



## QUALITY OF LIFE AMONG MENOPAUSAL WOMEN

GINIC GUPTA<sup>a</sup> AND REEMA KUMARI<sup>b1</sup>

<sup>ab</sup>Department of Community Medicine and Public Health, K.G.M.U., Lucknow, Uttar Pradesh, India

### ABSTRACT

Many women experience menopausal symptoms during their post-reproductive years. This natural phenomenon often results in various psychological, somatic, vasomotor, and urinary symptoms, which impair the overall quality of life of women. This study aimed to access the quality of life of menopausal women. Though a majority of women suffer from severe menopausal symptoms, they have poor health related quality of life. Sensitization of both women and the health care system may serve to address this issue of menopause-related symptoms and the possibility of treatment for these.

**KEYWORDS:** Quality of Life among Menopausal Women, Post-Menopause, Menopause Specific Quality of Life, Menopausal Symptoms, Menopausal Syndrome, Premenopause, Perimenopause

Women are among the most important part of any society and family, and community health provision is dependent on the fulfillment of their different health needs. On the other hand, menopause is one of the most critical stages of women's health. According to the World Health Organization classification- Menopausal women are those who have not experienced regular menstrual bleeding for 12 months or more. Menopause is considered to be a marker of biological aging in women (WHO technical Group, 1996). It is one of the most significant stages in the female reproductive life cycle where there is a transition from the reproductive to the non-reproductive stage. It is a physiological event, but its psychological, physical, and sexual consequences will prevail throughout post-reproductive odd years for the woman.

World Health Organization defines Quality of life as an individual's perception of his or her position in life in the context of the culture and value systems in which he or she lives and in the relation to his or her goals, expectations, standards, and concerns (WHO, 1993). In menopausal women, quality of life usually refers to aspects pertaining to health based on a combination of various symptoms related to vasomotor, psychosocial, physical, and sexual domains. During this period, following the lowered activity of the ovaries and changes in hormone levels symptoms such as headache, sleep disorder, mood swings, vasomotor symptoms such as hot flushes and night sweats and anxiety might occur.

Some of the important and common symptoms women can experience during and after menopause are changes in periods, hot flushes and night sweats, problems with vagina and bladder, changes in sexual desire, sleep problems, mood changes/swings, changes in the body, etc.

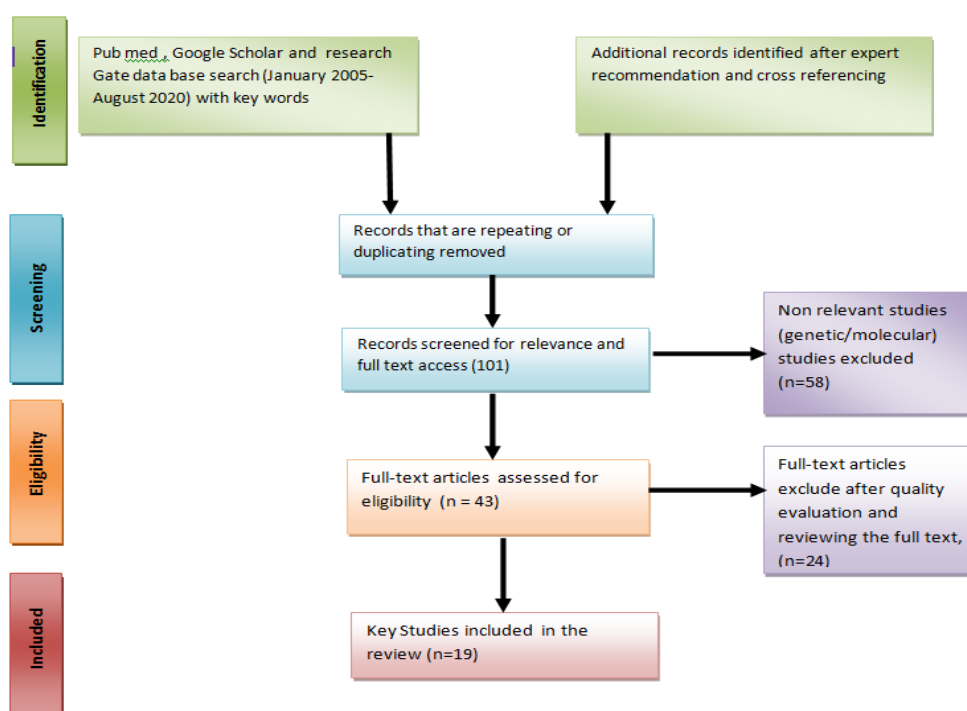
According to the Indian Menopausal Society, there are about 65 million Indian women over the age of 45 years. The average age of menopause in Indian women is 46.2 years much less than their western counterparts (51 years) (Ahuja, 2016). Today, most women spend more than one-third of their life after menopause. It is predicted that the total number of postmenopausal women worldwide will increase from 476 million in the year 1990 to 1200 million in 2030. Menopause does not cause any life-threatening conditions, but it affects the quality of life of women in the middle ages.

