Pakistan Journal of Psychological Research, 2017, Vol. 32, No. 1, 55-75

Menopausal Attitude and Symptoms in Peri and Post-Menopausal Working Women

Saira Batool, Rukhsana Kausar, Ghuncha Naqvi, Anum Javed, and Hafsa Tufail

University of the Punjab

The present study was aimed to examine working women's attitude towards menopause and menopausal symptoms. It was hypothesized that: a) Post-menopausal women are likely to show more positive attitude towards menopause as compared to peri-menopausal women; b) there is likely to be a negative relationship between attitude towards menopause and menopausal symptoms. Eighty women with equal number of nurses and teachers were recruited from public sector colleges and hospitals of Lahore, Pakistan. The sample ranged in ages between 45 - 60 years (Teachers M = 50.92, SD = 3.87; Nurses M = 49.55, SD = 3.93). Attitudes toward Menopause Scale (Shahwar & Khalid, 2003) and Greene Climacteric Survey (Greene, 1998) were used for assessment. Results revealed that nurses and post-menopausal women showed positive attitude towards menopause as compared to teachers and peri-menopausal women, respectively. Peri-menopausal women showed more severity of menopausal symptoms as compared to post-menopausal women. Positive attitude towards menopause negatively predicted menopausal symptoms. Findings highlighted the importance of psychological help for working women and that attention should be paid to change working women's attitude towards menopause, particularly, teachers in order to reduce symptoms in them.

Keywords. Attitude toward menopause, working women, menopausal symptoms, peri-menopause, post-menopause

Menopause is a natural and universal female midlife transition (Huffman, Myers, Tingle, & Bond, 2005). It is the permanent cessation of menstrual cycle resulting from a decrease in the ovarian reproduction of sex hormones (Kalb, 2007). The female body is genetically programmed to stop periods in middle age (Huffman &

Saira Batool, Rukhsana Kausar, Ghuncha Naqvi, Anum Javed, and Hafsa Tufail, Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan.

Correspondence concerning this article should be addressed to Saira Batool, Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan. E-mail: sairakhalid09@gmail.com

Myers as cited in Osarenren, Ubangha, Nwadinigwe, & Ogunleye, 2009). Menopause can be divided into two types that is, natural menopause and induced menopause. Natural menopause is a natural process of cessation of periods and it occurs usually between the ages of forty eight and fifty one, when ovaries stop to produce hormones. Induced menopause occurs when ovaries have been removed surgically or stop functioning as a result of chemotherapy, radiation drug therapy or any other medical treatments. It can occur at any age, as it is a deliberate health decision or can be a result of unexpected medical condition. There is no gradual adjustment period for preparing the body to face the post-menopausal changes because of the abrupt onset of induced menopause. After removing the ovaries surgically, women may experience symptoms as a result (Kalb, 2007).

A woman remains unaware about her menopausal status until twelve months have passed since her last period (Kalb, 2007). Menopause status can be determined by: (a) Women having regular menstrual periods in the last 3 months can be classified as pre-menopausal; (b) women having irregular periods, but they had a period in the last 12 months can be classified as peri-menopausal; and (c) women having no periods in the last 12 months or longer can be classified as post-menopausal. Women having a hysterectomy can be classified as surgically menopausal (Huffman et al., 2005).

During menopause women have been reported to experience many somatic complaints such as night sweats, sleep disturbances that lead to mood instability and depression. Anxiety and panic attacks are also reported to get elevated in the menopausal transition (Lobo, Kelsey, & Marcus, 2000). The symptoms of menopause may remain for the whole menopausal transitions (until the mid 50s), but some women may have these symptoms for the rest of their lives. The most common symptoms include hot flashes, sleep disturbances, psychological changes, loss of libido, irregularities in periods, night sweats, vaginal dryness, mood swings (sudden tears), fatigue, hair loss or thinning (head, pubic or all the body) or increase in facial hair, dizziness, mental confusion, sleep disorders, increase in fingernails, difficulty in concentration, disturbing memory lapses, light headedness, increase in allergies, depression, irritability, digestive problems, headaches, increased tension in muscles etc. (Worden, 2011).

The ratio of women who are affected from these menopausal symptoms are seventy percent. Typical menopausal symptoms, such as hot flashes or night sweats, are caused due to changes in hormonal levels in the female reproductive system. Almost all women notice early symptoms, while, they are still having periods. This stage of

slowly falling and changing hormone levels is called peri-menopause, which usually begins in the early 40s (Worden, 2011).

According to Greene (1998), menopausal symptoms consist of four dimensions that are psychological, physical, vasomotor, and sexual. Psychological symptoms includes quick heartbeat, feeling tense, insomnia, excitability, attack of pains, concentration problem, tiredness, loss of interest, depression, crying spells, and irritability. Physical symptoms include dizziness, pressure or tightness in head or body, numbness or tingling feelings in parts of body, headaches, muscle and joint pains, and breathing difficulties. Vasomotor symptoms include hot flashes and sweating at night. Sexual symptoms include loss of interest in sex.

Menopause, though a natural transition, is manifested as a critical event for a middle aged woman and may act as a hazard for her self-esteem and self-image. The menopausal symptoms experienced by women depend on their cultural background, social learning, and also on the facts that are related to the alteration of menopause. Many factors such as attitude, diet, overall health, genetics, and cultural group determine how a woman experiences menopause (Huffman et al., 2005).

