

Linking Menopausal Status, Climacteric and Psychological Symptoms: Evidence from Middle Aged Pakistani Women **Khaula Batool Arbab¹, Muhammad Aqeel², Samia Wasif³ & Ammar Ahmed⁴**

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Menopause is a crucial and normal developmental phase in a life of woman. During this period, women experience social, psychological and physical changes. Menopausal symptoms experienced by women may differ enormously from culture to culture; consequently, there is a need to examine these signs and linked to risk factors in different population. This current paper designed to investigate the relationship between attitude towards menopause and climacteric and psychological symptoms of Pakistani women in menopause. Moreover, this study also investigated the differences in psychological and climacteric symptoms among postmenopausal premenopausal and perimenopausal women. Purposive sampling technique was used based on cross-sectional design. One hundred fifty participants (premenopausal, n = 57; perimenopausal, n = 33; postmenopausal, n=60) were included from different private and government hospitals of Peshawar, Islamabad and Rawalpindi, Pakistan from 2015 to 2016. Age ranged from 40 to 60 years. Two scales, Greene Climacteric Scale (Salik, & Kamal, 2010) and depression, anxiety and stress scale (Lovibond & Lovibond, 1995; Zafar & Khalily, 2015) were used to measure psychological, physical, vasomotor sexual Dysfunction, stress, anxiety and depression. This current paper results demonstrated that postmenopausal women tended to have somatic, sexual dysfunction and psychological symptoms as compared to premenopausal, perimenopausal women. This study would be helpful to understand health and psychological problems of menopausal women

Keyword. Menopausal Status, climacteric Symptoms. Stress, anxiety and depression.

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Menopause is an important event linked to many psychological and physical changes that reason a difficult phase in women's life (Erbil, 2017; Kim, Cho, Ahn, Yim, & Park, 2014). There are several women's aspects may be affected by menopause. It has deleterious effect on mental health of women. Its harmful effects are associated with psychological problems including stress, anxiety, depression, sexual function sexual arousal, sexual fantasies, sexual desire, night sweats, hot flushes, vasomotor symptoms, breast and skin atrophy, muscular, cardiovascular system diseases, skeletal problems, and senile vaginitis (Erbil, 2017; M. S. Hunter & O'Dea, 1997; Tamaria et al., 2013; Wasif, Khan, Nawaz, Aqeel, & Arbab, 2017).

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 (Ahmed, Ammar Ahmed, Akhtar, & Salim, 2017; Cisheng et al., 2017; Jami & Kamal, 2017; Kalsoom, Masood, & Jami, 2017; Wasif et al., 2017). Menopause is one of most an important phase women's life (Rossouw et al., 2002). It is a universal biological problem that is experienced by all women. It is documented in previous studies that menopause women has health problems (Dvornyk et al., 2006). The word menopause is simply explained end of monthly cycles. Menopause is a normal and for most Women largely unexciting part of life. For some Women the menopausal transition is a period of biologic vulnerability with marked physiologic, psychological, and somatic symptoms (Tamaria et al., 2013). The World Health Organization (1981) define the climacteric as a gradual process spanning the transition between the reproductive and the non-reproductive stages of life, which may span between 40-60 years. The term climacteric refers to the period of gradual reduction in ovulation

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and decrease in output of ovarian hormones. The duration of these stages varies among women.

For some Women, though, the menopausal transition is a period of biologic vulnerability with evident physiologic, psychologic, and somatic symptoms (Tamaria et al., 2013). Menopause has been portrayed as a time when women become ill, unattractive, depressed, and sexually less desirable (Chrisler, 2008).

The menopause is derived from two Greek words *menos* (month) and *pausos* (end), which means the end of monthly cycles of menstruation. Menopause is a natural transition that includes the biological, social and cultural variations linked with the aging process in women (Zöllner, Acquadro, & Schaefer, 2005). The internationally accepted classification defines a woman as postmenopausal if she has not menstruated during the previous 12 months; as premenopausal if she is still menstruating regularly and as perimenopausal or menopausal if menstruation became irregular but occurred in the course of 12 months. The assessment of menopausal status relies on these criteria (Jaszmann, 1973).

