

A Study of Socio-Demographic Characteristics and quality of life in post menopausal women- A questionnaire study

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Abstract

Background: With the increase in life expectancy of women all over the world, women are expected to spend almost 1/3rd of their life in menopause phase, usually starting in 4th to 5th decade of life. **Aim:** This study was planned to look for quality of life in post menopause. **Material and methods:** This cross-sectional study was conducted at Gynaecology and Obstetrics department. Menopause-Specific Quality of Life Questionnaire (MENQOL) was distributed among 115 patients presenting in Outdoor department of the institution. All the demographic details and MenQol results were analyzed. Also Odd's ratio (OR) was calculated for these symptoms according to age groups of the patients. **Results:** The mean age of the patients was 60 ± 5.8 years. The mean age of patients at time of menarche was calculated as 13.4 ± 1.80 years and the mean age at menopause was 49.10 ± 3.98 years. We found that the most common symptom of the patients in our study was low backache and the least reported symptom was drying skin. The OR was also calculated for various symptoms according to age of the patients but it was found significant only (OR:10.9; (4.467 – 26.58) for vasomotor symptoms in our study. **Conclusion:** Menopausal symptoms may vary in different parts of the world. Therefore exact determination of these symptoms in our society is essential as it can help us to identify preventable factors and educate our women about their quality of life.

Keywords: Menopause, MenQol, Women, Vasomotor

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Introduction

Menopause is defined as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity.¹ Natural menopause is recognized to have occurred gradually after 12 consecutive months of amenorrhea, for which there is no other obvious pathological or physiological cause[1-3]. Quality of life comprises of four domains including vasomotor, psychosocial, physical and sexual domains which are experienced by 80% of the menopausal women. This is established fact that the quality of menopausal women deteriorates as the effect of menopausal symptoms[3-7]

Globally, 20% of women have no noticeable changes, other than their periods stopping. However 70% consider menopausal changes a mild to moderate nuisance. About 10% find their symptoms severely distressing. About 11% of the total female population are between age 45-59. Life expectancy of female is increasing and has reached 68.56 at present. Normally most women have menopause during the age of 48 and 49[8-10]. Due to increase in life expectancy and growing population of above 40 years of women their health demands priority. Large efforts are required to educate and aware about the health problems of these segments of population. Proactively managing menopause is an opportunity for women to prevent disease and improve their long-term health and quality of life[11]. The prevalence of menopausal symptom among Asian women is reported ranging from 10- 40%, whereas, in western countries a higher prevalence of physical and psychological symptoms around

menopause is reported[12]

This study helps for early reorganization of the symptoms and reduction of the discomfort and fears, and to seek the appropriate remedy. Furthermore, it helps health personnel to plan health interventions. Hence, this study is an attempt to assess the Physical domain, Psychological domain, vasomotor domain for quality of life and its association with selected socio-demographic variables of post menopausal women.

Materials and Method

This prospective, descriptive, cross-sectional, study was conducted by department of Obstetrics and gynaecology, at Nalanda Medical College and Hospital, Patna, Bihar. The study was approved by the institutional research and ethical committee. The study was conducted over a period of from March 2017 to March 2018.

The study sample consisted of menopausal women aged 45-60 years whose menstruation has ceased for a complete one year naturally excluding those having thyroid disorders and mentally disable.

Structured questionnaire was used of Modified Menopause-Specific Quality of Life (MENQOL) questionnaire. For each of the items, participants responded whether they had experienced the problem in the past six months. Those who responded "yes" were asked further the rates how much they had been bothered by the problem ranging from 1. Not bothered at all, 2. Somewhat bothered, 3. Moderately bothered, 4. Very much bothered, and 5. Extremely bothered.

The questionnaire included the following four domains.

Vasomotor domain questionnaire included three questions including (1) Hot flushes or flashes, (2) Night sweats, and (3) Sweating.