According to the multifactorial model of climacteric, several factors play role in how a woman experiences and labels her menopausal symptoms and woman's attitude toward menopause is one of these factors (Veeniga & Kraaimat, 1995). Attitudes toward menopause fluctuate among different ethnic groups, and cultures, which support results from different investigators, therefore, results from one population of women cannot be generalized to another population (Huffman et al., 2005).

Positive attitudes toward menopause are associated with positive experiences of menopause and negative attitudes are associated with both negative symptoms and negative experiences of women (Dennerstein, Smith, & Morse, 1994; Malik, 2008; Papini, Intrieri, & Goodwin, 2002). Ayers, Forshaw, and Hunter (2009) also found that women having more negative attitudes towards menopause, in general, experience more symptoms during the menopausal evolution. Shahwar and Khalid (2003) study revealed negative correlation between attitude toward menopause and severity of menopausal symptoms. In another study, it was observed that working women undergo more psychological symptoms subsequent to menopause as compared to the nonworking women (Kakkar, Kaur, Chopra, Kaur, & Kaur, 2007). Educated women are reported to show a lower numbers of psychological and somatic symptoms. Age, and

employment status also contributed to significant alterations in menopausal symptoms. Women in older age show more positive attitude toward menopause as compared to the younger ones (Willis, 2006).

Joe et al. (2010) examined factors associated with experiencing menopausal symptoms in 657 post-menopausal Korean women. The researchers concluded that socio-demographic characteristics (more time spent in education, employment status, and longer post-menopausal duration) decreased the severity of menopausal symptoms while lifestyle factors, attitudes towards menopause, a dyadic relationship with partner, and inner psychological status were associated with the severity of menopause symptoms.

The attitude women show towards menopause has been reported to be prejudiced by their culture and economic settings they belong to. In particular, education and economic status play an important role in helping women maintain a good and healthy life during menopausal phase of life. Larocco and Polite (1980) assessed the extent of knowledge of women about menopause and found that working women and women with higher level of education had more knowledge than non-working and less educated women. They also found that attitude of women toward menopause varied in relation to their occupational status and education and positive attitude was predicted by higher education and professional status. Nurses are at the forefront of menopause practice, especially in primary care. They can play a valuable role in teaching patients about management options, as well as in screening women for menopause symptoms and encouraging them to ask about treatment options (Chism, 2014). A survey of knowledge, attitudes, and symptomology of menopause and hormone replacement therapy (HRT) in qualified nurses revealed a good degree of knowledge amongst these paramedics regarding menopause **(**Kansaria, Mayadeo, & Nandanwar, 2002). Nurses as health personnel can access knowledge and identify attitudes towards menopause that help them select coping strategies to deal with their menopausal problems.

Knowing more about menopause might empower women to better cope with menopausal changes (Devi, Dular, & Yaday, 2015). In a study conducted with nursing staff aged 40 and above, positive attitude towards their experience of menopause had given them maturity and confidence (Leon, Chedraui, Hidalgo, & Ortiz, 2007). Osarenren et al. (2009) in a study with 300 married teachers examined attitude of women towards menopause. Majority of the women showed concern about their husbands' reaction to their menopause (98%) and perceived menopause as an unpleasant experience (83%).

This discrepancy in attitudes may be due to the increased awareness and knowledge of the nursing staff regarding menopause because of their profession and thereby helping them adopt healthy lifestyle patterns (Pinto, 2010).

In a study, Zulkefli and Sidik (2003) determined both the prevalence of menopause and menopausal symptoms in a group of employed Malaysian teachers and reported 21.9% prevalence of menopause. They also reported high prevalence for skin dryness, hot flashes, fatigue, and excessive sweating in menopausal respondents.

There is significant difference in menopausal attitude across menopausal status. Those who had attained menopause significantly surpassed those pre-menopaused and those within the process. This implies that menopausal attitude is related to menopausal status with pre-menopause women being less positive while post-menopausal being more positive towards it (Tsehay, Mulatie, & Sellakumar, 2014). Other researchers (Abraham, Perz, Clarkson, & Llewellyn, 1995) reported that post-menopausal and older women consistently express positive feelings towards menopause than younger women. Hence, it can be concluded that direct experience with menopause plays important role in attitude formation that is, those who have not yet experienced menopause are likely to be more afraid of what to expect during menopause whereas post-menopausal women who have already passed this phase became less susceptible to false stereotypes. This indicates that once women have gone through menopause they find it less troubling than what they had been anticipating prior to it (Devi et al., 2015).

Menopause precludes bleeding and the risks of an undesired pregnancy, hence women welcome menopause as relief and freedom from attending taboos of menses. It is considered as a clean state, hence these women can participate unhindered in religious and social activities (Daftary & Desai, 2005). Papini et al. (2002) conducted a research to examine the relationship of menopausal attitude with recurrence of menopausal symptoms at midlife. Post-menopausal women expressed a more positive attitude toward menopause than peri-menopausal women. They found that a positive attitude toward menopause was associated with less menopausal symptoms. Mostly, women said that cessation of the menstrual periods was the most positive thing because they did not have to wait for irregular bleeding, use of sanitary equipment, take birth control methods, and they were not at risk of getting pregnant. In addition, most women stated that they could start new lives, and were feeling more calm, independent and mature (Ayranci, Orsal, Orsal, Arslan, & Emeksiz, 2010).

