

ORIGINAL STUDY

Design and psychometric analysis of a climacteric adjustment questionnaire for middle-aged women

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Abstract

Objective: The climacteric adjustment questionnaire (CAQ) was developed to assess the adjustment with fertility changes in middle-aged women. The aim of this study was to examine the psychometric properties of the CAQ in a sample of Iranian middle-aged women.

Method: This study used the impact item method and exploratory factor analysis (EFA) to evaluate the psychometric properties and construct validity of the developed questionnaire. The primary questionnaire was developed based on a qualitative study. A principal componential analysis (34 items) with Varimax rotation was conducted in a cross-sectional study on 277 middle-aged women.

Results: In the qualitative section, of the 34 items extracted, those with an impact item index of over 1.5, a content validity ratio of over 0.42, and a content validity index of over 0.79 were considered as valid. EFA reduced the list of the items to 32 with six factors capable of predicting 58% of the variance. The Cronbach's α coefficient for CAQ was 0.863.

Conclusion: The findings of the present study indicated that the validity and reliability of the questionnaire designed to measure the adjustment to the climacteric period in middle-aged women could be used in related studies.

Key Words: Adjustment – Climacteric – Fertility – Middle age – Psychometric analysis.

Reduction of ovarian function and estrogen level leads to a wide range of changes in general health,¹ reproductive competence,² and sexual function in middle-aged women. In addition, modifying feminine attractiveness affects self-concept in middle-aged women,³ which has a direct and close relationship with self-satisfaction, mental and physical health, mode of perception, and connection with the social environment, self-esteem, self-acceptance, and also a positive and healthy approach to life.⁴ Furthermore, in some societies, femininity is strongly connected to fertility. Therefore, in our society, reduction in fertility competency is of central importance. Because the sexual relationship, even in families, is affected by these stereotypes, menopause and the changing standards of

beauty during middle age significantly affect their sexual relationship.⁵ Gender stereotypes prevalent in some societies alter middle age to a critical period for women so that most middle-aged women relate their depression to the onset of middle age and changes in their body shape.⁶

All these challenges make a new life time for women and may intensify the feeling of having failed to achieve happiness, success, and enjoyment of participating in middle-age activities, resulting in a midlife crisis for women.¹ Experiencing alterations in life is perceived as a crisis, having a negative impact on marital relationships,⁷ and psychological health of women.⁸ Hence, adjustment to this crisis as an essential individual, family, economic, and social need, and is of central importance.

In this period, adjustment to middle-age changes and self-acceptance affects the degree of satisfaction with the current conditions, thereby enhancing the mind and power of the individual towards developing other aspects of life.⁹ Considering the importance of the difficulties and health problems induced by crisis and nonadjustment, women with low adjustment should be identified using a measurement instrument. In practice, it helps to identify women having difficulties adjusting to the transition, and targets them for intervention. An overview of the adjustment instruments available indicated that their development was only based on the recognized factors of the adjustment process; however, women's experiences and feelings in their middle age can reveal the conditions affecting their adjustment rate. Given the challenges of the adjustment of middle-aged women to fertility changes and the cultural, social, economic, and environmental

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conditions in Iran, developing an adjustment instrument for middle-age changes seems inevitable. Therefore, the study was conducted to evaluate the experiences of middle-aged women by developing an adjustment instrument, and performing a psychometric analysis.

METHODS

The present study was a quantitative part of a mixed research performed both quantitatively and qualitatively. The Ethics Committee of the Isfahan University of Medical Sciences approved the study. This part of the main study was a cross-sectional study conducted on middle-aged women in Isfahan, Iran, from February, 2017 to November, 2018, where a psychometric analysis was performed using climacteric adjustment questionnaire (CAQ).

Preparing a climacteric adjustment questionnaire

In the qualitative section, the items were developed by evaluating the experiences of middle-aged women and adjusting the fertility changes. A 60-item questionnaire was designed based on a 5-point Likert scale (1-5) including: 5 “strongly agree”, 4 “agree”, 3 “neutral”, 2 “disagree,” and 1 “strongly disagree”, with a higher score indicating greater women’s climacteric adjustment.

