

Quality of life of postmenopausal women of Kaski district

Dipti Koirala¹, Nirupa Thapa², Sarala Shrestha³

¹Gandaki Medical College, College of Nursing Sciences, Kaski;

²Institute of Medicine, Pokhara Nursing Campus;

³Nepalese Army Institute of Health Sciences, College of Nursing, Kathmandu.

Received: November 10, 2019

Accepted: May 5, 2020

ABSTRACT

Aim: To assess menopause specific quality of life of postmenopausal women.

Method: This descriptive survey was carried out among postmenopausal women aged 40 to 60 years residing in a municipality of Kaski district of Nepal. Data was collected from 150 women meeting the criteria through face to face interview using a structured questionnaire consisting of socio-demographic items and Menopause-Specific Quality of Life (MENQOL) scale.

Results: Respondents' mean age and SD was 52.83±4.19 years and their mean menopausal age and SD was 47.12±4.34 years. The most common menopausal symptom reported by the respondents was decrease in physical strength (82.70%) and the least frequent symptom was increase in facial hair (7.40%). The mean scores and SD of MENQOL for physical, psychosocial, sexual and vasomotor domains were 1.67±0.42, 1.46±0.42, 1.31±0.47 and 1.27±0.57 respectively. Significant differences were detected in vasomotor, psychosocial and physical domain score according to physical activity, living status and body mass index respectively (p=0.05).

Conclusions: Based on findings, it is concluded that all the postmenopausal women tend to have at least one or more menopausal symptoms. Physical domain is the most affected domain of QOL among the postmenopausal women. The presence of menopausal symptoms affects the quality of life of women adversely that warrants focused teaching and counselling.

Keywords: menopause, menopausal symptoms and menopause specific quality of life

Citation : Koirala D, Thapa N, Shrestha S. Quality of life of postmenopausal women of Kaski district. Nep J Obstet Gynecol. 2020;15(30):43-49. DOI: 10.3126/njog.v15i1.29340

INTRODUCTION

Menopause refers to the permanent cessation of menstruation resulting from the loss of ovarian follicular activity due to aging which occurs after 12 consecutive months of amenorrhea and post menopause is the period following menopause.¹ Menopause results into a decrease in the production of ovarian sex hormones – estrogen and progesterone which often occurs naturally between 45-55 years of age.² The deficiency of these hormones brings various somatic, vasomotor, sexual and psychological symptoms that impair the overall quality of life (QoL) of post-menopausal women.³

There is a wide variation in the prevalence of menopausal symptoms across menopausal women. Various studies have indicated that Asian women mostly report somatic symptoms compared to psychological, vasomotor and sexual symptoms.⁴ The type, severity and length of symptoms are different for

every woman. Culture, health, previous experience of mood problems, lifestyle and the type of menopause will all impact on menopausal symptoms.⁵ Many women with menopausal symptoms will experience their spontaneous cessation within 5 years after their onset; a substantial proportion of women, however, continue to experience symptoms beyond 5 years.⁶

With increasing life expectancy of women in Nepal to 71.6 years⁷ and average age at menopause is 46.28 ± 4.33 years,⁸ it can be expected there will be an increasing number of menopausal women in Nepal. Reviewed literature revealed that most of the studies related to quality of life among menopausal women were conducted in the developed countries and very little information exists about the menopausal experience in developing countries like Nepal. It is also stated that among all the menopausal periods, the quality of life of women is much affected during the

CORRESPONDENCE

Dipti Koirala

Gandaki Medical College, College of Nursing Sciences, Kaski

Email: diptibanjara@yahoo.com; Mobile: +977-9846086443

postmenopausal period.⁹ Therefore, this study aimed at identifying the prevalence of menopausal symptoms in postmenopausal women and the impact of these symptoms and their socio demographic, lifestyle and obstetric characteristics on their quality of life.

METHODS

A descriptive, cross-sectional research design was used to conduct the study among the postmenopausal women aged 40-60 years residing in Lekhnath municipality of Kaski district in Nepal. Three wards from 18 wards (ward no 1, 8 and 12) were selected randomly as a representative wards of Lekhnath municipality and then 50 women meeting the criteria were selected from each of the three selected wards on first come first basis by visiting house to house. Only one member of each household (younger one) was included. Postmenopausal women who were on hormone replacement therapy within the last 6 month time and those who had undergone hysterectomy or oophorectomy were excluded from the study.