Devi et al. (2015) examined middle-aged women's menopausal symptoms experience and their attitude towards menopause in relation to demographic factors. Results revealed that peri-menopausal women experienced more menopausal symptoms than pre and post-menopausal ones. Post-menopausal women displayed positive attitude than pre and peri-menopausal ones. It was also found that menopausal status, education, and awareness about menopause among middle aged women were important determinants of positive attitude towards menopause.

Jamil and Khalid (2009) developed an indigenous Menopausal Symptom Scale to assess psychosocial aspects of menopause in the Pakistani women. They found that menopausal status, social support, attitude towards aging and menopause, lifestyle, gynecological history, and socio demographic characteristics were associated with menopausal symptoms. In their study the frequency of menopausal symptoms was high in the peri-menopause stage than others. One possible explanation for this finding was that, at the very beginning for women different symptoms are new and they feel them more strongly and hence report more menopausal complaints, however, with passage of time they get used to the symptoms and would not sense or experience strongly like early phase of menopause (Devi et al., 2015).

Nisar and Sohoo (2010) conducted a study with Pakistani women to assess severity of menopausal symptoms and their association with menopausal status and quality of life. The findings revealed significant differences in somatic symptoms of women in pre-menopause, peri-menopause and post- menopause status. However, quality of life was found significantly impaired across all stages of menopause. Among pri-menopausal group, physical symptoms such as bone and joint pain, irritability, and physical and mental exhaustion were the most common problems (80%). In peri-menopausal group, sleep disturbances, joint pain, and decreased libido were the major problems were reported by 70%. In Singapore, peri-menopausal women reported a significantly higher prevalence of vasomotor, urogenital, and psychological symptoms compared with pre-peri-menopausal and post-peri-menopausal women (Chim et al., 2002).

In another study, severity of menopausal symptoms and knowledge, attitude, and practices towards menopause among Saudi women were assessed. In this cross-sectional study, a sample of 233 Saudi women ranging in ages between 45 to 55 years old was selected. Findings indicated that majority of menopausal women reported suffering from somatic symptoms, changes in mood, and urinary symptoms. Most severe symptoms were found among peri-

menopausal sample, which could be due to the changes in hormonal level (Al-Olayet et al., 2010).

A number of researches have been conducted in the West exploring factors and implications of menopause for women, but this area is less explored in the Pakistani context. The main objectives of the present study were: to examine working women's attitude towards menopause and severity of menopausal symptoms; to compare peri and post-menopausal women on menopausal attitude and severity of symptoms and to examine the predictors of severity of menopausal symptoms in working women. Teaching and nursing being the most popular and socially acceptable professions in Pakistan for women, the present research compared teachers and nurses on their attitude and severity of menopausal symptoms. Knowing more about menopause might empower women to better cope with menopausal changes (Devi et al., 2015). Literature shows that nursing staff show more positive attitude towards menopause (Leon et al., 2007, Pinto, 2010) as compared to teachers (Osarenren et al., 2009).

Keeping in view the above literature, following hypotheses were formulated:

1. Post-menopausal women are likely to show more positive attitude towards menopause and less severity of menopausal symptoms as compare to peri-menopausal women.
2. There is likely to be negative relationship between attitude towards menopause and severity of menopausal symptoms in working women.

Method

Sample

The sample comprised of 80 women including 40 peri-menopausal and 40 post-menopausal women (equal number of nurses and teachers in both groups). The sample was recruited from four government colleges and four government hospitals in Lahore. The age of the participants ranged between 45 to 65 years (teachers $M = 50.92$, $SD = 3.87$; nurses $M = 49.55$, $SD = 3.53$).

Purposive sampling strategy was used for sample selection. Only those women were included who were married and experienced natural menopause. Women with any other medical condition (e.g., diabetes, heart diseases, etc.), experiencing any gynecological problem, or taking hormone replacement therapy were excluded. Demographic characteristics of the sample are given Table 1.

Table 1

Demographic Characteristics of the Sample (N = 80)

Variables	Teachers (*n* = 40)		Nurses (*n* = 40)	
	M (S.D)	*f (%)*	*M (S.D)*	*f (%)*
Age	50.92 (3.87)		49.55 (3.53)	
Education in years	16		15.05 (1.01)	
Duration of marriage	24.72 (5.56)		23.90 (4.38)	
No. of children				
1		4 (10.0)		3 (7.5)
2 – 4		33 (82.5)		33 (82.5)
5-7		3 (7.5)		4(10.0)
Working hours per day	4.88 (0.91)		7.15 (0.95)	
Family monthly income (Pak Rs)	100175.0 (47746.06)		63650.00 (26829.52)	
Health status				
Poor		3 (7.5)		4 (10.0)
Fair		22 (55.0)		17 (42.5)
Good		11 (27.5)		17 (42.5)
Excellent		4 (10.0)		2 (5.0)
Exercise				
Yes		11 (27.5)		25 (62.5)
No		16 (40.0)		4 (10.0)
Occasionally		13 (32.5)		11 (27.5)

Demographic information reveals that in teachers and nurse mean of duration of marriage was 24.72 and 23.90 years respectively. Most of teachers had three children and nurses had 2 children. The mean working weekly hours for teachers and nurses are 4.88 and 7.15 respectively. Nurses reported more work stress (M = 2.75) as compared to teachers (M = 2.52). Teachers' family income was more (M=100175) than nurses (M=63650). Overall health status reported by teachers and nurses was fair.