Fatigue, headache, depression, anxiety, nervousness, loss of appetite, hot flushes, constipation are the symptoms that occur during the menopausal phase. The menopausal transition of menopause marks the end of women's reproductive period. Studies have shown that the physiological and psychological problems associated with menopause is an crucial issue in the health problems of older women worldwide (Tindal, 1987).

Depression which is categorized as the feeling of hopelessness, devaluation of life, self-criticism, and lack of interest and inertia (Lovibond & Lovibond, 1995). Some women relate menopause with the development of depression (Tindal, 1987). A women with a history of depression have up to 5 times more chances to develop Major depression disorder diagnosis during this period of time. The main predictors of

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depression are the social stressors, exercise, vasomotor symptoms and past history of depression (Tamura et al., 2013).

A domino theory was projected for the relationship between menopause and depression, where menopause itself generates some vasomotor symptoms such as hot flashes and night sweats which in turn can have a harmful effect on sleep with recurrent awakenings, and can finally lead to depressed and upset moods (Campbell & Whitehead, 1977).

Anxiety is defined as a sense of nervousness, worry, fear, uneasiness and terror as what will happen. Whereas fear is the emotion in which we can feel the danger is present, anxiety is a sense of predictable difficulty, danger, or threat. Anxiety can be mild to severe and the severity depends on the person and situations. The feeling of nervousness falls in the mild anxiety category. A person with severe anxiety may feel fear or panic. Feelings of tension and worrying are type of anxiety (Lyness, 2007). Some women link menopause with development of anxiety (Tindal, 1987). Menopause hot flashes were associated with increased scoring on anxiety measures. The measures of anxiety are generally composed of items which measure somatic and affective symptoms. It was reported that anxiety scores were higher among postmenopausal women compared to pre-menopausal women (Barentsen, van de Weijer, van Gend, & Foekema, 2001).

According to Bradford Somatic with a high and middle BSI score produces point rule of 66% of women who suffer from psychiatric disorders. 70% of these disorders were depressive disorder and other were anxiety disorders (Mumford, Saeed, Ahmad, Latif, & Mubbashar, 1997). Women especially were having common comorbidities of depression and anxiety (Hariharan, Ramakrishnan, & Mathrubootham, 1993). Patients are often left with a feeling of dissatisfaction. There might be an existence of strong association between psychiatric morbidity and physical symptoms despite the fact of whether they have a medical clarification or not (Kisely, Goldberg, & Simon, 1997). Hot flushes and night sweats are one of the frequently reported menopausal

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symptoms which are also well-known as vasomotor symptoms. Cross-cultural differences are found in hot flushes reporting. In terms of the physical experience, hot flushes are usually defined as sensations of heat in the face, neck and chest often accompanied by perspiration or shivering (Obermeyer, Ghorayeb, & Reynolds, 1999; Thomas, 2005).

Research from a range of studies has shown that a large minority of women report vasomotor symptoms earlier in midlife, before the onset of menstrual cycle changes and well into their 60's and 70's after the menopause transition (Barnabei et al., 2005; Barnabei et al., 2002; Freeman et al., 2001). A number of studies, including the Women's Health Study, reveal that around one-third to a half of women report experiencing sexual problems during and after the menopause. While a reduced libido did not create problems for all women, it was a source of anxiety for those who had a previously active sexual relationship. (Obermeyer et al., 1999).

The premenopausal phase is linked to higher vulnerability for depression as compare to post menopause period but women is going through post menopause period have higher chances to have major depression disorder diagnosis. Negative psycho-social factors such as major life events, daily disturbances and negative expectations of menopause and vasomotor symptoms are associated with psychological problems including stress, anxiety and depression (Tamaria et al., 2013; ; Kalsoom, Masood, & Jami, 2017; Khan, Amanat, Aqeel, Sulehri, Amanat, Sana, & Amin, 2017; Bibi, Sobia, Mustanir & Sana 2017; Peter, Abbas, Aqeel, Akhtar, & Farooq, 2017; Hussain, Rohail, & Ghazal, 2017; Rehna & Hanif, 201; Aftab & Malik, 2017).