Instrument consisted of an interview schedule having two parts. Part I consisted of semi-structured questions related to socio-demographic, lifestyle and obstetric characteristics developed by the principal researcher through literature review. Part II consisted of structured Menopause specific Quality of Life (MENQOL) scale, a validated tool developed by Hilditch et al.¹⁰ at the University of Toronto, Canada, relevant for postmenopausal women. The scale included the frequency of menopausal symptoms and also indicated how much the respondents had been bothered by a symptom over the past 30 days in a scale of 0 to 6 ranges. It consisted of 29 items related to vasomotor (Q1-3=3), psychosocial (Q4-10=7), physical (Q11-26=16) and sexual domain (Q27-29=3). The vasomotor domain assessed hot flashes, night sweats and sweating. The psychosocial domain determined the psychological well-being of the individual by including items about anxiousness, memory and feeling blue. The physical domain evaluated items as flatulence, bloating, pain, tiredness, sleeping, energy and weight gain. The sexual domain investigated about changes in sexual desire, vaginal dryness and intimacy.

The scoring for each of the four MENQOL domains was identical. For each of the 29 items, the seven-point Likert scale was converted to an eight point scale, ranging from 1 to 8. A score of “one” was equivalent to a woman responding “no”, indicating she had not

experienced this symptom in the past month. A scale of “two” indicated that the woman experienced the symptom, but it was not at all bothersome. Scores “three” through “eight” indicated increasing levels of bother experienced from the symptom, but they corresponded to “1” through “6” check boxes on the MENQOL. Once each item was manipulated into a 1 – 8 score, each domain was scored by averaging their values. The interpretation was done as higher the mean score, lower the quality of life and vice versa.

Pretesting of the instrument was done on 15 postmenopausal women meeting the criteria in ward number nine of Lekhnath municipality to check for accuracy, clarity and consistency of the tool. Internal consistency reliability of MENQOL scale was tested by calculating Cronbach’s alpha coefficient from the pretested data. The obtained alpha value of 0.80 showed high degree of internal consistency of the tool.

Each eligible woman was identified by house to house survey from the selected wards of the municipality and written consent was obtained from the respondents prior to data collection. Data was collected on January 1-27, 2017. After data collection, respondents’ queries related to menopausal problems were responded and informal health teaching regarding menopausal symptoms and healthy lifestyle was provided to them. Respondents having most bothersome symptom in sexual domain were referred to a gynaecologist. Data were coded and entered in IBM SPSS, version 22. Data were analyzed and interpreted by using descriptive statistics (frequency, percentage, mean, median and standard deviation) to describe the socio demographic as well as the menopause related variables and inferential statistics (Mann Whitney U test) to find out the difference in MENQOL scores according to selected variables. Statistical significance was considered as p -value <0.05 .

RESULTS

Total of 150 cases were studied. The mean age of the respondents was 52.83 years (SD \pm 4.19) with two fifth (40%) belonging to age group of above 55 years. Two third (66%) of the respondents were from upper caste group and 88.7% were Hindus by religion. Most of the respondents (90.7%) were married and 18.7% could not read and write and rest belonged to different levels of education. Majority (58.0%) of them were employed [Table-1].

Table-1: Socio-demographic Characteristics of Respondents [n=150]

Characteristics	Number	Percentage
Age in years		
40-54	90	60.00
55-59	60	40.00
Ethnicity		
Upper caste group	99	66.00
Dalit	25	16.70
Relatively advantaged Janajatis	20	13.30
Disadvantaged Janajatis	06	4.00
Religion		
Hindu	133	88.70
Non-Hindu (Buddhist, Muslim, Christian)	17	11.30
Educational status		
Cannot read and write	28	18.70
Can read and write only	75	50.00
Basic (grade 1- 8)	29	19.33
Secondary (grade 9-12)	16	10.66
Higher level (more than 12)	02	1.33
Marital status		
Married	136	90.70
Widowed/Divorced/Separated	14	9.30
Employment status		
Employed	87	58.00
Housewife	63	42.00

About one third (35.3%) had normal body mass index and 17.3% were obese; 95.3% had menopause at 40-55 years; and 57.3% had menopause for less than five years. Current smokers were 16.7%; 17.3% had the habit of drinking alcohol; 50% were involved in daily vigorous physical activities; and 42% had occasional activity.

