Original Article

The Moderating Role of Menopausal Status Between Somatic Symptoms and Development of Psychological Problems Among Pakistani Middle-Aged Women

Samia Wasif[1], Sadia Khan[2], Sobia Nawaz[3], Muhammad Aqeel[4], Khaula Batool Arbab[5]

[1]Assistant Professor, Department of Humanities, COMSATS Institute of Information Technology, Islamabad, [2] Assistant Professor, Dept of Obs and Gynae, Holy Family Hospital, Rawalpindi, [3] Assistant Professor, Dept of Obs and Gynae, DHQ Hospital, Rawalpindi Medical College, Rawalpindi [4]Lecturer, Department of Psychology, Foundation University, Rawalpindi Campus, [5]MS. Psychology, Department of Psychology, Foundation University, Rawalpindi.

***Address of Correspondence**: Dr. Samina Wasif, Assistant Professor, Department of Humanities, COMSATS Institute of Information Technology, Islamabad*
Email: samia.wasif@comsats.edu.pk

Abstract

Objective: The Current study was designed to investigate the moderating role of menopausal status between somatic symptoms and development of psychological symptoms including depression, anxiety and stress among Pakistani middle-aged women.

Methodology: 150 participants (Premenopausal n=57, Perimenopausal n=33 and Postmenopausal n=60) aged ranging from 40 to 60 years, were approached at different public and private hospitals of Peshawar, Islamabad and Rawalpindi, Pakistan. Purposive sampling technique was used based on cross-sectional design. Two instruments Depression, Anxiety and Stress Scale (DASS) Urdu translated version[1] and Bradford Somatic Inventory (BSI) translated version[2] were used to assess, depression, stress and anxiety and somatic symptoms respectively. The results revealed that Neurological symptoms were significantly predicting depression and stress for peri-menopausal women, while, Neurological symptoms were significantly predicting anxiety for postmenopausal women. Chest symptoms were significantly predicting anxiety for peri-menopausal women. Fatigue symptoms were significantly predicting depression for premenopausal women while it was also significantly predicting stress for postmenopausal women. Results further elaborated that panic symptoms were significantly predicting anxiety and depression for postmenopausal women.

Conclusion: Current study results would be a reference in the clinical setting to overcome psychological and physical problems of women with reference to their relevant menopausal status.

***Keywords*:** Depression, Anxiety, Stress, Somatic Symptoms and Menopausal Status.

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Introduction

Human growth cycles through several important stages from infancy through childhood to adolescence and youth to adulthood. Each of these stages is characterized by certain features that manifest in human beings. Many studies have been carried out on some of these stages while the period of adulthood especially the menopausal stage of adult life is yet to receive considerable attention.

Menopause is one of the most hypercritical stages of life among women.[1] Menopause is a universal biological phenomenon which is experienced by all females. It is frequently researched with the

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justification that menopause is a threat to health.[2] Menopause is largely unexciting part of life, though, the menopausal transition is a period in which women faces biologic vulnerability with marked physiological, psychological, and somatic symptoms.[3] Menopause has been portrayed as a time when women become ill, unattractive, depressed, and sexually less desirable.[4] The perimenopausal period is related with a higher susceptibility for depression with risk rising from early to late premenopausal and decreasing during post menopause women.[3]

Menopause is a natural transition that includes the biological, social and cultural variations linked with the aging process in women.[5, 6] Studies have shown that the physiological and psychological problems like fatigue, headache, depression, anxiety, nervousness, hot flushes associated with menopause is a crucial issue in the health problems of older women worldwide.[3]

Menopause frequently occurs between 40 and 60 years and marks the end of the reproductive phase of a women's life.[7] Menopause is defined as the permanent cessation of menses and is labeled after 12 months of amenorrhea without a pathologic cause.[8] While most women pass through the menopausal transition with slight difficulty, others may go through significant stress.[9] During menopause, women report experiencing symptoms of varying type and severity, including vasomotor symptoms, depressed mood, sleep disturbance, reduced sexual function and vaginal dryness commonly.[10] Undoubtedly, it is a challenging time in a woman's life.