Several studies reported that both psychological and biological factors such as educational, occupational, and social status, health issues, body mass index, daily stressful life events, level of physical activity, drug addiction, number of children, sexual orientation, marital satisfaction attitudes towards menopause health status, and ageing were positively linked to enhance psychological problems included stress, anxiety and depression. During the menopausal phase, physical and

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psychological problems such as headache, fatigue, nervousness, hot flushes, depression, anxiety are major symptoms that experienced (Dodin et al., 2008; Kaewboonthum, 2003; Sharma, Tandon, & Mahajan, 2007; Trivedi, Mishra, & Kendurkar, 2007; Yahya & Rehan, 2003).

Method

Objective

1. To investigate the relationship among stress, anxiety, depression, somatic symptoms and climacteric symptoms in premenopausal, perimenopausal and postmenopausal women.

Hypothesis

1. Postmenopausal women will tend to have stress, depression, anxiety as compared to premenopausal and perimenopausal women.
2. Postmenopausal women will predispose to more somatic symptoms and sexual dysfunction than premenopausal and perimenopause women.

Sample

Purposive Sampling technique was used based on cross-sectional design. 150 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 outdoor of a private and public sector hospitals of Peshawar, Rawalpindi and Islamabad, Pakistan in 2015. Inclusion criteria included only those women who had reported menopause's symptoms last 2 years. Menopausal status was measured on basis of self-reported bleeding patterns and categorized as the time from the whole of the reproductive period prior to the menopause as follows (1) Pre menopause: Regular menstruation within previous year. (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. (3) Post menopause: The period of last

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menstruation to death as post menopause. It is also defined as not having menstruation throughout the previous 12 months (Hunter & Rendall, 2007; Hunter & O'Dea, 1997; Kaewboonthum, 2003).

Instrument

Following instrument was used in the present study.

Greene Climacteric Scale (GCS). Greene climacteric scale was used to measure the symptoms of menopause in middle aged women and was developed by Greene (1976) and was also translated in Urdu version by (Salik & Kamal, 2010). The scale is a 4-point rating scale and responses are scored as 0, not existing; 1, sometimes (*symptom exists but is not bothersome*); 2, often (*bothersome during daily activities*); and 3, very often (*interfering with daily activities*). The scale consists of 21 items which was divided into four clusters.

- (1) Psychological 1,2,3,4,5,6,7,8,9,10,11
- (2) Physical 12,13,14,15,16,17,18
- (3) Vasomotor 19,20
- (4) Sexual Dysfunction 21

Assessment of depression, anxiety and stress scale (DASS).

Depression, anxiety and stress was devised by Lovibond & Lovibond (1995) and translated into urdu language by Zafar & Khalily (2015). It consists on 42-items that ask patients to rate their level of accord for each items of all subscales on a 0 (*did not apply to me at all*) to 3 (*applied to me very much*) instruments. Three aspects have been measured via DASS; stress, anxiety, social, and physical functioning (Lovibond & Lovibond, 1995). The higher scores show higher level of stress, anxiety and depression while lower scores demonstrate lower prevalence of stress, anxiety, and depression. The reliability for whole scale ($\alpha = .92$) is adequate in present study.

Bradford Somatic Inventory. The inventory was designed to evaluate somatic symptoms comprehensive regarding somatic symptoms linked with anxiety and depression. Bradford Somatic Inventory was

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developed by David Mumford (1989) and the Urdu version of Bradford Somatic Inventory was developed by Naraghi (1991). All the items refers to the past (a month ago) and not before that one month period. (Mumford et al., 1997). The scale consisted of 44 items and has 8 subscales. It is a Likert type scale rating from '0' to '2'.