The most common symptom reported was decrease in physical strength by 82.7% respondents and the least frequent symptom was increase of facial hair by 7.3% respondents. Hot flush, a characteristic climacteric symptom, was prevalent among 24% of the respondents [Table-2].

Table-2: Prevalence of Menopausal Symptoms among the Respondents [n=150]

Domain/Symptom*	Number	Percentage
Physical		
Decrease in physical strength	124	82.70
Feeling tired or worn out	104	69.30
Aches in muscles and joints	101	67.30
Feeling of lack in energy	93	62.00
Low backache	89	59.30

Domain/Symptom*	Number	Percentage
Flatulence or gas pains	75	50.00
Change in appearance or tone of skin	73	48.70
Drying skin	65	43.30
Difficulty in sleeping	62	41.30
Weight gain	55	36.70
Frequent urination	54	36.00
Aches in back of neck or head	54	36.00
Decrease in stamina	54	36.00
Involuntary urination	52	34.70
Feeling bloated	38	25.30
Increase of facial hair	11	7.30
Psychosocial		
Accomplishing less than earlier	111	74.00
Experiencing poor memory	105	70.00
Feeling anxious or nervous	54	36.10
Dissatisfied with personal life	38	25.30
Being impatient with other people	20	13.30
Desired to be alone	16	10.70
Feeling depressed, down or blue	12	8.00
Sexual (n=136)		
Change in sexual desire	55	40.40
Vaginal dryness during intercourse	40	29.40
Avoiding intimacy	14	10.30
Vasomotor		
Hot flushes	36	24.00
Sweating	30	20.00
Night sweats	23	15.30

*Multiple responses

The highest mean scores in physical, psychosocial, sexual and vasomotor domains belong to the items of aches in muscles and joints (2.37 ± 1.26), accomplishing less than earlier (2.10 ± 0.99), change in sexual desire (1.46 ± 0.60) and hot flushes (1.33 ± 0.79) respectively. In regards to overall mean scores, the mean of physical domain (1.67 ± 0.42) had the highest score and vasomotor domain (1.27 ± 0.57) had the least score [Table-3].

Table-3: Rank Ordering of MENQOL Scores of Respondents on Different Domains [n=150]

Domain /Symptom	Scores* (Mean +SD)	Overall Mean Score	
Physical			
Aches in muscles and joints	2.37 ± 1.26	1.67 ± 0.42	
Low backache	2.07 ± 1.27		
Decrease in physical strength	2.01± 0.63		
Flatulence or gas pains	1.89 ± 1.31		
Feeling tired or worn out	1.85 ± 0.70		
Feeling of lack in energy	1.81 ± 0.81		
Difficulty in sleeping	1.73 ± 1.10		
Weight gain	1.63 ± 1.03		
Involuntary urination	1.54 ± 0.83		
Frequent urination	1.54 ± 0.93		
Aches in back of neck or head	1.53 ± 0.90		
Change in appearance or tone of skin	1.49 ± 0.51		
Drying skin	1.46 ± 0.55		
Decrease in stamina	1.46 ± 0.68		
Feeling bloated	1.39 ± 0.87		
Increase of facial hair	1.08 ± 0.29		
Psychosocial			
Accomplishing less than earlier	2.10 ± 0.99	1.46 ± 0.42	
Experiencing poor memory	1.96 ± 0.94		
Feeling anxious or nervous	1.47 ± 0.73		
Dissatisfied with personal life	1.34 ± 0.67		
Being impatient with other people	1.19 ± 0.56		
Desired to be alone	1.12 ± 0.36		
Feeling depressed, down or blue	1.09 ± 0.33		
Sexual (n=136)			
Change in sexual desire	1.46 ± 0.60		1.32± 0.48
Vaginal dryness during intercourse	1.42 ± 0.73		
Avoiding intimacy	1.1 ± 0.33		
Vasomotor			
Hot flushes	1.33 ± 0.79	1.27 ± 0.57	
Sweating	1.30 ± 0.79		
Night sweats	1.19 ± 0.50		