Measures

Demographic Information Sheet. Demographic information, work related information and menopause related information was gathered using demographic information sheet. The sheet gathered information pertaining to age, education, duration of marriage, number of children, family monthly income, working hours, health status and status of physical exercise.

Attitude towards Menopause Scale. Attitudes toward Menopause Scale (Shahwar & Khalid, 2003) assesses attitude of women towards menopause. It contains 15 items rated on a 5 point rating scale ranging 1= *strongly disagree* to 5=*strongly agree*. Five items are positively worded (Item no 1, 5, 6, 11, & 15) and ten items are negatively worded (Item no 2, 3, 4, 7, 8, 9, 10, & 12. Sample items are: 'menopause is a natural biological process', 'it is embarrassing to tell others that you are menopausal'. The score ranged from 15-75. High score indicates the favorable attitude of women towards menopause. For the present sample Cronbach Alpha of the scale was .81.

Greene Climacteric Scale (Greene, 1998). It consists of 21 items and has 4 dimensions of symptoms including psychological, physical, vasomotor, and sexual. Psychological symptoms are further divided into anxiety and depression symptoms. Each symptoms is rated on 4-point Likert scale (0 = '*not at all'* to 3 = '*extremely'*) to examine the severity of each symptom. Symptoms 1-11 are Psychological, (1-6 anxiety, 7-11 Depression); 12-18 are Physical; 19-20 are Vasomotor, and 21 is a probe for sexual dysfunction. Since there was no scoring method and reliability reported for symptom 21, therefore, it was discarded after discussion with the author. High score on each subscale means more severe symptoms. The maximum score ranges for anxiety symptoms 6-18; for depression symptoms is 5-15; for Somatic symptoms is 7-21 and for vasomotor symptoms is 2-6. The author reports test-retest reliability of .87, .84, & .83 for psychological, somatic, and vasomotor respectively. Cronbach Alpha reliability for the present sample was .76, .76, .72 &.78 for Depression, Anxiety, Physical, and Vasomotor symptoms respectively.

Procedure

Permission was taken from authors of the scales to use in the present study. Prior to data collection, a letter was taken from the Institute of Applied Psychology, University of the Punjab, Lahore authenticating the researchers' credentials, explaining nature and purpose of the research and requesting permission for recruiting participants. Permission from the authorities of colleges and hospitals was taken to collect data. Colleges and hospital authorities were also requested for provision of a separate room to conduct assessment. Initially, 110 women meeting inclusion criteria were contacted and of those 20 teachers and 10 nurses refused to participate mainly due to lack of interest, busy schedule and inability to share personal

information with the researcher. Therefore, the response rate was 72%. Written consent was taken from the participants after describing them nature and purpose of the study. Issues related to voluntary nature of participation, anonymity, confidentiality, and right to quit at any time they wished were thoroughly discussed. Individual assessment was conducted and interview schedule was used as a method of data collection.

Results

The research aimed to examine the attitude towards menopause and symptom severity in peri and post-menopausal working women; relationship between menopausal attitude and symptoms severity; predictors of menopausal symptoms. The data analytic strategy involved performing; (i) descriptive analysis, (ii) two-way analysis of variance to compare peri and post-menopausal teachers and nurses on menopausal attitude and symptoms, (iii) Pearson product moment correlation was used to examine the relationship between menopausal attitude and menopausal symptoms (iv) Stepwise regression analysis to examine predictors of menopausal symptoms.

A series of two way Analyses of Variance were performed to examine effect of type of profession (teacher vs nurses) and stage of menopause (peri vs post-menopausal) on attitude towards menopause and severity of symptoms (Table 2, Figures 1-5).

Table 2

Effect of Profession and Stage of Menopause on Attitude towards Menopause and Menopausal Symptoms (N=80)

Sources	*M*	*SD*	*F*	*P*
Attitude towards menopause				
Profession			18.26	.001
Teachers	48.70	12.10		
Nurses	56.05	7.02		
Stage of Menopause			47.85	.001
Peri-Menopause	46.43	9.77		
Post- Menopause	58.32	7.43		
Profession×Stage			5.14	.05
Anxiety symptoms				
Profession			2.68	.11
Teachers	5.41	2.13		
Nurses	4.85	1.14		

Continued…

	M	*SD*	*F*	*P*
Stage of Menopause			17.38	.001
Peri-Menopause	5.83	1.69		
Post- Menopause	4.43	1.45		
Profession ×Stage			6.57	.01
Depression symptoms				
Profession			.96	.33
Teachers	5.46	2.19		
Nurses	5.77	1.23		
Stage of Menopause			33.01	.001
Peri-Menopause	6.54	1.48		
Post- Menopause	4.70	1.56		
Profession×Stage			11.56	.001
Physical symptoms				
Profession			0.00	.99
Teachers	5.59	1.91		
Nurses	5.58	1.34		
Stage of Menopause			12.92	.001
Peri-Menopause	6.14	1.28		
Post- Menopause	5.03	1.78		
Profession× Stage			20.90	.001
Vasomotor symptoms				
Profession			2.76	.10
Teachers	6.09	2.82		
Nurses	7.00	2.38		
Stage of Menopause			7.89	.01
Peri-Menopause	7.31	2.18		
Post-Menopause	5.78	2.84		
Profession× Stage			5.53	.05

Results in Table 2 demonstrate that type of profession and stages of menopause have significant main as well as interactive effect on attitude towards menopause. Nurses hold significantly more positive attitude towards menopause as compared to teachers. Post-menopausal women have more positive attitude towards menopause compared to peri-menopausal women. Peri-menopausal nurses have more positive attitude towards menopause than peri-menopausal teachers. Post-menopause nurses show more positive attitude than post- menopause teachers.