- (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
- (6) *Globus* 15,31,36
- (7) *Frequency* 23,34,40
- (8) *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 the questionnaires were provided to each participant and relevant instructions was provided to them. Only those participants were incorporated in current study who were not reluctant and volunteered for participation. Data was statistically analyzed through SPSS-18. This study was approved by Institutional/ethical/ Review Board of Foundation University, Rawalpindi Campus.

Analysis Plan

In the First steps of analysis, imputation method was used to deal missing values of climacteric symptoms, stress, anxiety and depression on Spss-18 (Field, 2009). In the Second steps of analysis, Product moment correlation was used to confirm relationship among climacteric symptoms, stress, anxiety and depression in premenopausal,

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perimenopausal and postmenopausal women (Field, 2009). In the next step, ANOVA was used to find the difference between premenopausal, perimenopausal and postmenopausal status of middle aged women (Field, 2009).

Results

Table 1

Mean and standard deviation, cronbach alpha reliability, correlation matrix among depression anxiety stress scales, and bradford somatic inventory along with subscales for premenopausal women (N=57)

Variables	M	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13
1.DASST	60.74	34.48	.968	-	.986**	.969**	.980**	.795**	.759**	.748**	.692**	.724**	.568**	.701**	.438**	.633**
2.Depression	20.17	11.50	.905		-	.935**	.959**	.753**	.731**	.718**	.640**	.666**	.547**	.687**	.411**	.587**
3.Anxiety	19.31	11.05	.902			-	.912**	.823**	.780**	.754**	.709**	.752**	.598**	.718**	.474**	.673**
4.Stress	21.46	12.18	.916				-	.751**	.703**	.703**	.659**	.701**	.506**	.652**	.412**	.606**
5.BST	38.60	24.31	.963					-	.916**	.936**	.828**	.904**	.720**	.861**	.604**	.880**
6.Head	9.20	5.63	.892						-	.824**	.694**	.831**	.638**	.835**	.438**	.692**
7.Chest	4.97	3.65	.870							-	.741**	.834**	.701**	.767**	.502**	.851**
8.Abdomen	5.17	4.21	.848								-	.719**	.558**	.607**	.511**	.671**
9.Heat	3.75	2.98	.764									-	.624**	.709**	.554**	.783**
10.Globus	1.32	1.62	.715										-	.558**	.285*	.626**
11.Fatigue	7.32	4.20	.863											-	.442**	.682**
12.Frequency	1.25	1.45	.424												-	.637**
13.Panic	5.57	4.40	.861													-

Overall reliability of the scales was adequate in current study. Depression was positively significant associated with bradford somatic inventory ($r = .79$, $p < .01$), head ($r = .73$, $p < .01$), chest ($r = .71$, $p < .01$), abdomen ($r = .64$, $p < .01$), heat ($r = .66$, $p < .01$), globus ($r = .54$, $p < .01$), fatigue ($r = .68$, $p < .01$), frequency ($r = .41$, $p < .01$) panic ($r = .58$, $p < .01$), greene climacteric scale ($r = .77$, $p < .01$), psychological scale ($r = .76$, p

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<.01), somatic scale ($r = .69, p < .01$), and vasomotor scale ($r = .42, p < .01$) for premenopausal women.

Anxiety was also positively significantly linked to bradford somatic inventory ($r = .82, p < .01$), head ($r = .78, p < .01$), Chest ($r = .75, p < .01$), abdomen ($r = .70, p < .01$), heat ($r = .75, p < .01$), globus ($r = .59, p < .01$), fatigue ($r = .71, p < .01$), frequency ($r = .47, p < .01$), with panic ($r = .67, p < .01$), greene climacteric scale ($r = .76, p < .01$), psychological scale ($r = .73, p < .01$), somatic scale ($r = .67, p < .01$), vasomotor scale ($r = .50, p < .01$), and sexual dysfunction ($r = .25$) for premenopausal women.