Psychological symptoms allied with menopause include depression, anxiety, stress and other somatic symptoms as well. Depression is categorized as the feeling of hopelessness, devaluation of life, self-criticism, and lack of interest and inertia.[11,12] Anxiety is characterized as unconscious arousal, skeletal muscle effects, subjective experience of anxious effect and situational anxiety. [11, 12, 21, 25] High anxiety levels have been reported to worsen the somatic symptoms of menopause. [11, 12] Somatic symptoms is categorized as an expression of distress in which patients with psychological and emotional problems express their distress mainly through physical symptoms. [11, 12, 22, 23, 24]

Relatively few studies in Pakistan have systematically assessed the moderating role of menopausal status between somatic symptoms and development of depression, anxiety and stress among middle aged women. Thus, it appears that this reproductive event still remained a silent passage in the life of many women. Therefore, the present study is an attempt to look into the role of menopausal status in the somatic symptoms and psychological symptoms among middle aged women in Pakistan.

Methodology

One hundred and fifty diagnosed patients (Premenopausal women, n = 57; Perimenopausal women, n= 33; postmenopausal women, n = 60) with the chief complaint of gynecological issues were recruited in present study. Age ranged from 40 to 60 (M=47.44, SD=5.40) years. The participants were selected from gynecological out door of a private and public-sector hospitals of Peshawar, Rawalpindi and Islamabad, Pakistan. Only those women were included in study who fulfilled inclusion criteria of sample which is:

Menopausal status measured on the basis of self-reported bleeding patterns and categorized from the whole of the reproductive period prior to the menopause as follows

(1) Pre menopause: Regular menstruation within previous year [13, 14]

(2) Peri menopause: The period of one year prior to the menopause when the biological and clinical features of approaching menopause commence. It is that stage in which there is irregular menstruation for previous 3 months or less than months ago [13, 14] and

(3) Post menopause: The period of last menstruation to death as post menopause. It is also defined as not having menstruation throughout the previous 12 months .[13, 14]

Instruments: Following instruments/ scales were used in this study.

Depression, Anxiety and Stress Scale (Lovibond & Lovibond, 1995): It was developed by Lovibond &

Lovibond (1995) and translated by Zafar & Khalily, (2014). It consists of 42 items which assess three broad subscales (1) Depression (2) Anxiety and (3) Stress. All the items are positively scored.

(1) The depression subscale items are 3,5,10,13,16,17,21,24,26,31,34,37,38,42.
(2) The anxiety subscale items are 2,4,7,9,15,19,20,23,25,28,30,36,40,41.
(3) The stress subscale items are 1,6,8,11,12,14,18,22,27,29,32,33,35,39.

Scores for each subscale were calculated by summing the scores for the relevant items. Items measured symptoms during the past week and were scored on a 0 to 3 scale with (0) did not apply to me at all and (3) applied to me very much, or most of the time. Alpha reliability coefficient of translated version was reported as .83 for overall DASS and .63, .60, and .60 for Depression, Anxiety, and Stress subscales, respectively [15].

Bradford Somatic Inventory (David Mumford, 1989) The Bradford Somatic Inventory was developed by David Mumford, (1989) and was then translated[16]. It was designed to measure somatic symptoms including head, chest, abdomen, fatigue, heat, globus, and frequency. All the items refer to the past (a month ago) and not before that period. Each item refers to certain particular site referring to its relevant symptoms. Number of scale

(1) Head 1,5,8,11,20,26,30,37,39,41,
(2) Chest 3,6,13,19,32,42,
(3) Abdomen 2,9,14,21,25,33,43,
(4) Fatigue 10,17,24,27,28,29,39
(5) Heat 4,11,18,35,41, (5) Globus 15,31,36,
(6) Frequency 23,34,40, and
(7) Panic 7,12,16,19,22,32,35,44.