Physical domain questionnaire included 13 questions including (1) Flatulence or gas pains, (2) Aching in muscles and joints, (3) Feeling tired or worn out, (4) Difficulty sleeping, (5) Aches in back of neck or head, (6) Decrease in physical strength, (7) Drying skin or changes in appearance, texture or tone of skin, (8) Weight gain, (9) Increased

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facial hair, (10) Feeling bloated, (11) Low backache, (12) Frequent urination, and (13) Involuntary urination when laughing or coughing. **Psychosocial domain questionnaire** included seven questions including (1) Being dissatisfied with my personal life; (2) Feeling anxious or nervous; (3) Experiencing poor memory; (4) Accomplishing less than I used to; (5) Feeling depressed, down or blue; (6) Being impatient with other people, and (7) Feelings of wanting to be alone.

Sexual domain questionnaire included 3 questions (1) Change in sexual desire, (2) Vaginal dryness during sexual intercourse, and (3) Avoiding intimacy. Data entry was done in the MS excel software and data analysis was done by using SPSS version 16. The significance was set at $p < 0.05$ level.

Results

A total of 115 patients were included in the study. The mean age of the patients was 60 ± 5.8 years. All the demographic details of the patients included in the study are summarized in Table 1.

Table 1: Socio-demographic details of the patients included in the study.

	Number of Patients	Percentage
Age of Patients (In Years)		
51-60	69	60%
61-70	37	32.2%
71-80	9	7.8%
Marital Status		
Married	111	96.5%
Unmarried	4	3.5%
Educational Level		
Uneducated	37	32.2%
Primary Level	32	27.8%
Matriculation Level	21	18.3%
Higher Education	25	21.7%

The mean age of patients at time of menarche was 13.4 ± 1.80 years. The mean age at menopause was found to be 49.10 ± 3.98 years. The mean gravidity of patients in the study was 4.81 ± 2.03 and parity

was 3.88 ± 1.66 . The mean duration after marriage was calculated as 38.2 ± 30.62 years.

Table 2: Detail MenQol score of the patients.

Sr. No	Variable	Number of patients	Mean Score
Vasomotor			
1	Hot flushes	66	3.37
2	Night sweats	62	3.31
3	Sweating	69	3.52
Psychosocial			
1	Dissatisfaction with personal life	72	3.62
2	Feeling anxious or nervous	80	3.03
3	Experiencing poor memory	64	2.51
4	Accomplishing less than I used to do	48	2.37
5	Feeling depressed, down or blue	65	2.09
6	Impatience with other people	88	2.41
7	Willing to be alone	41	2.31
Physical			
1	Flatulence (wind) or gas pains	48	2.79
2	Aching in muscles and joints	86	2.82
3	Feeling tired or worn out	94	3.54
4	Difficulty I sleeping	59	3.54
5	Aches in back of neck or head	85	3.55
6	Decrease in physical strength	88	3.54
7	Decrease in stamina	94	3.54
8	Feeling lack of energy	93	3.53
9	Drying skin	33	2.21
10	Facial hair	38	2.66
11	Weight gain	91	3.54
12	Changes in appearance, texture or tone of skin	94	3.63
13	Feeling bloated	43	2.58
14	Low backache	98	2.56
15	Frequent urination	75	3.4
16	Involuntary urination when laughing or coughing	63	3.77
Sexual			
1	Change in sexual desire	57	3.63
2	Vaginal dryness during intercourse	96	3.45
3	Avoiding intimacy	61	3.60

The MenQol score of the patients is summarized in Table 2. We found that the most common symptom of the patients in our study was low backache in 98 of 115 patients (85.2%) and vaginal dryness in 97 of 115 patients (84.3%). The least reported symptom by the patients was drying skin, reported by 33 patients (28.6%) and facial

hair by 38 patients (33%). Also stratification of each symptom group according to age groups was done. Odd's ratio (OR) was calculated for each group and is summarized in Table 3. OR was found significant for vasomotor symptoms in different age groups (OR:10.9; 95% CI (4.467 - 26.58)).

Table 3: Prevalence of postmenopausal symptoms in relation to age.

