International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Agrawal D et al. Int J Reprod Contracept Obstet Gynecol. 2024 Jul;13(7):1708-1712
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20241763

Original Research Article

Quality of life in menopausal women attending gynaecology OPD in a tertiary care hospital

Deepika Agrawal, Manisha Sharma*, Sangeeta Popli

Department of Obstetrics and Gynaecology, NDMC Medical College and Hindu Rao Hospital, Delhi, India

Received: 04 May 2024
Accepted: 11 June 2024

***Correspondence:**
Dr. Manisha Sharma,
E-mail: drmanishasharma63@gmail.com

ABSTRACT

Background: The longevity of women due to increase in life expectancy makes them spend almost one third of life after menopause. Menopause is a transitional event that can profoundly affect quality of life. It is an adaptation process accompanied by many biological, psychological changes. Aim of the study was to study menopause related symptoms, their severity and impact on quality of life.
Methods: The longevity of women due to increase in life expectancy makes them spend almost one third of life after menopause. Menopause is a transitional event that can profoundly affect quality of life. It is an adaptation process accompanied by many biological, psychological changes. Aim of the study was to study menopause related symptoms, their severity and impact on quality of life.
Results: The present study showed that the most severe symptoms of vasomotor, psychological, physical and sexual domains were hot flushes, night sweats, feeling of wanting to be alone, feeling depressed, low backache, change in sexual desire. In group 1 there were more vasomotor symptoms as compared to group 2. Severity of psychological, physical, sexual symptoms increased in group 2. In local gynaecological examination more abnormalities were found in group 2 (34%) as compared to group 1 (14%). Also, there was an increased percentage of diabetes (18.96%), hypercholesterolemia (31.03%), hypertriglyceridemia (31.03%) in group 2.
Conclusions: Our study concluded that by identifying characteristics associated with poor quality of life of menopausal women would help them in making strategies that are required for improving their health and quality of life.

Keywords: Quality of Life, MENQOL, Menopausal symptoms

INTRODUCTION

Menopause, a natural event in the life of women refers to a point in time that follows one year after the complete cessation of menstruation.[1] It is not just cessation of menstruation, but it is depletion of ovarian follicles leading to decrease in ovarian hormones. Due to increase in life expectancy women have to spend almost one third of their lives in menopause.[2] This longevity along with depleted ovarian hormones has made women more vulnerable to various morbidities.

During menopause, due to cessation of ovarian function, there is decrease in oestrogen level and woman experiences many symptoms like hot flushes, dryness, back pain, urinary incontinence, joint stiffness, depressive mood, weight gain, night sweats, poor memory, and painful intercourse.

Also, the decrease in oestrogen level has an adverse effect on glucose and insulin metabolism, body fat distribution, coagulation and lipid profile.[3] The duration, severity and impact of these symptoms on quality of life may vary from person to person and population to population.

In today's world, there is a lot of emphasis on improvement of quality of life. According to WHO, quality of life is understood as individual's perception of status in life according to cultural and value system the person lives in, considering their aims, expectations, standards and worries.[4] It is a multidimensional concept and deals with various domains like philosophical, psychological, social, political, and health care. More than 80% of women report physical and psychological symptoms that commonly accompany menopause, with varying degrees of severity and life disruption.[7] It has been seen that quality-of-life declines in midlife women, as transition occurs from reproductive age to menopause and then to post-menopausal life.

In our country, the health system mainly emphasizes on safe motherhood, reproductive health, and adolescent health.[6] The issues of women beyond reproductive age have not been considered a priority till now. Also, there is lack of awareness about the effect of the menopausal symptoms on quality of life in women. Health-care providers play a more visible and instrumental role in continuously assessing menopausal women's needs as well as to implement appropriate health educational programs and to develop a new way to meet their demands.[7]

So the present study has been done to study various menopause related vasomotor, physical, sexual and psychological symptoms in post-menopausal women and to assess the impact of these menopause related symptoms on quality of life of women by Menopause - Specific Quality of Life Questionnaire (MENQOL).[5]

METHODS

This was a Hospital Based Cross-Sectional Study conducted in Department of Obstetrics and Gynecology, Hindu Rao Hospital and NDMC Medical College, New Delhi from Sept 2019 to Aug 2021. After ethical clearance from the institution the study was done on 150 women, who were post-menopausal with age more than 45 years and attained natural menopause and were up to 10 years of their final menstrual period.