Validity assessment

To determine the face validity of the questionnaire, qualitative and quantitative methods were employed. For the qualitative method of face validity, five experts evaluated the face validity, logical sequence of items, and also the brevity and inclusiveness of the instrument. Then, the Impact Item Index was used to evaluate the quantitative face validity, to eliminate improper items, and to determine the importance of each item. For this purpose, 20 experts in the fields of reproductive health, psychology, social medicine, and geriatric nursing were asked to do the assessment. Accordingly, for each item, a 5-point Likert scale was designed including 5 “extremely important”, 4 “very important”, 3 “slightly important”, 3 “less important”, and 1 “not important.”

The impact score of each item was calculated as: impact score = frequency (%) × importance level. After calculating the impact item index, the items with a score higher than 1.5 were retained for subsequent analysis, whereas the other items were eliminated such that the number of the items was reduced to 49.

The content validity was determined based on the experts’ judgment through qualitative and quantitative methods. Accordingly, 20 experts were asked to evaluate the instrument in terms of the concept and domain coverage rate of the items. Also, content validity ratio (CVR) and content validity index (CVI) methods were used to evaluate the content validity quantitatively. The calculated formula of CVR was: $(N_e - N/2)/(N/2)$, where, N_e represents the number of experts who evaluated the essential items and N denotes the number of experts.

For this purpose, 20 experts in reproductive health, clinical psychology, psychiatry, and social medicine were asked to

rate each item based on a 3-point Likert scale (1 “essential”, 2 “useful but not essential,” and 3 “not essential”). According to Lawshe’s table, the items with CVR points higher than 0.42 (based on an evaluation by 20 experts) were retained.

To evaluate CVI, the Waltz and Bausell method was used. Accordingly, 20 experts were asked to rate each item based on relevance, clarity, and simplicity on a 4-point scale.¹⁰

For each scale, the CVI was calculated through dividing the number of experts who rated the items as 3 or 4 by the total number of experts CVI (sum of items rated 3 or 4)/(the number of all the responses).

Then, the mean CVI was calculated based on the mean score of CVI for all items of the instrument. Scores higher than 0.76 were considered suitable; scores between 0.76 and 0.70 were modified, and scores lower than 0.70 were eliminated.⁹

Hence, the 34 remaining items were categorized into the following groups: 8 items for decline, 7 items for expectations and needs, 7 items for beliefs and convictions, 6 items for reactions, and 6 items for beginning a new stage of life. The mean CVI of the questionnaire calculated was 0.93.

Reliability assessment

The internal consistency of this CAQ was evaluated in two steps. First, it was calculated before doing the factor analysis in a pilot study on 20 middle-aged women, and in the second stage, after performing factor analysis for the construct validity assessment.

The reliability of the instrument was measured using a pilot study on 20 middle-aged women via a retest method with 3-week intervals. To determine the stability of the scale, the intraclass correlation was calculated.

Construct validity assessment

The construct validity of the CAQ with 34 items was measured in a cross-sectional study of 277 middle-aged women referred to healthcare centers in Isfahan, Iran. Exploratory factor analysis (EFA) was conducted using principal component analysis (PCA) with Varimax rotation by SPSS software v.19 (SPSS, Inc, Chicago, IL).

Data collection

The study population consisted of middle-aged women receiving care at health centers in Isfahan. The inclusion criteria were not having any diagnosed medical, gynecological, or mental disorders currently under treatment. The convenience sampling method was used for sample selection. All of the 277 women in the study completed the informed consent forms. After explaining the aim of the study, a self-reported questionnaire was administered to the women to complete.

Accordingly, 277 middle-aged women enrolled in the study. Based on the literature review, a variable for the participant ratio of 1:10 was considered sufficient for performing the EFA. Further, to ensure the adequacy of the sample size, Kaiser-Meyer-Oklun (KMO) test was performed,

TABLE 1. Descriptive profile of the women (N = 277)

	Mean (SD) or number (%)
Age (mean)	49.4 (10.4)
Educational level (%)	
Primary	13 (4.3)
Secondary	206 (76.6)
Higher	58 (19.1)
Marital status	
Married	192 (71.1)
Divorced	31 (10.6)
Widow	43 (15.0)
Single	11 (3.3)
Employment status	
Employed	59 (21.3)
Premenopausal symptoms (%)	
Flashing	94 (33.9)
Menstrual irregularities	132 (47.7)
Dyspareunia	58 (20.9)
Contraception methods (%)	
None	100 (36.1)
Withdrawal	83 (30.0)
Intrauterine device	10 (3.6)
Condom	57 (20.6)
Depot medroxyprogesterone acetate	17 (6.1)
Tubal ligation or vasectomy	10 (3.6)

SD, standard deviation.

with scores ≥ 0.6 being considered sufficient for performing EFA.