*MENQOL score ranged from 1-8

There was statistically significant difference in vasomotor, psychosocial and physical domain score of MENQOL according to physical activity, living status and body mass index respectively. Based on mean score, vasomotor domain score was higher among those respondents who were not involved in daily vigorous physical activity ($p=0.038$). Likewise, psychosocial domain score was higher among the respondents who were living without spouse ($p=0.001$) and physical domain score was higher among respondents having abnormal body mass index ($p= 0.006$) than their counterpart. However, there was no statistically significant difference in sexual domain score of MENQOL according to selected variables [Table-4].

Table-4: Difference in Mean scores of the Domains of MENQOL according to Selected Variables [n=150]

Variables	Vasomotor	Psychosocial	Physical	Sexual (n=136)
Age (in years)				
<55 years	1.26 ± 0.56	1.42 ± 0.43	1.63 ± 0.41	1.36 ± 0.50
>55 years	1.28 ± 0.59	1.52 ± 0.40	1.73 ± 0.44	1.26 ± 0.61
p-value	0.485	0.083	0.139	0.156
Working status				
Housewife	1.33 ± 0.67	1.52 ± 0.48	1.73 ± 0.46	1.37 ± 0.54
Employed	1.22± 0.48	1.42 ± 0.37	1.64 ± 0.39	1.29 ± 0.43
p-value	0.635	0.312	0.371	0.437
Living status				
With spouse	1.28 ± 0.59	1.43 ± 0.40	1.66 ± 0.43	-
Without spouse	1.16 ± 0.36	1.78 ± 0.43	1.77 ± 0.28	-
p-value	0.698	0.001	0.171	-
Body mass index				
Normal	1.25 ± 0.51	1.38 ± 0.29	1.55 ± 0.37	1.36 ± 0.48
Abnormal	1.28 ± 0.60	1.51 ± 0.47	1.74 ± 0.43	1.31 ± 0.48
p-value	0.189	0.222	0.006	
Menopausal duration				
< 5 years	1.31 ± 0.62	1.45 ± 0.46	1.69 ± 0.44	0.323

Variables	Vasomotor	Psychosocial	Physical	Sexual (n=136)
> 5 years	1.21 ± 0.49	1.48 ± 0.36	1.66 ± 0.40	
p-value	0.213	0.217	0.915	0.810
Smoking				
Yes	1.19 ± 0.39	1.50 ± 0.39	1.69 ± 0.39	1.27 ± 0.53
No	1.29 ± 0.60	1.44 ± 0.43	1.67 ± 0.44	1.35 ± 0.46
p-value	0.136	0.133	0.608	0.109
Alcohol use				
Yes	1.19 ± 0.39	1.41 ± 0.26	1.61 ± 0.39	1.40 ± 0.65
No	1.29 ± 0.60	1.47 ± 0.44	1.69 ± 0.43	1.31 ± 0.43
p-value	0.807	0.815	0.426	1.000
Physical activity				
Yes	1.15 ± 0.35	1.41 ± 0.41	1.61 ± 0.39	1.31 ± 0.49
No	1.39 ± 0.71	1.51 ± 0.42	1.69 ± 0.43	1.33 ± 0.47
p-value	0.038	0.149	0.149	0.702

p value significant <.05

DISCUSSION

Physical domain was the most affected and vasomotor domain the least affected domain of MENQOL. The most prevalent symptom within the study subjects was decrease in physical strength (82.70%) and the least frequent symptom was increase of facial hair (7.4%).

Globally, natural age at menopause lies between 45 to 55 years of age.¹¹ In the present study, mean age at menopause was 47.12± 4.34 years which is consistent with the reported age of 45-50 years.^{8,12-15} Premature menopause (before 40 years of age) was 4% which is lower than the study of Ghimire et al¹⁴ in Nepal but higher than the study of Singh et al¹⁷ in India.