	Age<55 Years		Age>55 Years		Odds Ratio (OR)
	Present	Absent	Present	Absent	
Vasomotor	58	11	15	31	10.9 (4.467 – 26.58)
Psychosocial	57	12	40	6	0.712 (0.246 – 2.05)
Physical	54	14	42	4	0.367 (0.112 – 1.198)
Sexual	46	23	35	11	0.628 (0.27 – 1.459)

Discussion

As the life expectancy has increased all over the world, therefore it is presumed that women are now expected to spend almost 1/3rd of their life in menopausal phase [12]. Therefore QoL of women after menopause, particularly in our setup, is needed to be assessed. Among post-menopausal women, most commonly encountered symptoms are that of vasomotor including hot flushes and night sweats which women face in early menopause phase. According to a study, 88% of women in United States suffer from hot flushes in menopausal age [13]. Mahajan et al., found that 44% of the women are affected in negative manner during menopause stage. Therefore this study was conducted to look into prevalence of symptoms in post-menopausal women in our setup [14] so that awareness regarding its symptoms and their management should be discussed with women in premenopausal period. This education regarding her health will give benefit later in life. In our study, we found that low backache and other physical symptoms were most prevalent in our patients. In a similar study by Nusrat et al., most common symptoms among menopausal women were found to be backache and bodyaches in women [15], these symptoms are more severe in women who don't do exercise. Similarly in another study by Nisar et al., most common symptom was bodyaches in 81.7% of patients [9]. In an Indian study, most commonly found symptom was fatigue in 61% of patients [14]. This is in contrast to most of the western studies, in which vasomotor symptoms particularly hot flushes is found as more common [13,16]. This may be due to cultural differences among different regions. In a study conducted by Zeleke et al. factors which were significantly associated with post-menopausal symptoms included age, bilateral oophorectomy, obesity and being a caregiver for another person [17].

There are multiple tools available for assessment of QoL among menopausal women which include both general and specific questionnaires. One of the most commonly validated scales for QoL in menopausal women is MENQOL. The other commonly used scales include 36-item short-form (SF-36), World Health Organization Quality of Life (WHOQOL-BREF), Utain Quality of Life Scale (UQOL), Woman's Health Questionnaire (WHQ) and Greene Climacteric Scale. However in a systematic review by Jenabi et al., MenQol was found to be most validated and most commonly used scale in literature and this is the same scale we have used in our study [10].

Menopause hormonal therapy (MHT) is usually considered as the best therapy for menopausal symptoms. It is thought to be reducing vasomotor symptoms and hot flushes and improves sleep problems among menopausal symptoms [18]. However there are multiple contradictory studies also available in the literature regarding use of MHT [19]. About duration of use of these drugs is not clear because of risk of cancers associations with this therapy. There are multiple treatment options other than MHT proposed by different authors for menopausal symptoms. Fu et al. conducted a randomized trial on usage of Chinese herbal medicine among patients with menopause and they found significant improvement in vasomotor symptoms

after 8 weeks of usage of herbal granules [20]. In another study by Nourozi et al., Soy milk ingestion was compared with low fat cow milk. In this study it was found that significant improvement in post-menopausal women occurred in vasomotor, psychosocial and physical domains with the usage of soy milk [21]. Physical activity has also been found having positive impact on QoL among post-menopausal women. Moilanen et al. conducted an 8-years follow up study among finish women and found that women who increase or maintain their physical activity, they had greater chances of increased score in QoL scales.

Conclusion

Thus we conclude that in our setup, a large number of women suffer from post-menopausal symptoms. Therefore we recommend heavy campaigns on larger scales for education of women regarding these problems so that they can be educated in a better way. Also more trials are needed to be conducted to look into specific causes of the symptoms among women in our country.