RESULTS

In this study with a 100% participation rate, the 277 middle-aged women had an age range of 45 to 55 years. The baseline characteristics of the women who completed the 34-item questionnaire are reported in Table 1.

The calculated KMO index was 0.872, so the selected sample size was adequate for performing EFA. Further, Bartlett's test of sphericity showed that EFA was suitable for identifying the structure of the factor model at $P < 0.001$, which was a reason for the existence of a relationship between the variables. The results of EFA indicated a correlation of over 0.3 between each item and other items, whereby all the items were enrolled in the factor cycle.

In the present study, based on Kaiser's criterion, six factors had a value higher than 1, which could explain 58.7% of the variances (Table 2). Considering values higher than 1 and the gradient of the Scree plot diagram (Fig. 1), six factors with the ability to predict 58.7% of the entire variance were extracted and selected.

As for the samples larger than 200 in numbers, factor loads greater than 0.4 were considered acceptable. In this study,

given 277 samples, the minimum accepted factor load for keeping the items in the extracted factors was 0.4, whereas the factor loads lower than 0.4 were eliminated. Therefore, at this step, 32 items with a minimum factor load of 0.4 were divided into six factors (Table 3). The steps of the item reduction are presented in Fig. 2.

These factors were named: the end of the menstruation (nine items), perfection (five items), decline of beauty (seven items), lack of sexual attraction (three items), decline of femininity (three items), and sexual silence (five items). In addition, they explained 10.9%, 8.4%, 7.6%, 14.41%, 11.78%, and 5.56% of the variances respectively (a total variance of 58.7%).

The calculated Cronbach's alpha for the total and for each questionnaire factor before and after performing the exploratory analysis is presented in Table 4. The calculated reliability of stability (repeatability) was 0.921.

DISCUSSION

The aim of the present study was to perform a psychometric analysis of the climacteric adjustment instrument in middle-aged women. The results revealed an acceptable validity and reliability for the CAQ. Because the questionnaire focuses on climacteric adjustment, it has advantages over other instruments. According to the literature review, it seems that no Iranian instrument has been developed so far to measure the climacteric and fertility change adjustment in middle-aged women; the questionnaires used in similar studies were only the translated versions of the general adjustment instruments. One of the limitations of instruments is their lack of information about the quality of instrument validity, which can cause challenges for the reader. Generally, the result of the psychometric analysis was a 32-item questionnaire for climacteric adjustment in middle-aged women with six factors indicating "the end of menstruation," "perfection," "decline in beauty," "lack of sexual attraction," "decline in femininity," and "sexual silence." The acceptable loading concerning "the end of menstruation" indicated that menopause is a major challenge in middle-aged women and the need for climacteric adjustment to accept menopause. The results are in agreement with the studies indicating that speaking about changes occurring at the end of fertility can be a sign of acceptance and adjustment.¹⁰

Lee and Yang¹¹ also reported that women who are not able to accept menopause prefer not to speak about its symptoms

TABLE 2. Varimax rotation on the factors

Component	Total variance explained					
	Initial eigenvalues		Extraction sums of squared loadings		Rotation sums of squared loadings	
	Sum of preliminary equity value	Percent of cumulative variance	Sum of preliminary equity value	Percent of cumulative variance	Sum of preliminary equity value	Percent of cumulative variance
1	22.622	22.622	22.622	22.622	10.940	10.940
2	8.580	31.201	8.580	31.201	8.435	19.375
3	7.403	38.604	7.403	38.604	7.625	27.000
4	4.187	47.602	4.187	47.602	14.412	41.434
5	3.780	55.317	3.780	55.317	11.785	53.219
6	3.461	58.778	3.461	58.778	5.559	58.778