From the MENQOL list, the most common vasomotor symptoms were hot flushes (24%), sweating (20%) and night sweats (15.3%). The four most common psychosocial symptoms found were accomplishing less than earlier (74%), experiencing poor memory (70%), feeling anxious or nervous (36.1%) and

dissatisfied with personal life (25.3%). Similarly, the most common physical symptoms were decrease in physical strength (82.70%), feeling of tiredness or worn out (69.3%), aches in muscles and joints (67.3%) and feeling of lack of energy (62%). In the sexual domain, the symptoms found were feeling of change in sexual desire (40.4%), vaginal dryness during intercourse (29.4%) and avoiding intimacy (10.3%). These findings showed that physical and psychosocial symptoms were the most prevalent symptoms in the postmenopausal women which is supported by the study of Adhikari et al.⁸ The low prevalence of vasomotor complies but lesser sexual symptoms contradicts to the findings of Ghimire et al¹⁴ which may be due to hesitation. The least report of facial hair (7.3%) is similar to the study of Poomalar et al.¹⁸ Overall, the findings of this study is supported by the study of Islam et al.⁴

The overall mean scores of menopausal quality of life for each MENQOL domain revealed the highest mean score in physical domain (1.67±0.42) followed by psychosocial (1.46±0.42), sexual (1.31±0.47) and vasomotor domain (1.27±0.57). Similar result was revealed in the physical domain in the study by Mirhaghjou et al²⁰ which reported highest mean score in physical domain. In contrast, Kalarhoudi et al¹⁶ reported highest mean scores in sexual domains among Iranian women while Ghazanfarpour et al²¹ in Iran and Nisar et al²² in Pakistani women reported highest score in vasomotor domain. The differences in the frequency of the symptoms and the score may be influenced by various factors such as race, lifestyle, culture, genetics, diet, levels of physical and mental stress, support and coping mechanisms and economic factors.²¹

Older women may have better QOL as reported by Shobeiri et al¹⁹ and Williams et al²³ but current study didn't show the significant value.

Duration of menopause did not have any impact on MENQOL scores in all domains in this study and this finding has been confirmed by the study of Shobeiri et al¹⁹ but in contrast, menopausal duration was associated with physical and sexual domain according to Kalarhoudi et al.¹⁶

Women who were employed had better QOL although significant difference was not observed by working status like in Shobeiri et al¹⁹ and Kalarhoudi et al.¹⁶

The present study found statistically significant difference in psychosocial domain score in relation to living status revealing that women without spouse had higher quality of life scores ($p=0.001$). This result might have been confounded with different factors including life events of women which can make a woman prone to low quality of life. This finding contradicts to the findings of Mirhaghjou et al²⁰ and Kalarhoudi et al¹⁶ which showed no significant relationship of living status with all other domains of MENQOL.

The mean quality of life scores in all domains were higher among those who were not involved in daily physical activity although statistical significance was obtained in vasomotor domain only ($p=0.038$) indicating their decreased quality of life. The result suggests that physical activities have protective effect for quality of life. This may be due to the fact that exercise or some sort of activities can have beneficial effects on women's mood, general wellbeing and sleep disorders and even on cognitive functions (Villaverde et al).²⁴ Mirhaghjou et al²⁰ supports the current finding with statistically significant difference in psychosocial and physical domain. Kalarhoudi et al¹⁶ also showed higher quality of life scores in all

domains among those women who did not do exercise with statistical significance in all domains excluding sexual.

In the current study, abnormal body mass index was a predictor of higher scores in vasomotor, psychosocial and physical domains of MENQOL although the difference was statistically significant in physical domain only ($p=0.011$). Obesity is a health problem that can decrease quality of life in menopausal women.²¹ A study conducted by Shobeiri et al¹⁹ correlates with this finding with statistical significant difference in the four domains.

CONCLUSIONS

The postmenopausal women tend to have at least one menopausal symptom. The most affected domain of quality of life is the physical domain. The menopausal symptoms itself decrease the quality of life of women. Quality of life is dependent on body mass index and physical activity. Menopausal symptom management, maintenance of normal body mass index and increase physical activity may help to improve quality of life in postmenopausal women.