Stress was significantly positively associated with bradford somatic inventory ($r = .75, P < .01$), head ($r = .70, p < .01$), chest ($r = .70, p < .01$), abdomen ($r = .65, p < .01$), heat ($r = .70, p < .01$), globus ($r = .50, p < .01$), fatigue ($r = .65, p < .01$), frequency ($r = .41, p < .01$), panic ($r = .60, p < .01$), greene climacteric scale ($r = .79, p < .01$), psychological scale ($r = .77, p < .01$), somatic scale ($r = .71, p < .01$), vasomotor scale ($r = .49, p < .01$) for premenopausal women.

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Table 2

Mean and standard deviation, cronbach alpha reliability, correlation matrix among depression anxiety stress scales, and bradford somatic inventory along with subscales for perimenopausal women (N=33).

Variables	M	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13
1.DASST	9.78	8.47	.981													
2.Depression	6.06	3.53	.958													
3.Anxiety	5.67	2.13	.930													
4.Stress	8.04	3.50	.944													
5.BST	6.90	6.61	.972													
6.Head	.68	.90	.885													
7.Chest	.28	.80	.880													
8.Abdomen	.38	.76	.919													
9.Heat	.90	.11	.885													
10.Globus	.21	.74	.738													
11.Fatigue	.63	.35	.877													
12.Frequency	.57	.72	.659													
13.Panic	.21	.37	.86													

Depression was positively significant associated with bradford somatic inventory ($r = .75, p < .01$), head ($r = .80, p < .01$), chest ($r = .68, p < .01$), abdomen ($r = .63, p < .01$), globus ($r = .59, p < .01$), fatigue ($r = .72, p < .01$), frequency ($r = .41, p < .01$), panic ($r = .60, p < .01$), greene climacteric scale ($r = .82, p < .01$), psychological scale ($r = .88, p < .01$), somatic scale ($r = .64, p < .01$), and vasomotor scale ($r = .50, p < .01$) for perimenopausal women.

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Anxiety was positively significantly linked to bradford somatic inventory ($r = .83, p < .01$), head ($r = .84, p < .01$), chest ($r = .80, p < .01$), abdomen ($r = .68, p < .01$), heat ($r = .77, p < .01$) globus ($r = .67, p < .01$), fatigue ($r = .76, p < .01$), frequency ($r = .53, p < .01$), panic ($r = .73, p < .01$), greene climacteric ($r = .84, p < .01$), psychological scale ($r = .86, p < .01$), somatic scale ($r = .71, p < .01$), vasomotor scale ($r = .60, p < .01$) for perimenopausal women.

Stress was positively significant associated with bradford somatic inventory ($r = .77, P < .01$), chest ($r = .71, p < .01$), abdomen ($r = .63, p < .01$), heat ($r = .68, p < .01$), globus ($r = .58, p < .01$), fatigue ($r = .72, p < .01$), frequency ($r = .43, p < .05$) panic ($r = .63, p < .01$), greene climacteric scale ($r = .81, p < .01$), psychological scale ($r = .85, p < .01$), somatic scale ($r = .68, p < .05$), vasomotor scale ($r = .53, p < .01$) for perimenopausal women.

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Table 3

Mean and standard deviation, cronbach alpha reliability, correlation matrix among depression anxiety stress scales, and bradford somatic inventory along with subscales for postmenopausal women (N=60)

Variables	M	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13
1.DASST	8.20	7.39	.976		986**	982**	985**	785**	773**	727**	600**	685**	527**	782**	380**	654**
2.Depression	2.54	2.71	.932			952**	960**	772**	735**	728**	600**	677**	524**	778**	388**	643**
3.Anxiety	1.40	2.32	.922				948**	810**	810**	733**	614**	714**	575**	769**	371**	704**
4.Stress	4.24	2.95	.932					738**	740**	688**	561**	634**	459**	763**	364**	587**
5.BST	5.75	3.92	.958						904**	895**	841**	905**	789**	878**	575**	899**
6.HD	0.50	.96	.878							753**	674**	835**	669**	789**	385**	750**
7.CHEST	.10	.43	.815								702**	771**	690**	813**	397**	823**
8.ABD	.97	.05	.800									699**	603**	710**	541**	706**
9.HEAT	.80	.74	.677										731**	717**	501**	839**
10.GLOBUS	.64	.75	.694											636**	430**	737**
11.FTU	.10	.85	.836												476**	680**
12.FRQ	.69	.68	.487													529**
13.PANIC	.91	.24	.826													