Inclusion criteria

Women who are able to understand the questions and gave consent for the study were included.

Exclusion criteria

Women with known medical problems like diabetes, thyroid disorder, hypertension, renal disorder, anemia, arthritis or who had induced menopause due to hysterectomy or oophorectomy were excluded from the study. Women using hormone replacement therapy were also excluded.

A written informed consent was filled up by them after explaining the procedure to them in the language they understood. The respondents were assured of confidentiality.

A pre-structured performa was filled after taking a detailed history of women including demographic profile, menstrual and menopausal history, obstetrics and personal history. Any significant past medical/surgical or family history was also noted.

For collecting data of menopausal related symptoms, Menopause-specific Quality of Life questionnaire (MENQOL) developed by Hilditch et al was used. The questionnaire was explained to all the participants. The MENQOL questionnaire includes a list of 29 menopausal symptoms grouped into 4 domains. The vasomotor domain assesses hot flushes, night sweats, sweating. The psychological domain evaluates the psychological well-being of the individual by including items regarding anxiousness, memory and feeling 'blue'. The physical domain evaluates items such as flatulence, bloating, pain, tiredness, sleeping, energy, weight gain and the sexual domain assesses symptoms related to changes in sexual desire, vaginal dryness and intimacy.

The participants were asked to fill up the questionnaire on the basis of their experience of all the 29 symptoms during the past one-month period. If the patient was illiterate, she was asked the questionnaire as per the Performa in the local language. The systematic scoring was done by five-point Likert Scale, which included score 'one' equivalent to a woman responding and "No" to a question which meant that she had not experienced those symptoms in the past one month. 'Two' score indicated that the women experienced the symptom, but it was not bothersome to her. Scores 'three' to score 'five' indicated increasing levels of bothered experiences i.e. score three indicated mild, score four moderate and score five indicated severe bothering experiences.

General physical examination, systemic and local examination was performed. Need based laboratory investigations including complete blood count, liver/renal function tests, fasting and post prandial sugar, urine examination, fasting lipid profile, serum TSH, USG pelvis was done to detect any newly developed co morbidity along with menopause. PAP smear was taken as a screening procedure for detecting abnormality in cervix.

The data was entered in MS excel spreadsheet and analysis was done using Statistical Package for Social Sciences (SPSS) version 21.0. Categorical variables were presented in number and percentage and continuous variables were presented as mean±SD and median. Qualitative variables were correlated using chi-square test/fisher's exact test. A p value of <0.05 was considered statistically significant.

RESULTS

In the study, 50.66% women were between 51-55 years, 32% between 56-60 years and only 5.33% women were

>60 years. The mean age of menopause was 49.61±1.42 years. 83.33% were home maker and 46.67% women were uneducated, 33.2% had received primary or secondary education and 72% women belong to middle class or lower middle class. 53.33% women had normal BMI while 37.33% were overweight and 6.67% were obese.

Table 1: Mean BMI comparison between both groups.

BMI	Group 1		Group 2	
	Mean	SD	Mean	SD
	23.34	2.244	22.54	2.807
t-test	2.398			
P value	0.020*			

*p value<0.05 is significant

The 150 enrolled women were divided in two groups based on duration of menopause. Group 1 included women with menopause duration less than or equal to 5 years and Group 2, more than 5 years. Figure 1 shows that 61.33% women were in group 1 and 38.66% in group 2.