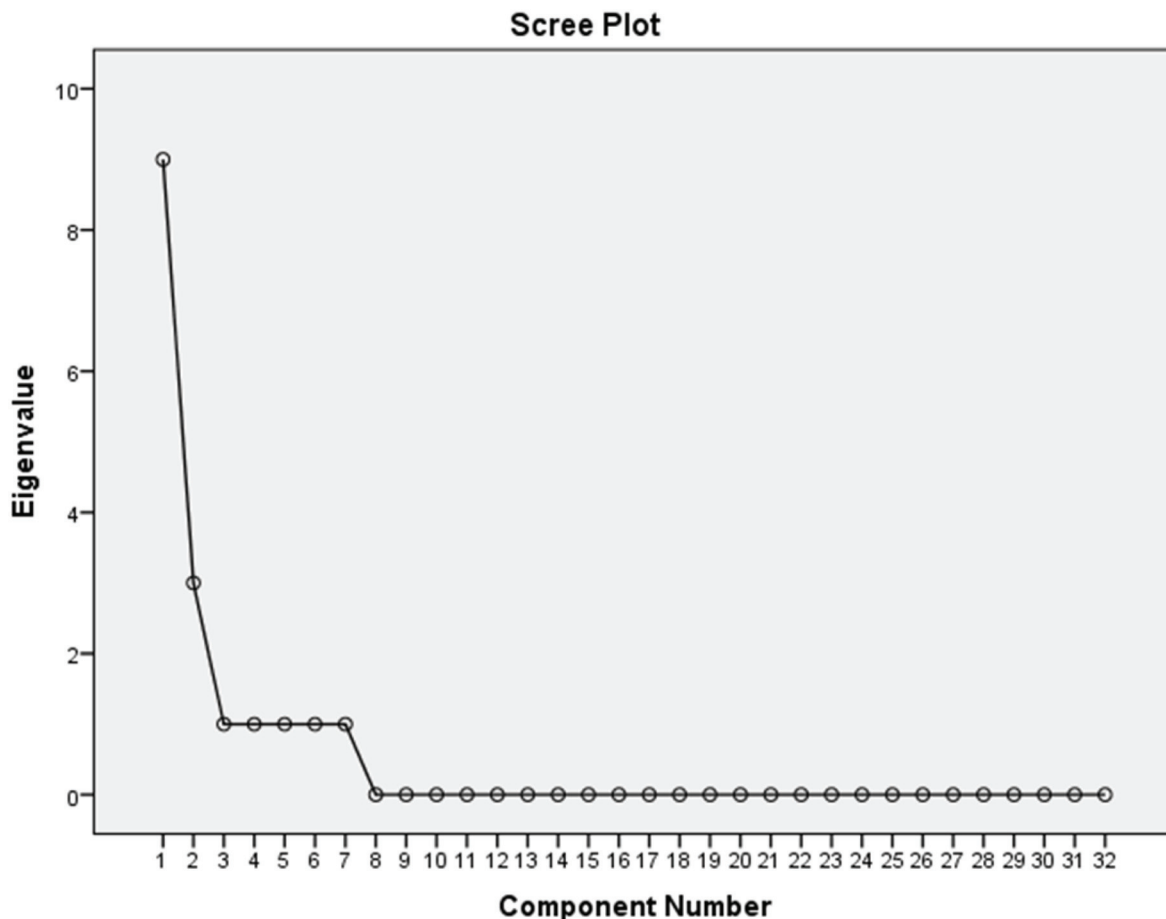


FIG. 1. Scree plot diagram based on exploratory factor analysis to determine the correlation between items.

and complications, suggesting that the issue is annoying to them. Indeed, the first step, that is, having an ideal climacteric adjustment, is speaking about it without feeling upset.¹² Furthermore, the way middle-aged women deal with menopause can indicate the adjustment to fertility changes. Other studies have indicated that in some women, there was a sense of satisfaction about entering the climacteric period. These items were acceptably loaded in the second factor called “perfection.” The findings confirm that when evaluating the different aspects of fertility change adjustment, it is useful to assess the items on the evaluation of the feeling of perfection and development. The results are in agreement with those of a study by Sharifi et al who reported that in some middle-aged women, the feeling of competence, worthiness, and empowerment were higher than they were before; therefore, the issue leads to facilitated adjustability.¹³