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Depression was positively significant allied with bradford somatic inventory ($r = .77, p < .01$), head ($r = .73, p < .01$), chest ($r = .72, p < .01$), abdomen ($r = .60, p < .01$), heat ($r = .67, p < .01$), globus ($r = .52, p < .01$), fatigue ($r = .77, p < .01$), frequency ($r = .38, p < .01$), panic ($r = .64, p < .01$), greene climacteric scale ($r = .83, p < .01$), psychological scale ($r = .82, p < .01$), somatic scale ($r = .65, p < .01$), vasomotor scale ($r = .51, p < .01$) for postmenopausal women.

Anxiety was positively significant associated with bradford somatic inventory ($r = .81, p < .01$), head ($r = .81, p < .01$), chest ($r = .73, p < .01$), abdomen ($r = .61, p < .01$), heat ($r = .71, p < .01$) globus ($r = .57, p < .01$), fatigue ($r = .76, p < .01$), frequency ($r = .37, p < .01$), panic ($r = .70, p < .01$), greene climacteric ($r = .8, p < .01$), psychological scale ($r = .79, p < .01$), somatic scale ($r = .67, p < .01$), vasomotor scale ($r = .58, p < .01$), and Sexual scale ($r = .54, p < .01$) for postmenopausal women

Stress was positively significant linked to bradford somatic inventory ($r = .73, p < .01$), head ($r = .74, p < .01$), chest ($r = .68, p < .01$), abdomen ($r = .56, p < .01$), heat ($r = .63, p < .01$), globus ($r = .45, p < .01$), fatigue ($r = .76, p < .01$), frequency ($r = .36, p < .01$) panic ($r = .58, p < .01$), greene climacteric scale ($r = .82, p < .01$), psychological scale ($r = .81, p < .01$), somatic scale ($r = .65, p < .01$), and vasomotor scale ($r = .53, p < .01$) for postmenopausal women.

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Table 4

Menopausal Categories (Premenopause, Perimenopause and Postmenopause) wise difference on depression anxiety stress scales, greene climacteric scale and bradford somatic inventory along with subscales in women (N=150)

Variable	Premenopause (n= 57)		Perimenopause (n= 33)		Postmenopause (n= 60)		F	P
	M	SD	M	SD	M	SD		
1.DASS	60.74	34.48	49.78	38.47	68.20	37.39	2.66	.07
2.DP	20.17	11.50	16.06	13.53	22.54	12.71	2.83	.06
3.AX	18.43	11.10	13.86	12.76	20.27	12.50	3.00	.05
4.Stress	21.45	12.18	18.04	13.50	24.24	12.95	2.49	.08
5.BST	38.59	24.31	36.90	26.61	45.75	23.92	1.79	.16
6.HD	9.20	5.63	8.68	5.90	10.50	5.96	1.24	.29
7.CST	4.97	3.65	4.28	3.80	6.10	3.43	2.97	.05
8.ABD	5.17	4.21	5.38	4.76	6.97	4.05	2.87	.06
9.HT	3.75	2.98	2.90	3.11	3.80	2.74	1.17	.31
10.GLB	1.32	1.62	1.21	1.74	1.64	1.75	.84	.43
11.FTU	7.32	4.20	7.63	4.35	9.10	3.85	2.99	.05
12.FRQ	1.25	1.45	1.57	1.72	1.69	1.68	1.17	.31
13.PC	5.57	4.40	5.21	4.37	5.91	4.24	.27	.76
14.GCT	30.02	14.20	28.39	16.27	37.13	12.95	5.29	.05
15.PSI	18.57	8.20	16.09	9.47	21.30	7.03	4.52	.01
16.SS	9.24	5.55	9.24	6.01	11.75	5.15	3.68	.03
17.VS	1.71	1.72	1.87	1.72	2.013	1.69	.43	.64
18.SD	.50	.77	1.18	1.10	2.06	1.21	33.44	.00