Type of profession has no effect on anxiety, depression, physical, and vasomotor symptoms. Stage of menopause has significant effect on anxiety, depression, physical and vasomotor symptoms. Peri-

menopausal women reported more anxiety, depression, physical, and vasomotor symptoms as compared to post-menopausal women.

Figures 1-5

Interactive Effect of Profession and Stage of Menopause on Attitude towards Menopause and Menopausal Symptoms

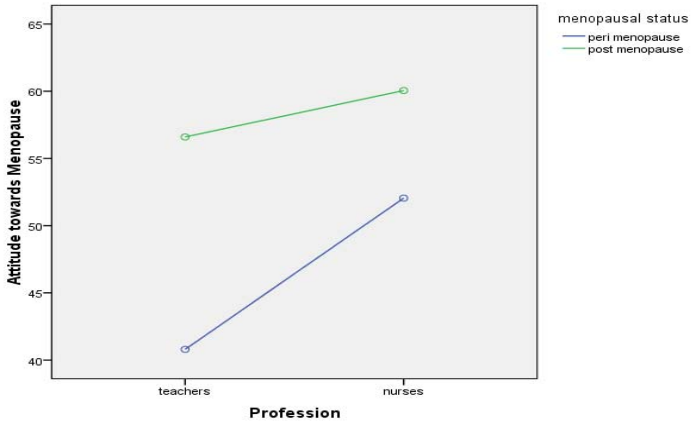

Figure 1. Interactive Effect of Profession and Stage of Menopause on Attitude towards Menopause

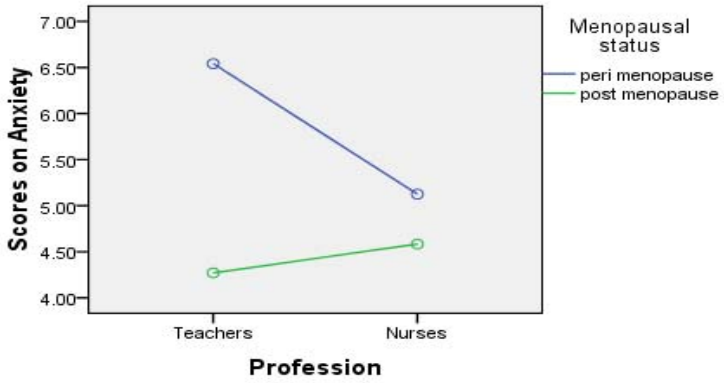

Figure 2. Interactive Effect of Profession and Stage of Menopause on Anxiety Symptoms

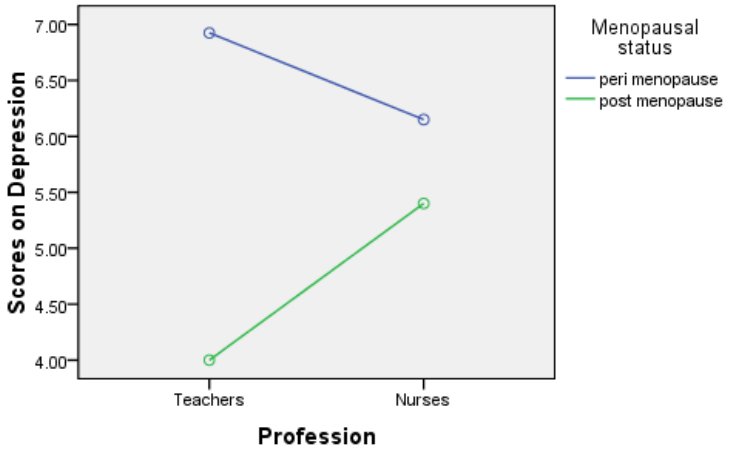

Figure 3. Interactive Effect of Profession and Stage of Menopause on Depression Symptoms

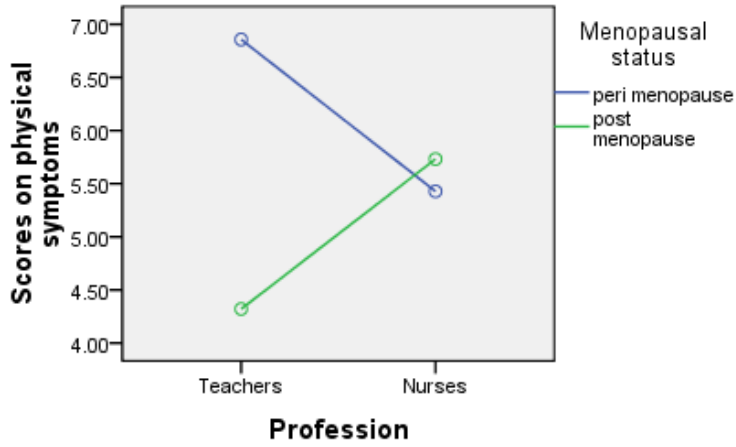

Figure 4. Interactive Effect of Profession and Stage of Menopause on Physical Symptoms