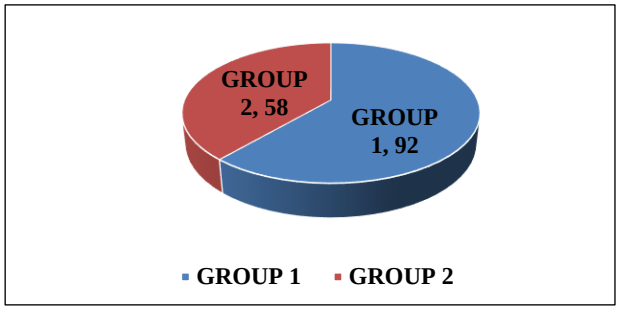

Figure 1: Distribution of women according to duration of menopause.

Table 2 show a comparative analysis on local examination finding in both menopausal groups. Normal findings were found in 85.87% in group 1 and 65.57% in group 2. By using Chi square test, the p value was found to be 0.044, which is significant.

Table 2: Local examination findings (specific pathology).

Gynaecological findings per speculum	Group 1 (%)	Group 2 (%)
Candidiasis	3.26	3.45
Cervical erosion	8.69	15.52
Cervical growth	2.17	3.44
Cystocele	0	12.07
Uterine prolapse	0	8.62
Normal	85.87	65.57
Chi square	12.991	
P value	0.044*	

*p value<0.05 is significant

In vasomotor domain hot flushes had highest mean value of 3.198±0.9 followed by night sweats 2.96±1.08 and sweating 2.93±1.04. In psychological domain feeling of wanting to be alone and feeling depressed had high mean value of 3.3±0.88 and 3.26±0.93 respectively. In physical domain low backache had highest mean value of 4.09±0.72 followed by feeling tired with mean value of 3.83±0.85 and decreased stamina 3.827±0.79 and decrease in physical strength with a mean value of 3.827±0.8. In sexual domain change in sexual desire had a highest mean value of 2.681±0.78.

Table 3: Pap smear findings in total and both menopausal groups.

PAP smear	Group 1 (%)	Group 2 (%)
ASC-H	0	1.7
ASCUS	5.4	10.3
Atrophic smear	5.4	17.2
inflammatory smear	25.0	13.8
NILM	60.9	53.4
Sq cell ca	3.3	3.4
Chi square	11.64	
P value	0.032*	

*p value<0.05 is significant

Table 4: Different vasomotor symptoms in both the groups.

Vasomotor symptoms	Group 1		Group 2		P value	Total	
	Mean	SD	Mean	SD		Mean	SD
Hot flushes or flashes	3.9483	0.94447	2.4483	0.90170	0.001	3.031	1.024
Night sweats	3.50	1.203	2.4310	0.97535	0.003		
Sweating	3.4483	1.18725	2.4138	0.89901	0.022		
Mean	3.632	1.111	2.431	0.937			

The prevalence of vasomotor symptoms was more in women with menopause duration ≤ 5 years (group 1), but the prevalence of psychological symptoms, physical symptoms and sexual symptoms were more in women with menopause >5 years (group 2) causing a poor quality of life. The values were statistically significant in all the domains (Table 4, Table 5).

Table 5: Different psychological symptoms in both the groups.

Psychological symptoms	Group 1		Group 2			Total	
	Mean	SD	Mean	SD	P value	Mean	SD
Being dissatisfied with my personal life	2.1724	0.81945	3.7414	0.92831	0.001	2.905	0.887
Feeling anxious or nervous	2.00	0.838	3.7241	1.03945	0.022		
Experiencing poor memory	2.0517	0.84651	3.6724	0.96223	0.001		
Accomplishing less pain, I used to do	1.6897	0.56837	3.4310	1.12565	0.032		
Feeling depressed, down or blue	2.7069	1.12404	3.8103	0.73644	0.033		
Being impatient with other people	1.6379	0.51973	3.4828	1.15836	0.021		
Feelings of wanting to be alone	2.7241	1.03945	3.8793	0.72735	0.026		
Mean	2.14	0.822	3.67	0.953			

*p value<0.05 is significant

Secondary incidental outcome

There was increased incidence of both medical and gynaecological co-morbidities in women with duration of menopause >5 years. The values were statistically significant.