An increase occurs in self-esteem, sense of competence, worthiness, and empowerment. The sense of competence can lead to self-empowerment causing the individuals to feel that they can fulfill all the responsibilities perfectly, thereby enhancing their self-esteem as a necessary condition for mental health. Hence, in this period, women can accept the changes and easily adjust to the new conditions.¹³

Another dimension of this questionnaire was the factor “decline in beauty” with an acceptable level of load factors. Kweon and Jeon¹⁴ performed a study on Korean middle-aged women and reported that a climacteric experience of women was the decline of youth which resulted in a difficult adjustment.

The factor “lack of sexual attraction” emphasizes the importance of women’s image of the feeling of losing their sexual attractiveness due to fertility changes. Nisar and Sohoo¹⁵ investigated the quality of life in middle-aged women and stated that their life quality significantly depended on the feeling of being attractive. Krajewska-Ferishah et al¹⁶ indicated that the feeling of femininity including gender roles, and sense of attractiveness was associated with the adjustment behavior of middle-aged women. An aspect of social life is a constructive interaction between humans and establishment of an emotional and sexual relationship between men and women.¹⁷ Accordingly, family theorists emphasize the importance of sexual attractiveness between spouses, stating marital satisfaction¹¹ as its reason. McHugh and Interligi¹⁰ studied sexual relationships during the middle age, and reported that in middle-aged women, having sexual attraction to the opposite sex is the major key to sexual satisfaction.

TABLE 3. The loading of the items

Items	Load factor	
1 Being reminded of my age and menopause makes me upset.	0.559	Reaction to end of menstruation
2 Thinking about menopause drives me crazy.	0.405	
3 Menopause is acceptable to me.	0.588	
4 I always think that I could not become pregnant.	0.702	
5 I am happy because I am not anxious about getting pregnant in a sexual relationship.	0.525	
6 The infertility changes that I experience are the same as those that others experience.	0.540	Perfection
7 When someone brings up menopause, I evade the issue.	0.548	
8 I want to postpone menopause by taking medication.	0.689	
9 It bothers me to think that menopause is the onset of aging in the society.	0.587	
10 Physical changes followed by menopause cannot be an obstacle for me.	0.466	
11 I am satisfied about looking like a mature woman.	0.640	Decline in beauty
12 Decline of feminine abilities is not a limitation on my development.	0.578	
13 Despite some feminine changes in my body, I still feel perfect.	0.484	
14 I feel I am completely mature now and I can control my relationships better.	0.450	
15 I do not care about breast sagging.	0.438	
16 It annoys me that others comments on my appearance.	0.425	Decline of femininity
17 I feel jealous of beautiful and attractive women.	0.433	
18 When I look at my body in the mirror, I feel getting older.	0.424	
19 All the changes that have occurred in my body mean that I'm getting older.	0.577	
20 Despite all the physical changes, I need my husband to reassure me that I still look attractive to him.	0.435	
21 In a sexual relationship, I really get annoyed when my husband pays attention to my body's physical changes.	0.425	Lack of sexual attraction
22 It upsets me to think that I am losing my attraction.	0.565	
23 It really makes me unhappy to feel that I have lost attraction for the opposite sex.	0.578	
24 I hide my physical changes from my husband because I think I am not as attractive as I used to be.	0.438	Sexual silence
25 Although I feel that I have declined in some of my capabilities as a woman, I still have enough to fulfill my responsibilities.	0.435	
26 It pleases me to be able to do all my feminine duties as a woman.	0.455	
27 I miss the days when I had my feminine capabilities.	0.465	Sexual silence
28 I try to learn new sexual skills to enjoy this period of my life.	0.438	
29 I still enjoy having sex; however, the quality differs from what it used to be.	0.433	
30 I can comfortably speak with my husband about my sexual changes.	0.455	
31 My diminished sexual desire is not a big deal for me.	0.442	
32 I think, in this period, I am only a housewife to my husband, but not a sexual partner.	0.402	