Figure 5. Interactive Effect of Profession and Stage of Menopause on Vasomotor Symptoms

Type of profession and stages of menopause show significant interactive effect on menopausal symptoms. Peri-menopausal teachers experience more anxiety symptoms compared to peri-menopausal nurses. Peri-menopausal nurses and teachers show more anxiety symptoms compared to post-menopausal teachers and nurses. Peri-menopausal teachers experience more severity of depressive symptoms as compared to peri-menopausal nurses and post-menopausal nurses. Peri-menopausal nurses show more severe depression symptoms as compared to post-menopausal teachers. Peri-menopausal teachers show more depressive symptoms as compared to post-menopausal nurses. Peri-menopausal women show more physical symptoms as compared to post-menopausal women. Peri-menopausal teachers show more severity of vasomotor symptoms as compared to peri-menopausal nurses whereas post-menopausal teachers experience more vasomotor symptoms than post-menopausal nurses. Peri-menopausal nurses show more vasomotor symptoms as compared to post-menopausal teachers.

To examine relationship between demographic characteristics, menopausal attitude and menopausal symptoms, Pearson product correlation analysis was performed (Table 3).

Table 3

Relationship between Demographic Characteristics, Menopausal Attitude, and Symptom (N = 80)

Variable	2	3	4	5	6	7	8	9	10	*M*	*SD*
1.VS	.43**	.54**	.41**	-.12	.09	-.11	-.22*	.29**	.09	6.55	2.63
2.PS		.62**	.64**	-.49**	.39**	-.09	-.14	.03	-.22*	5.58	1.64
3.DS			.71**	-.57**	.36**	-.03	-.03	.09	-.17	5.62	1.77
4.AS				-.66**	.37**	.06	-.03	-.10	-.07	5.13	1.72
5.ATM					-.30**	-.02	-.08	.27*	.14	52.38	10.50
6.NOC						.36**	.09	-.08	-.09	3.04	1.22
7.DOM							.09	-.17	.11	24.31	4.99
8.FI								-.49**	-.06	81912.5	42644
9.JH									.05	6.01	1.47
10.HS										2.59	0.76

Note. VS = Vasomotor Symptoms; PS = Physical Symptoms; DS = Depression Symptoms; AS = Anxiety Symptoms; ATM = Attitude toward menopause; NOC = No. of children; DOM = Duration of marriage; FI = Family income; JH = Job hours, HS=Health status.
*$p < .05$; **$p < .01$; ***$p < .001$.

It can be seen that attitude towards menopause has significant negative relationship with physical, depressive and anxiety symptoms. Moreover, number of children has negative whereas working hours have positive relationship with attitudes towards menopause. Family income has negative relationship with vasomotor symptoms in women.

Stepwise regression analysis was carried out to examine predictors of menopausal symptoms (Table 4).

Table 4

Demographic Characteristics and Attitude towards Menopause as Predictors of Menopausal Symptoms (N=80)

Anxiety	Model 1 β	Model 2 β	95 % CI
Positive Attitude	-.66***	-.60***	[-.67 -.38]
Number of children		.19*	[.02 -.51]
R^2	.43	.46	
F	59.32***	33.46***	
ΔR^2		.45	
ΔF		4.75*	
Depression			
Positive Attitude	-.57***	-.64***	[.15- .8]
Job hours		.27**	[.11- .54]
R^2	.33	.39	
F	37.48***	24.74***	
ΔR^2		.06	
ΔF		8.43**	

Continued…

Anxiety		Model 1 β	Model 2 β	95 % CI
Physical Symptoms				
Positive Attitude	-.49***	-.41***	-.38***	[-.09 -.03]
Number of Children		.27**	.36**	[.21 - .76]
Family income			-.19*	[.00 - .00]
R^2	.26	.31	.35	
F	24.93***	17.09***	13.63***	
ΔR^2		.06	.04	
ΔF		7.19***	5.02*	
Vasomotor Symptoms	Model 1 β	95 % CI		
Working hours	.29**	[.14 - .91]		
R^2	.09			
F	7.33**			
ΔR^2	.09			

Note. ΔR^2 = R Square change, ΔF = F change, CI = Confidence Interval.

*$p < .05$; **$p < .01$; ***$p < .001$.

Findings in Table 4 show that attitude towards menopause and number of children predict severity of anxiety symptoms, whereas attitude towards menopause and working hours predict severity of depressive symptoms. Attitude towards menopause, number of children, and family income emerged as significant predictors of physical symptoms, whereas, job hours predict vasomotor symptoms in women.

To summarize, the type of profession and stage of menopause had significant main and interaction effect on attitude towards menopause. Stage of menopause had significant main effect on severity of menopausal symptoms whereas type of profession and stage of menopause had significant interact effect on menopausal symptoms. Attitude towards menopause, number of children, and family income were significant predictors of psychological and physical symptoms. Working hours significantly predicted vasomotor symptoms in women.