Note. 1. DASS=Depression Anxiety and Stress Scale; 2. DP= Depression; 3.AX= Anxiety; 4.STR= Stress; 5= BSI= Bradford Somatic Inventory; 6.HD= Head; 7.CST= Chest; 8. ABD= Abdomen; 9.HT=Heat; 10.GLB=Globus; 11. FTU=Fatigue; 12. FRQ=Frequency; 13. PC=Panic; 14.GCS= Greene Climacteric Scale; 15. PS= Psychological Scale; 16. SS= Somatic Scale; 17. VS=Vasomotor Scale; 18. SD= Sexual Dysfunction,CI = Confidence Interval; LL= Lower Limit; UL= Upper Limit.

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Table 5

Post hoc analysis for (*Premenopause, Perimenopause and Postmenopause*) wise difference on depression anxiety stress scales, greene climacteric scale and bradford somatic inventory along with subscales in women (*N=150*)

Variable	i-j	MEAN. D(i-j)	S.E	P	95% CI	
					LL	UL
AX	2>3	-6.40	2.62	0.04	-12.77	-.04
	3<2	6.40	2.62	.04	.04	12.77
GCT	1>3	-7.10	2.63	.02	-13.48	-.73
	2>3	-8.74	3.11	.01	-16.28	-1.20
PSI	2>3	-2.73	1.76	.01	-9.49	-.92
ISS	1>3	-2.51	1.01	.04	-4.98	-.04
SD	1>2	-.68	.22	.00	-1.22	-.13
	1>3	-1.56	.19	.00	-2.02	-1.09
	2>3	-.87	.22	.00	-1.42	-.33

Table illustrated that the results of One way analysis of variance for menopausal categories premenopause, perimenopause and postmenopause wise difference on depression anxiety stress scales, greene climacteric scale and bradford somatic inventory along with subscales in women. Table demonstrated significant mean differences for premenopause, perimenopause and postmenopause on on depression anxiety stress scales, greene climacteric scale and bradford somatic inventory along with subscales in women. The results revealed that postmenopausal women were more predisposed to anxiety, psychological, somatic, sexual dysfunction symptoms as compare to premenopause and perimenopause women. Post Hoc analysis was

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employed to check how much difference on anxiety, psychological, somatic, sexual dysfunction symptoms in menopause women. Post Hoc analysis was performed via Bonferroni method.

Discussion

Menopause has appeared as a noticeable issue in the women's health. Historically menopause has been a topic of curiosity, though it was rarely discussed. This topic of menopause remains to be an area of interest and ongoing research ever since it affects all women and creates a significant health burden for middle aged women all over the world. Current research designed to examine the relationship among stress, anxiety, depression, somatic symptoms and climacteric symptoms in premenopausal, perimenopausal and postmenopausal women. Moreover, to investigate difference among postmenopausal, premenopausal and perimenopausal women status on depression anxiety stress scales, greene climacteric scale and bradford somatic inventory. Postmenopausal women will tend to have stress, depression, anxiety as compared to premenopausal and perimenopausal women. Postmenopausal women will predispose to more somatic symptoms and sexual dysfunction than premenopausal and perimenopause women.