The acceptable loading for the items in the factor “femininity decline” confirms the importance of the gender roles in the women’s mental health. According to the evaluation, femininity decline was a factor which could show the climacteric adjustment in middle-aged women. In addition, this

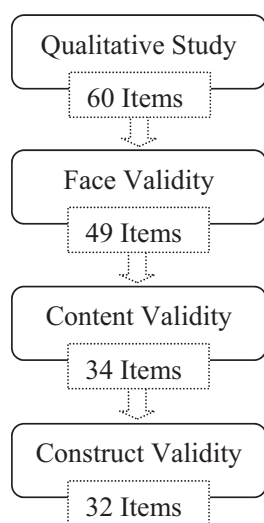


FIG. 2. Steps of the item reduction.

factor emphasizes the importance of the sense of decline in adjustment to change.

Runfola et al stated that an important factor in the climacteric adjustment of middle-aged women is the sense of being female after such changes. Note that body image in women also affects the different aspects of adjustment.¹⁸ Afghari and Ahmad Shirvani¹⁹ showed that at middle age, the physiological changes and depression lead to an altered sense of femininity and mental aspects.

Another load factor was sexual silence, which emphasized the importance of sexual health and relationships at middle age to assess the adjustment. This suggests that sexual satisfaction is crucial in the mental health of women.²⁰ The

TABLE 4. Cronbach's alpha for each factor and all the questionnaires after performing EFA (277 women)

Factor	Number of items	Cronbach's alpha
End of menstruation	9	0.772
Perfection	5	0.728
Decline in beauty	7	0.927
Lack of sexual attraction	3	0.798
Decline in femininity	3	0.839
Sexual silence	5	0.843
Adjustment	32	0.863

EFA, exploratory factor analysis.

consistency of the items concerning sexual satisfaction has been confirmed in the assessment of adjustment to the new conditions for the sexual relationship.

Asadpour et al²¹ reported that less intimate couples dealt with more problems at middle age and could not successfully solve their internal conflicts; therefore, women felt that their husband's sexual desire was reduced to merely that of a friend. Foroud et al²² believed that sexual satisfaction was an aspect of climacteric adjustment.

It is obvious that hormonal changes at middle age lead to altered sexual desire and performance. Nevertheless, couples with sufficient intimacy and communication skills are able to solve their sexual problems by discussing their problems and understanding each other's feelings, thereby experiencing less midlife crisis.²³

The way items are loaded and the acceptable predictive power of the factor analysis indicated that climacteric adjustment could be evaluated on such different dimensions as gender, fertility roles, and social communications. Furthermore, the high correlation of factor analysis and the life quality questionnaire for evaluating the criterion validity indicated its application in assessing the climacteric adjustment.

The Bell adjustment instrument measures adjustment on such different dimensions as adjustment at home, occupational adjustment, emotional adjustment, health adjustment, and social adjustment. Individual satisfaction with their personal development and deepening of social communication has been evaluated on the social adjustment dimension,²⁴ which is consistent with "perfection" on the dimension of the present questionnaire.

The present study indicated that the social adjustment dimension for middle-aged women could be measured by the items in the present questionnaire for fertility changes. Also, the results revealed the validity of the questionnaire; the score obtained for the evaluation of adjustment indicated that the social roles were an important dimension of adjustment, and at middle age, played an important part in the form of gender roles.

Limitations

Because of the different definitions of femininity across different social contexts, we suggest that the CAQ could prove useful in other cultures and countries, but it needs to be appropriately translated and then subjected to validity and reliability tests before adoption for presentation in other settings. In addition, a scoring system needs to be developed for CAQ.

CONCLUSIONS

The results of the present study suggested that climacteric adjustment in middle-aged women could be evaluated through sexual and gender roles, and also social relationships. In addition, the psychometric analysis of this instrument indicated the capability of the instrument in measuring the climacteric adjustment in middle-aged women with fertility changes. Designing an instrument based on the psychometric process, using the experts' comments from different fields,

while offering simplicity, economy, and logical sequence of the items were the advantages of the instrument. Researchers can use the results of this study to enhance the health of middle-aged women in society.