Discussion

The present study was aimed to examine effect of type of profession and stage of menopause on working women's attitude towards menopause and severity of symptoms. It also examined relationship between working women's attitude towards menopause and severity of symptoms. In our sample, nurses showed more positive attitude towards menopause as compared to teachers. Our

findings are in line with Leon et al.s' (2007) study who also found that majority of the female nurses perceived menopause as a positive event and attributed it to maturity and confidence. On the contrary, in a research conducted on teachers, Osarenren et al. (2009) observed that majority of the female teachers reported menopause as unpleasant experience (83%). Positive attitude of the nurses towards menopause as compared to the teachers could be attributed to the medical knowledge they possess as part of their training and practice.

The findings of the present study suggest that women at post-menopausal stage had more positive attitude towards menopause than peri-menopausal women. Similarly, our research showed that peri-menopausal women experienced more severity of symptoms compared to the post-menopausal women. Papini et al. (2002) also found that post-menopausal women expressed more positive attitude towards menopause than those at peri-menopausal stage. Moreover, previous research has shown decreased severity of menopausal symptoms in relation to positive menopausal attitudes and duration of menopause (Joe et al., 2010). One plausible explanation for this difference in attitude between peri - and post-menopause could be due to the anticipated apprehensions associated with menopause and non-preparedness for its implications. The experience of menopause could have helped women live the reality and would have helped them improve their attitude towards menopause which in turn would have reduced symptoms.

Another finding of the present study was that attitude towards menopause, long job hours, number of children, and family income emerged as significant predictors of menopausal symptoms. There is empirical evidence, which lends support to our findings. Dennerstein et al. (1994) found that positive menopausal attitude is associated with positive experiences of menopause whereas negative attitudes were related to both negative experiences and negative symptoms. In another study, income, perceived stress, and attitude toward menopause and aging were related to intensity of symptoms (Nosek et al., 2010). One possible explanation is that long working hours cause stress among women as a result they may experience more severity of menopausal symptoms. Consistent with our study findings, Gharaibeh, Al-Obeisatand, and Hattab (2010) also found a significant relationship between the severity and occurrence of menopausal symptoms and age, education, number of children, family income, perceived health, and menopausal status of women.

Limitations and Implications

The sample of the present study comprised of women from two professions and was recruited from only one city, which makes one cautioned about generalizations of the findings. Moreover, sample size was small. The future researchers may consider expanding data collection from working women in other professions as well as nonworking women and also to recruit sample from other cities or regions of Pakistan. Sample size also needs to be increased in order to increase generalization of the findings. It is also important that future researches assess the extent of knowledge about menopause in middle aged women using quantitative and qualitative approaches.

Despite above stated limitations of the study, the findings have important implications for women health. It is important that women are psycho-educated about stages and implications of menopause to help improve their attitude towards menopause, which in turn would alleviate post-menopausal symptoms in them. Moreover, medical care providers can educate women about menopause, its symptoms, long term consequences, and effective ways of dealing with it. This would help bring significant improvement in quality of life of Pakistani women.

Conclusion

It is concluded that profession and menopausal status had significant effect on attitude towards menopause. Attitude towards menopause had implications for psychological and physical health of women. The findings highlight importance of the knowledge about menopause and its likely implications for women and warrant the need to safeguard health care needs of working women. Findings also highlight the significance of provision of psychological help for women and to focus on improving their attitude towards menopause, which in turn would help reduce menopausal symptoms in them.

References

Abraham, S., Perz, J., Clarkson, R., & Llewellyn, J. (1995). Australian women's perceptions of hormone replacement therapy over 10 Years. *European Journal of Menopause*, *21*, 91-95.

Al-Olayet A. Y., Al-Qahtani, I. F., Al-Essa, D. I., Al-Saleek, F. H., Al-Moutary, R. N., Al-Mudimeg, L. M. … & Ajab-nor, M. O. (2010). Severity of menopausal symptoms, and knowledge attitude and practices towards menopause among Saudi women. *Scientific Research and Essays*, *5*(24), 4077-4079.

Ayers, B., Forshaw, M., & Hunter, S. M. (2009). The impact of attitudes towards the menopause on women's symptom experience: A systematic review. *Maturitas, 65*(1), 28-36. doi:10.1016/j.maturitas.2009.10.016.

Ayranci, U., Orsal, O., Orsal, O., Arslan, G., & Emeksiz, D. F. (2010). Menopause status and attitudes in a Turkish midlife female population: An epidemiological study. *BMC Women's Health, 10*(1). doi:10.1186/ 1472-6874-10-1.

Chim, H., Tan, B. H., Ang, C. C., Chew, E. M., Chong, Y. S., & Saw, S. M. (2002). The prevalence of menopausal symptoms in a community in Singapore. *Maturitas*, *41*(4), 275-282.

Chism, L. A. (2014). Guiding your patients through menopause. *American Nurse Today*, *9*(1). Retrieved from https://americannursetoday.com/ guiding-your-patients-through-menopause/

Daftary, S. N., & Desai, S. V. (2005). *Selected topics in obstetrics and gynaecology* (1st ed.). New Delhi: BI Publications Pvt. Limited.

Dennerstein, L., Smith, A., & Morse, C. (1994). Psychological well-being, mid-life and the menopause. *Maturitas, 20,* 1-11.