Procedure: 150 diagnosed patients (Premenopausal women, n = 57; Perimenopausal women, n= 33; postmenopausal women, n = 60) with the chief gynecological complaints were recruited in present study. Sample was selected as per the aforementioned sample inclusion criteria. All participants were assured that study information would be kept confidential and will be used for research purpose only. After the informed consent taken from the participants, the questionnaires were provided to them alongwith relevant instructions. Only those participants were incorporated in current study who volunteered for participation and were not reluctant. Data was statistically analyzed through SPSS-18 and AMOS. This study was approved by Institutional/ethical/ Review Board of Foundation University, Rawalpindi Campus.

Results

At the first step, missing values of both scales were dealt through an imputation method on SPSS-18.[17] Next moderating regression analysis was applied to assess the role of Menopausal status between Somatic symptoms and development of stress, depression and anxiety and presented in Table I.

Table I revealed that head symptoms were positively and significantly predicting depression in perimenopausal women (B=1.45, p<.001) as it is in premenopausal women (B=0.97, p < .001) and postmenopausal women (B=0.91, p<.001). On the other hand, head symptoms also positively and significantly predicting anxiety in postmenopausal women (B=1.21, p< .001), premenopausal women (B=1.20, p < .001) and perimenopausal women (B=1.06, p < .001). Interestingly, head symptoms was also positively and significantly predicting stress

Table I: The moderating role of menopausal status in somatic symptoms and development of stress, depression and anxiety among Pakistani middle-aged women(N=150)

Variables		Premenopausal (n=57)			Perimenopause (n=33)			Postmenopausal (n=60)		
IV	DV	B	S.E	B	B	S.E	B	B	S.E.	B
HD	Depression	0.97	0.26	0.47***	1.45	0.33	0.63***	0.91	0.24	0.43***
HD	Anxiety	1.20	0.20	0.62***	1.06	0.29	0.49***	1.21	0.18	0.58***
HD	Stress	1.03	0.28	0.47***	1.64	0.30	0.71***	1.18	0.24	0.55***
CST	Anxiety	0.02	0.35	0.01	2.00	0.52	0.60***	0.17	0.30	0.04
FTU	Depression	0.91	0.30	0.33***	0.83	0.36	0.26**	0.84	0.29	0.26***
FTU	Stress	0.76	0.33	0.26**	0.49	0.37	0.15	0.83	0.33	0.25**
PC	Anxiety	0.62	0.23	0.25***	-0.6	0.46	-0.20	0.86	0.24	0.29
PC	Depression	-0.16	0.13	-0.06	-0.15	0.23	-0.05	0.41	0.15	0.14**

in perimenopausal women (B=1.64, p<.001), premenopausal women, (B=1.03, p <.001) and postmenopausal women (B=1.18, p<.001). Fatigue symptoms was also positively and significantly predicting depression in premenopausal women (B=0.91, p <.001), perimenopausal (B=0.83, p<.01) and postmenopausal women (B=0.84, p<.001). However, Fatigue symptoms was also positively and significantly predicting stress in premenopausal women (B=0.76, p <.01) as compared to perimenopausal women. Results also elaborated that Panic symptoms was positively significant in predicting the anxiety (B=0.62, p <.001) in premenopausal women as compare to other two groups. It is signified from the results that the hypothesis of the current study which stated that Menopausal status play a moderating role between somatic symptoms and psychological (depression, anxiety and stress) symptoms among middle aged women, is supported.

Figure1, Figure 2 and Figure 3 bear out the findings as they are presented in Table I and substantiate the results by showing the same direction as are presented in the above Table I.

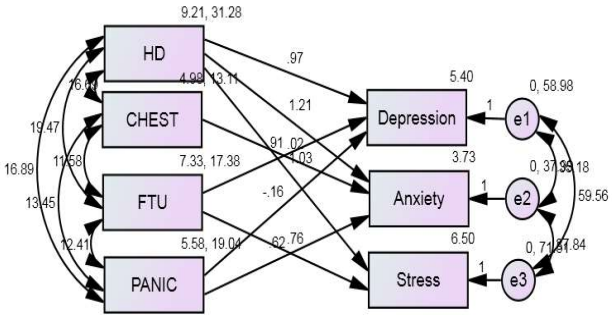

Figure 1. The impact of somatic symptoms on stress, depression and anxiety in premenopausal Pakistani Women

