if the sample size in hand was large in number. Body Mass Index (BMI) could be also held responsible for the hypothesis to turn out wrong as most of the respondents had almost close to normal BMI range and were not found in the extreme range of BMI. The tool used for measuring body image aspects did not yield many results while the area seemed to be highly significant. Hence, this tool may not have been very appropriate for the sample studied.

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