Devi, A. M., Dular, S. K., & Yaday, Y. (2015). A descriptive study to assess the level of knowledge and attitude regarding menopause among menopausal women in selected rural areas in Faridabad. *International Journal of Advances in Nursing Management, 3*(1), 7-9.

Gharaibeh, M., Al-Obeisat, S., & Hattab, J. (2010). Severity of menopausal symptoms of Jordanian women. *Climacteric, 13*(4), 385-394.

Greene, J. G. (1998). Constructing a standard Climacteric Scale. *Maturitas, 29*, 25-31.

Huffman, S. B., Myers, J. E., Tingle, L. R., & Bond, L. A. (2005). Menopause symptoms and attitudes of African women: Closing the knowledge gap and expanding opportunities for counseling. *Journal of Counseling and Development, 83*, 48-56.

Jamil, F., & Khalid, R. (2009). *Development and validation of Menopausal Symptoms Scale and psychosocial aspects of menopause* (Unpublished MPhil. Dissertation). Department of Applied Psychology: University of the Punjab Lahore, Pakistan

Joe, S. H., Kim, J. H., Ko, S. D., Ko, Y. H., Park, M. S., & Yang, J. (2010). Factors influencing the severity of menopause symptoms in Korean post-menopausal women. *Journal of Korean Medical Science, 25*(5), 758-765. doi: 10.3346/jkms.2010.25.5.758.

Kakkar, V., Kaur, D., Chopra, K., Kaur, A., & Kaur, I. P. (2007). Assessment of the variation in menopausal symptoms with age, education and working/nonworking status in north-Indian sub population using Menopause Rating Scale (MRS). *Maturitas, 57*(3). doi: org/10.1016/j. maturitas.2007.02.026.

Kalb, K. B. (2007). *The everything health guide to menopause: Reassuring advice and up to date information to keep you healthy and happy* (2nd ed.). Avon Mass: Adams Media Corp.

Kansaria, J., Mayadeo, N., & Nandanwar, Y. (2002). The effect of estradiol on vaginal collagen metabolism in post-menopausal women with GSI. *British Journal of Obstetrics and Gynaecology*, *21*, 109-339.

Larocco, S. A., & Polite, D. F. (1980). Women's knowledge about the menopause. *Nursing Research, 29*(1), 10-13.

Leon, P., Chedraui, P., Hidalgo, L., & Ortiz, F. (2007). Perceptions and attitudes toward the menopause among middle aged women from Guayaquil, Ecuador. *Maturitas, 57*(3), 233-238.

Lobo, R. A., Kelsey, I. L., & Marcus, R. (2000). *Menopause: Biology and pathobiology.* USA: Academic Press

Malik, H. S. (2008). Knowledge and attitude towards menopause and hormone replacement therapy among post-menopausal women. *Journal of Pakistan Medical Association*, *58*(4), 164-167.

Marahatta, R. (2012). Study of menopausal symptoms among peri and post-menopausal women attending NMCTH. *Nepal Medical College Journal*, *14*(3), 251-255.

Neugarten, B. (1967). The awareness of middle age. *Journal of Adulthood Health, 20*(4), 432-445.

Nisar, N., & Sohoo, A. N. (2010). Frequency of menopausal symptoms and their impact on the quality of life of women: A hospital based survey. *Journal of Pakistan Medical Association, 59*(11), 752-756.

Nosek, M., Kennedy, H. P., Beyene, Y., Taylor, D., Gillliss, C., & Lee, K. (2010). The effects of perceived stress and attitudes toward menopause and aging on symptoms of menopause. *Journal Midwifery Women's Health, 55*(4), 328-334.

Osarenren, N., Ubangha, M. B., Nwadinigwe, I. P., & Ogunleye, T. (2009). Attitudes of women to menopause: Implications for counseling. *Journal of Counseling, 2*(2), 155-164.

Papini, D. R., Intrieri, R. C., & Goodwin, P. E. (2002). Attitude toward menopause among married middle-aged adults. *Journal of Pakistan Medical Association, 36*(4), 55-68.

Pinto, M. E. (2010). A Study on knowledge and attitude regarding menopause among rural and urban married women in Mangalore. *Journal of South Asian Federation of Obstetrics and Gynecology*, *2*(3), 233-235.

Shahwar, D. E., & Khalid, R. (2003). *A study of sense of coherence of menopausal women, their attitude toward menopause and severity of menopausal symptoms* (Unpublished MSc. Thesis). Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan.

Tsehay, D. S., Mulatie, M., & Sellakumar, G. K. (2014). Determinants of menopausal symptoms and attitude among middle aged women: The case of Dangila Town, North West Ethiopia. *Innovare Journal of Social Sciences, 2*(1), 15-20.

Veeniga, A. T., & Kraaimaat, F. W. (1995). A multi factorial approach to complaints during the climacteric. *Journal of Reproductive and Infant Psychology*, *13*(2), 69-77.

Willis, S. l. (2006). *The baby boomers grow up: Contemporary perspectives on midlife*. USA: Routledge

Worden, J. (2011). *The menopause*. Retrieved from: http://www.netdoctor.co.uk/diseases/facts/menopause.htm

Zulkefli, N. A. M., & Sidik, S. M. (2003). Prevalence of menopausal symptoms among female teachers in Seremban, Negeri Sembilan. *Asia Pacific Family Medicine*, *2*, 235-238.

Received March 26, 2014
Revision received June 23, 2017