DISCUSSION

Mean values of all the menopausal symptoms according to MENQOL questionnaire in 4 domains were calculated.

In group 1 there was more vasomotor symptoms as compared to group 2. The mean in group 1 was 3.632±1.11 and that of group 2 was 2.431±0.93. By using Chi square test, the value is <0.05, which is significant. In group 1 women were experiencing more vasomotor symptoms than another group. This study correlates with study done by Karmakar et al where prevalence of vasomotor symptoms was less in elderly women of age >60 years.[8]

Mean value of psychological symptoms in group 1 was 2.14±0.822 and that of group 2 was 3.67±0.953. It showed a positive correlation between these two groups. The frequency and severity of psychological symptoms increases with increase in duration of menopause. Our study had a p value of <0.05, which is significant. Thus, more psychological support is needed as the age advances or duration of menopause increases. Our study correlates with the study done by Mohamed et al.[7] Where these symptoms had increased from premenopausal (2.77±1.5) to postmenopausal women (3.17±1.36). Our study contradicts with the study by Ray et al.[9]

Similarly mean value of physical symptoms in group 1 was 2.9±0.924 and in group 2 mean value was 3.48±0.795. this indicates a positive correlation between these 2 groups. Physical symptoms increased with duration of menopause. There is decrease in bone mass and muscle mass with increase in age, this can lead to a poor QOL in physical domain.[10] The p value was calculated as <0.05 by paired sample t-test, which is significant. Our study had a similar result as done by Ray et al.[9]

Likewise mean value in sexual domain in group 1 was 1.687±0.56, which increased to 3.22±0.98 in group 2. The p value calculated was <0.05, which is significant. Maximum change had occurred in vaginal dryness, due to oestrogen deficiency. Also, there is a marked increase in mean value of change in sexual desire, this was because in Indian population abstinence overrules the sexual behaviour of women, who are old. Also, deterioration of relationship with husband, living under one roof with children play a role in poor QOL in sexual domain. Study done by Mohamed et al has shown that the poorest QOL was in sexual domain.[7] Our result contradicts with the study by Ray et al.[9] They concluded that poor QOL in sexual domain was found to be associated with younger age women (<50 years) and those who had attained menopause for <5years of age.

In local examination findings in all participating menopausal women, 33 (22%) had abnormal finding (cervical erosion, growth, discharge, inflammation) and 117 (78%) women had normal finding. When we studied in groups, 85.87% women in group 1 and 65.57% in group 2 had a normal local examination finding. 14.13% abnormality was found in group 1 and 34.48% abnormality in group 2. This indicated increase in abnormality with increase in duration of menopause. The difference in both the groups was statistically significant as p value by Chi square test was found to be 0.044, which is significant. A study done by Susila et al in 2010 found the prevalence of genital prolapse as 18.8% in menopausal women.[11] Our study showed a lower incidence as compared with the above study because we had not included women with duration of menopause more than 10 years in our study.

When newly detected medical morbidities were considered, among 150 women, 23 women were detected with hypertension, 15 with diabetes, 24 had hypercholesterolemia and 26 had hypertriglyceridemia. Similarly studying in groups, group 1 had 15.21% hypertension, 4.34% diabetes, 6.52% hypercholesterolemia, 8,69% hypertriglyceridemia. There was an increased percentage of diabetes (18.96%), hypercholesterolemia (31.03%), hypertriglyceridemia (31.03%) in group 2, and the difference in two groups was statistically significant with p-value <0.5. It shows an

increase in chronic illness as the age advances. So, women may be counseled about life style modification by changing the type of food and including exercises. Similarly, Waidyasekera et al concluded that chronic illness in the women was significantly associated with the presence of menopausal symptoms (P<0.01).[12] Also, a large cross-sectional study by Parazzini et al suggested that postmenopausal women were at a higher risk of developing type 2 diabetes.[13]