References

- Forouhari S, Khajehei M, Moattari M, Mohit M, Rad MS et al. The effect of education and Awareness on the quality-of-life in postmenopausal women. *Indian J Community Med.* 2010; 35: 109-114.
- Kalarhodi MA, Taebi M, Sadat Z, Saberi F. Assessment of quality of life in menopausal periods: A population study in Kashan, Iran. *Iranian Red Crescent Med J.* 2011; 13:811-817.
- Soules MR, Sherman S, Parrott E, Rebar R, Santoro N et al. Executive summary: stages of reproductive aging workshop (STRAW) Climacteric. 2001; 4:267-272.
- Winblad B, Gauthier S, Astrom D, Stender K. Memantine benefits functional abilities in moderate to severe Alzheimer's disease. *J Nutr Health Aging.* 2010; 14:770-774.
- Norozi E, Mostafavi F, Hasanzadeh A, Moodi M, Sharifrad G. Factors affecting quality of life in postmenopausal women, Isfahan, 2011. *J Edu Health Promot.* 2013; 2: 58.
- Chen Y, Lin SQ, Wei Y, Gao HL, Wang SH et al. Impact of menopause on quality of life in community-based women in China. *Menopause.* 2008; 15:144-149.
- Yeo JH. Influencing factors on quality of life in pre- and postmenopausal women. *Taehan Kanho Hakhoe chi.* 2004; 34:1334-1342.
- Kuh D, Hardy R. Women's health in midlife: findings from a British birth cohort study. *The journal of the British Menopause Society.* 2003; 9:55-60.
- Nisar N, Sohoo NA. Frequency of menopausal symptoms and their impact on the quality of life of women: a hospital based survey. *J Pak Med Assoc.* 2009; 59:752-756.
- Jenabi E, Shobeiri F, Hazavehei SM, Roshanaei G. Assessment of Questionnaire Measuring Quality of Life in Menopausal Women: A Systematic Review. *Oman Med J.* 2015; 30:151-156.
- Van Dole KB, DeVellis RF, Brown RD, Funk ML, Gaynes BN et al. Evaluation of the Menopause-Specific Quality of Life

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- Questionnaire: a factor- analytic approach. *Menopause*. 2012; 19:211-215.
12. Ehsanpour S, Salehi K, Zolfaghari B, Bakhtiari S. The effects of red clover on quality of life in post-menopausal women. *Iran J Nurs Midwifery Res*. 2012; 17:34-40.
 13. Reed SD, Guthrie KA, Newton KM, Anderson GL, Booth-LaForce C et al. Menopausal quality of life: RCT of yoga, exercise, and omega-3 supplements. *Am J Obstet Gynecol*. 2014; 210:244 e1-11.
 14. Mahajan N, Aggarwal M, Bagga A. Health issues of menopausal women in North India. *Journal of mid-life health*. 2012; 3:84-87.
 15. Nusrat N, Nishat Z, Gulfareen H, Aftab M, Asia N. Knowledge, attitude and experience of menopause. *J Ayub Med Coll Abbottabad*. 2008; 20:56-59.
 16. Ghazanfarpour M, Kaviani M, Abdolalian S, Bonakchi H, Khadijeh MN et al. The relationship between women's attitude towards menopause and menopausal symptoms among postmenopausal women. *Gynecol Endocrinol*. 2015; 31:860-865.
 17. Zeleke BM, Bell RJ, Billah B, Davis SR. Vasomotor and sexual symptoms in older Australian women: a cross-sectional study. *Fertil Steril*. 2016; 105:149-155.
 18. Taylor HS, Manson JE. Update in hormone therapy use in menopause. *J Clin Endocrinol Metab*. 2011; 96:255-264.
 19. Wieder-Huszla S, Szkup M, Jurczak A, Samochowiec A, Samochowiec J et al. Effects of socio-demographic, personality and medical factors on quality of life of postmenopausal women. *Int J Environ Res Public Health*. 2014; 11:6692-6708.
 20. Fu SF, Zhao YQ, Ren M, Zhang JH, Wang YF et al. A randomized, double-blind, placebo-controlled trial of Chinese herbal medicine granules for the treatment of menopausal symptoms by stages. *Menopause*. 2015; 23:311-323.
 21. Nourozi M, Haghollahi F, Ramezanzadeh F, Hanachi P. Effect of Soy Milk Consumption on Quality of Life in Iranian Postmenopausal Women. *J Family Reprod Health*. 2015; 9:93-100.

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