Regarding hypothesis 1 which states “Postmenopausal women will tend to have stress, depression, anxiety as compared to premenopausal and perimenopausal women” was partially supporting in current study. The results in table 4 revealed that postmenopausal women were more predisposed to anxiety as compare to premenopause and perimenopause women. Previous studies finding are consistent with current study results (Barentsen et al., 2001; Ahmed, Ammar Ahmed, Akhtar, & Salim, 2017; Cisheng et al., 2017; Jami & Kamal, 2017). In longitudinal studies, during the postmenopausal period depressed mood occurs in approximately one third (North American Menopause Society, 2010). There are several women's aspects may be affected by menopause. It has deleterious effect on mental health of women. Its harmful effects are associated with psychological problems including stress, anxiety,

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depression, sexual function sexual arousal, sexual fantasies, sexual desire, night sweats, hot flushes, vasomotor symptoms, breast and skin atrophy, muscular, cardiovascular system diseases, skeletal problems, and senile vaginitis (Erbil, 2017; M. S. Hunter & O'Dea, 1997; Tamaria et al., 2013; Wasif et al., 2017).

Regarding hypothesis 2 which states “Postmenopausal women will predispose to more somatic symptoms and sexual dysfunction than premenopausal and perimenopause women” was support in present study. The results in table 4 revealed that postmenopausal women were more predisposed to somatic, sexual dysfunction symptoms as compare to premenopause and perimenopause women. Previous studies finding are consistent with current study results (Barentsen et al., 2001). Similar findings were reported in previous literature showing statistically higher somatic complaints in postmenopausal women compared perimenopausal women (Chuni & Sreeramareddy, 2011). According to previous study, it is reported that the Greene’s climacteric scale somatic subscale scores, were higher among postmenopausal women compared to premenopausal women (Barentsen et al., 2001). Several previous studies reported that postmenopausal were shown more sexual as compared to premenopausal women(Barentsen et al., 2001). In the study conducted to investigate the menopausal experience of Arabic women living in Sydney, postmenopausal women suffered more sexual symptoms than premenopausal and perimenopausal women (Lu, Liu, & Eden, 2007). Postmenopausal women experienced most sexual symptoms in a study among indigenous women of Sarawak in Malaysia(Syed Alwi, Lee, Awi, Mallik, & Md Haizal, 2009).Similarly,in a study where factors associated with sexual dysfunction were examined, it was found that dysfunction increased substantially with age, associated depression and with poor marital relationship (Aaron, Muliyl, & Abraham, 2002).Previous study conducted in Pakistan also reported that by comparing the experiences related to menopause the results shown that there was non-significant relationship of vasomotor symptoms among premenopausal, perimenopausal and postmeopausal women (Ahmed, 2011).Intense menopausal symptoms adversely affect women’s daily life and their

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motivation. Due to embarrassment and lack of education, the women can face worse menopausal symptoms. Therefore, health care providers can educate women to think about menopause as a time to evaluate their health and lifestyle practices and to overcome their physical, psychological and somatic symptoms with a positive frame of mind.

Limitations and Suggestions

1. Major limitations of present study was its use of a cross-sectional design, a longitudinal study is necessary to clarify the time course of menopausal symptoms.
2. There were unequal number of menopausal women taken. Therefore future researches should consider to collect equal number of women of premenopausal, perimenopausal and postmenopausal phases as it can grant a clear image of women problems transitioning to menopausal phases.
3. Further scales can be used in future researches for assessing menopausal symptoms and other factors related to menopause.

Implications and Conclusion

The specific objective of the current study was to investigate the relationship between menopausal status and climacteric symptoms in middle aged Pakistani women. The results revealed that postmenopausal women were predispose to have climacteric symptoms (psychological, somatic and sexual dysfunction) as compared to premenopausal, perimenopausal middle aged Pakistani women. The results further revealed that there is non-significant relationship of vasomotor symptoms in pre, peri and postmenopausal middle aged women. This study would be helpful to understand health and psychological problems of menopausal women.

The study of menopause is significant because it is a universal experience and all women will go through the menopausal phase if they reach mid-life. This study would be useful to understand health and psychological problems of menopausal women because women with increase in life expectancy will go through menopause. Therefore,

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women should have awareness about the psychological problems and how to prevent the menopausal symptoms. Studies suggest that health education can help to reduce menopausal symptoms (Towey, Bundy, & Cordingley, 2006).

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