REFERENCES

1. International Menopause Society, 2015. Menopause Terminology. URL:http://www.imsociety.org/menopause_terminology.php. [Retrieved on 12/8/2016].
2. Currie H, Martin K. What is the Menopause? [Phamplate]. London: National Health Statistics; 2005. URL:<http://www.menopausematters.co.uk/pdf>. [Retrieved on 21/12/2016].
3. Yim G, Ahn Y, Chang Y, Ryu S, Lim JY, Kang D, et al. Prevalence and severity of menopause symptoms and associated factors across menopause status in Korean women. *Menopause*. 2015;22(10):1108-16.
4. Islam MR, Gartoulla P, Bell RJ, Fradkin P, Davis SR. Prevalence of menopausal symptoms in Asian midlife women: a systematic review. *Climacteric*. 2015;18:157-176.
5. Jean Hailes for Women's Health, 2016. Menopause symptoms. URL:<https://jeanhailes.org.au/health-a-z/menopause/menopause-symptoms>. [Retrieved on 15/8/2017].
6. Goodman NF, Cobin RH, Ginzburg SB, Katz IA, Woode DE. AACE Menopause Guidelines. *Endocrine Practice*. 2011;17(6).
7. WHO, 2018. World Health Rankings. Nepal: Life Expectancy. URL:<https://www.worldlifeexpectancy.com/nepal-life-expectancy>. [Retrieved on 29/11/2018].
8. Adhikari RD, Bhattarai SG, Chhetri TK. Quality of life of menopausal women of Manamaiju VDC. *J Nepal Nurs Counc*. 2016;10:21-6.
9. Ceylan B, Özerdoğan N. Menopausal symptoms and quality of life in Turkish women in the climacteric period. *Climacteric*. 2014;17(6):705-12.
10. Hilditch JR, Lewis J, Peter A, Maris B, Ross A, Franssen E. A menopause-specific quality of life questionnaire: development and psychometric properties. *Maturitas*. 2008;61(1-2):107-21.
11. National Institute on Ageing, 2013. Age page. URL: www.nia.nih.gov. [Retrieved on 5/11/2016].
12. Acharya D, Gautam S, Neupane N, Kaphle HP, Singh JK. Health problems of women above forty years of age in Rupandehi district of Nepal. *Int J Health Sci Res*. 2013;3(3):29-36.
13. Chuni N, Sreeramareddy CT. Frequency of symptoms, determinants of severe symptoms, validity of and cut-off score for Menopause Rating Scale (MRS) as a screening tool: A cross-sectional survey among midlife Nepalese women. *BMC Women's Health*. 2011;11(30).
14. Ghimire N, Dhakal P, Norrish D, Dangal G, Sharma D, Dhimal M, et al. Menopausal Health Status of Women of Kapilvastu District of Nepal. *J Nepal Health Res Counc*. 2015;13(31):182-7.
15. Marahatta RK. Study of menopausal symptoms among peri and postmenopausal women attending NMCTH. *Nepal Med Col J*. 2012;14(3):251-5.

16. Kalarhousi A, 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(11):811-7.
17. Singh A, Pradhan SK. Menopausal symptoms of postmenopausal women in a rural community of Delhi, India: A cross sectional study. *J Mid-life Health.* 2014;5:62-7.
18. Poomalar GK, Arounassalame B. Quality of Life During and After Menopause Among Rural Women. *J Clin Diagn Res.* 2013;7(1):135-9.
19. Shobeiri F, Jenabi E, Hazavehei SM, Roshanae G. Quality of Life in Postmenopausal Women in Iran: A Population-based Study. *Menopausal Medicine.* 2016;22(1):31-8.
20. Mirhaghjou SON, Nickname M, Merida M, et al. Quality of life and its determinants in postmenopausal women: a population-based study. *Applied Nurs Res.* 2016;30:252-6.
21. Ghazanfarpour M, Abdolhian S, Zare M, Shahsavari S. Association between anthropometric indices and quality of life in menopausal women. *Gynecol Endocrinol.* 2013;29(10):917-20.
22. 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(11):752-6.
23. Williams RE, Levine KB, Kalilani L. Menopause-specific questionnaire assessment in US population-based study shows negative impact on health-related quality of life. *Maturitas.* 2009;62(2):153-9.
24. Villaverde GC, Araujo E, Cruz F, Roa JM, Barbosa W, Rulz G. Quality of life of rural menopausal women in response to a customized exercise programme. *J Advanc Nurs.* 2006;54:11-9.