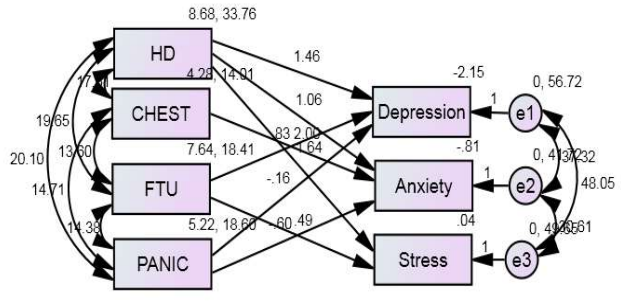

Figure 2. The impact of somatic symptoms on stress, depression and anxiety in perimenopausal Pakistani Women

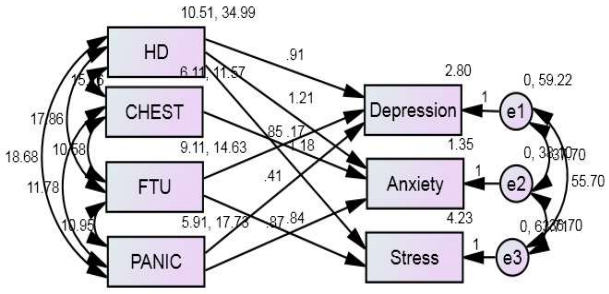

Figure 3. The impact of somatic symptoms on stress, depression and anxiety in Postmenopausal Pakistani Women

Discussion

Menopause is a universal biological phenomenon which is experienced by all females. It is frequently researched with the justification that menopause is a threat to health.[2] and is associated with the inevitable process of aging and illness.[4] The present study was designed to identify the moderating role of menopausal status between somatic symptoms and development of stress, depression and anxiety among Pakistani middle aged women.

Hypothesis of the current study i.e. “Menopausal status play a moderating role between somatic symptoms and psychological (depression, anxiety and stress) symptoms among middle aged women” is supported by the findings. Table 1 revealed that menopausal status was playing role of moderator between somatic symptoms and development of depression, anxiety and stress among Pakistani women. Moreover, results elaborated that somatic problems (head, chest, Fatigue, and panic) are one of most crucial factors for enhancing and provoking psychological problems including stress, anxiety and depression in premenopausal, perimenopausal and postmenopausal women. Study results shed light on it that perimenopausal women are more prone to have psychological problem including stress, anxiety and depression in the presence of somatic problems as compared to premenopausal and postmenopausal women. These results are consistent with numerous prior study findings which confirmed that somatic symptoms were positively associated with psychological problems in US middle-aged women. [14]

Interestingly, similar studies’ findings displayed that Asian middle-aged women were more predisposed to have somatic symptoms including headache with

psychological problems.[8, 18, 19] Similarly, domino theory explained that there is positive association between menopause and depression, where the menopause in itself generates certain vasomotor symptoms such as hot flashes and night sweats, which in turn can have a negative effect on sleep with frequent awakenings, which finally can lead to depressed and distressed moods.[3, 20] As an essence, current study findings explain that physiological problems due to menopause elevate risk for psychological problems including stress, anxiety and depression among middle aged women.

Conclusion

Current study concludes that Head symptoms and also chest symptoms as well a spanic symptoms significantly predicted the psychological problems including depression, anxiety and stress. This study would be helpful to understand physical and psychological problems of menopausal women.

Caring for menopause requires more than providing just medication. It is important for health care providers to help women think about menopause as a time to evaluate their health and lifestyle practices. Difference in symptoms reported by women may suggest differences in symptoms sensitivity or a tendency to under-report due to lack of education or embarrassment. These facts illustrate the need to assess the menopausal symptoms of midlife women accurately and to develop successful culturally focused preventive and control strategies for menopausal problems to have an easy and smooth midlife transition and to improve their quality of life. These aforementioned implications of the present study promise the women health individually and of the society at large.

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