This study has few limitations. Firstly, time bound cross sectional study. Secondly, the sample size was limited. A larger number of cases required for evaluation of significance of predictive value. Thirdly, sexual symptoms may not be scored properly due to a shy attitude of the women. Fourthly, the findings may not be generalized to other settings as the hospital caters to the population living nearby, so it does not represent the entire population.

CONCLUSION

Our study concluded that menopausal women form a vulnerable group in the society. By identifying characteristics associated with poor quality of life of menopausal women would help them in making strategies that are required for improving their health and quality of life. It is high time to think, plan and execute all feasible, appropriate and practical measures to give them a happy and joyful life.

Recommendations

Health care providers need to play a more visible and instrumental role in continuously assessing menopausal women's needs as well as implement appropriate health educational programs for women about the menopausal period and how to pass it safely. Further research addressing women's health needs is also essential for improving the quality of life of menopausal women in India. A large number of cases required for evaluation of significance of predictive value. So, still larger studies are required for better understanding of quality of life in menopausal women.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Hoffman BL, Schorge JO, Bradshaw KD, Halvorson LM, Schaffer JI, Croton MM. Williams Gynaecology. 3rd edition. Texas. McGraw Hill; 2016:471-475.
2. Monika Satpathy. A study on age at Menopause, Menopausal Symptoms and Problems among Urban Women from Western Odisha, India. IJSRP 2016;6(3):422-7.
3. Malhotra N, Malhotra J, Saxena R, Bora NM. Jeffcoate's Principle of Gynaecology. 9th edition. New Delhi. Jaypee Brothers; 2019:1074-8.
4. 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(3):151-6.
5. Hilditch JR, Lewis J, Peter A, van Maris B, Ross A, Franssen E, et al. A menopause-specific quality of life questionnaire: development and psychometric properties. Maturitas. 1996;24(6):161-75.
6. Paruthi R, Dutta PK. Reproductive and child health programme. Ind J Pub Heal. 2002;46(3):72-7.
7. Mohamed HA, Lamadah SM, Zamil LGA. Quality of life among menopausal women. Int J Reproduct Contracept Obstetr Gynaecol. 2014;3(3):552-61.
8. Karmakar N, Majumdar S, Dasgupta A, Das S. Quality of life among menopausal women: A community based study in a rural area of West Bengal. J Midlif Heal. 2017;8(1):21-7.
9. Ray S, Dasgupta A. An assessment of QOL and its determining factors of post menopausal women in a rural area of West Bengal, India: A multivariate analysis. Int J Medi Publ Heal. 2012;2(4):12-9.
10. Rubin R. Postmenopausal women with a "Normal" BMI might be overweight or even obese. JAMA. 2018;319(12):1185-7.
11. Susila T, Roy G. Gynecological morbidities in a population of rural postmenopausal women in Pondicherry: Uncovering the hidden base of the iceberg. J Obstetr Gynecol India. 2014;64(1):53-8.
12. Waidyasekera H, Wijewardena K, Lindmark G, Naessen T. Menopausal symptoms and quality of life during the menopausal transition in Sri Lankan women. Menopause. 2009;16(1):164-70.
13. Parazzini F, De Aloysio D, Di Donato P, Giulini NA, Modena AB, Cicchetti G, et al. Determinants of body mass index in women around menopause attending menopause clinics in Italy. Climacteric. 2003;6(1):67-74.

Cite this article as: Agrawal D, Sharma M, Popli S. Quality of life in menopausal women attending gynaecology OPD in a tertiary care hospital. Int J Reprod Contracept Obstet Gynecol 2024;13:1708-12.