REFERENCES

- Swami V, Frederick DA, Aavik T, et al. The attractive female body weight and female body dissatisfaction in 26 countries across 10 world regions: results of the International Body Project I. *Pers Soc Psychol Bull* 2010;36:309-325.
- Slevec J, Tiggemann M. Attitudes toward cosmetic surgery in middle-aged women: body image, aging anxiety, and the media. *Psychol Women Quarterly* 2010;34:65-74.
- Greenblum CA, Rowe MA, Neff DF, Greenblum JS. Midlife women: symptoms associated with menopausal transition and early postmenopause and quality of life. *Menopause* 2013;20:22-27.
- Fortman TL. The effects of body image on self efficacy, self esteem, and academic achievement: Undergraduate senior honors thesis in Psychology, The Ohio State University. 2006. Available at: <http://kb.osu.edu/dspace/bitstream/handle/1811/44744/tylerfortman.pdf?sequence=1>. Retrieved October 13, 2018.
- Shojaa M, Jouybari L, Sanagoo A. The sexual activity during pregnancy among a group of Iranian women. *Arch Gynecol Obstet* 2009;279:353-356.
- Gagne DA, Von Holle A, Brownley KA, et al. Eating disorder symptoms and weight and shape concerns in a large web-based convenience sample of women ages 50 and above: results of the gender and body image (GABI) study. *Int J Eat Disord* 2012;45:832-844.
- Ayers B, Hunter M. Health-related quality of life of women with menopausal hot flushes and night sweats. *Climacteric* 2013;16:235-239.
- Graneheim UHLB. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105-112.
- Creswell JW, Clark VLP, ed. *Designing and Conducting Mixed Methods Research*, Secondary edition. Washington DC, PA: Sage; 2011.
- McHugh MC, Interligi C. Sexuality and older women: desirability and desire. *Women and Aging* 2015;89-116.
- Lee M, Yang J. Recognition of successful aging among middle aged women. *J Korean Gerontol Nursing* 2012;14:79-90.
- Nappi RE, Lachowsky M. Menopause and sexuality: prevalence of symptoms and impact on quality of life. *Maturitas* 2009;63:138-141.
- Sharifi K, Kazemnejad A, Forughan M, Anooosheh M. Women's experiences of mental health promoting factors during middle age: a qualitative content analysis. *J Urmia Nursing Midwifery Faculty* 2015;12:1028-1037.
- Kweon YR, Jeon H. Effects of perceived health status, self-esteem and family function on expectations regarding aging among middle-aged women. *J Korean Acad Nurs* 2013;43:176-184.
- Nisar N, Sohoo NA. Severity of menopausal symptoms and the quality of life at different status of menopause: a community based survey from rural Sindh, Pakistan. *Int J Collab Res Intern Med Public Health* 2010;2:118-130.
- Krajewska-Ferishah K, Krajewska-Kulak E, Terlikowski S, Wiktor H. Analysis of quality of life women in menopause period in Poland. *Adv Med Sci* 2011;55:52-58.
- Soares CN. Can depression be a menopause-associated risk? *BMC Med* 2010;8:79.
- Runfola CD, Von Holle A, Peat CM, et al. Characteristics of women with body size satisfaction at midlife: results of the gender and Body Image (GABI) Study. *J Women Aging* 2013;25:287-304.
- Afghari A, Ahmad Shirvani M. Psycho-emotional changes in menopause: a qualitative study. *J Mazandaran Univ Med Sci* 2012;22:27-38.
- Vares T. Reading the 'sexy oldie': gender, age (ing) and embodiment. *Sexualities* 2009;12:503-524.
- Asadpour I, Nazari A, Sanai Zaker B, et al. An investigation of effectiveness of the emotionally focused couple therapy on increasing marital intimacy in couples entered at counseling centers in Tehran. *Res Clin Psychol Counsel* 2012;2:25-38.
- Foroud A, Mehdipour S, Zaegeshenas S. The quality of life in menopausal women in Kerman. *J Health* 2014;5:257-265.
- Ussher JM, Perz J, Parton C. Sex and the menopausal woman: a critical review and analysis. *Feminism Psychol* 2015;25:449-468.
- Sinha A, Singh R. *The adjustment Inventory for school students (AISS)*. Agra (India): National Psychological Corporation; 1993