Sensitization of both women and the health care system may serve to address this issue of menopause-related symptoms and the possibility of treatment for these. It is important to have a national policy with an individualized approach in addressing the menopause-related symptoms which is sensitive to the clear event in the women's life cycle.

### METHODOLOGY

The literature search utilized Pub Med, Google Scholar, and Research Gate databases, with a period limit of January 2005 until August 2020.

<sup>1</sup>Corresponding author



**RESULTS AND DISCUSSION**

Menopausal symptoms can be categorized into 4 domains i.e vasomotor, psychosocial, physical, and sexual symptoms. Quality of life in the selected studies was evaluated using questionnaires including the World Health Organization questionnaire (WHO Quality of Life-brief), Kupperman menopausal index (mKMI), Menopause rating scale (MRS), Goldberg Depression Scale and Goldberg Anxiety Scale, Greene Climacteric Scale, Short Form-Health Survey 36 (SF-36) and menopause-specific quality of life scale (MENQOL).

**Table 1: Health-related quality of life (HRQoL) – issues in menopause**

1	Vasomotor symptoms
2	Cognitive functioning
3	Vaginal dryness
4	Mood symptoms
5	Urinary complaints
6	Sleep changes
7	Skin aging
8	Changes in Sexual activity
9	Anxiety
10	Depression
11	HRQoL associated with chronic conditions

**Table 2: Studies based on Menopausal Symptoms and Quality of life among menopausal women**

S. no	Author	Place	Sample	Instrument	Results
<b>World</b>					
1.	Du <i>et al.</i> , 2020	Shanghai, china	3147 participants aged 40–60 years.	Kupperman Menopausal Index (mKMI).	The total prevalence of menopausal symptoms was 73.8percent, while among the perimenopausal women, the symptoms were the most common (81.70%). The top three reported symptoms were fatigue (38.08%), hot flushes and sweating (33.65%), and joint ache (28.81%).
2.	Rathnayake <i>et al.</i> , 2019	Sri Lanka	350 pre and post-menopausal women	Menopause Rating Scale (MRS)	In postmenopausal women, physical and mental exhaustion (53%), irritability (48.2%), depressive mood (43.4%), and

					hot flushes (42.2%) of mild to moderate severity were observed. Severe symptoms were more prevalent among postmenopausal women compared to premenopausal women.
3.	Mulhall <i>et al.</i> , 2018	Australia	Premenopausal (n=237), perimenopausal (n=249) or naturally postmenopausal (n=225)	Goldberg depression scale and Goldberg anxiety scale	Perimenopausal was associated with an increased risk of greater symptoms of depression while being postmenopausal was associated with an increased risk of greater symptoms of anxiety.
4.	Masjoudi <i>et al.</i> , 2017	Iran	646 women aged 45-60 years	Menopause Rating Scale	The score of the physical domain for menopause symptoms was higher in postmenopausal women. Joint and muscle problems were the most frequent symptoms in post and perimenopausal women.
5.	Sánchez-Rodríguez <i>et al.</i> , 2017	Mexico city	101 premenopausal and 101 postmenopausal women	WHO Quality of Life-brief	Oxidative stress is increased in postmenopausal women with psychological disturbances and low quality of life
6.	Wieder-Huszla <i>et al.</i> , 2014	Northern Poland	630 women	1.Short Form health survey (SF-36) 2.Blatt-Kupperman Menopausal Index	57.9 percent did not have climacteric symptoms, only 8.7 percent had severe symptoms, 9.3 percent had moderate symptoms while 24.1 percent had mild symptoms.
7.	Dienye <i>et al.</i> , 2013	Nigeria	385 women were with ages ranging from 35 to 95 years,	Modified Menopause Rating Scale (MRS)	The most prevalent menopausal symptoms were loss of libido (92.47%), muscle pain (87.53%), joint pain (85.45%), and tiredness (80.26%). Urinary symptoms had the least prevalence (7.79%)
8.	Grigoriou <i>et al.</i> , 2013	Greece	1025 greek women perimenopausal or within their first 5 postmenopausal years	Greene Climacteric Scale	29.8 percent of the women reported moderate to severe menopausal symptoms. More specifically, 39.2 percent reported vasomotor, 21.3 percent psychological, 6.3 percent psychosomatic, and 34.5 percent sexual symptoms.
9.	Ayers and Hunter, 2013	South London	140 women Reporting at least ten hot flushes/night sweats a week	Short Form-Health survey-36 (SF-36)	Women with vasomotor symptoms reported somewhat reduced Hrql compared to SF-36 us norms and a general sample of UK menopausal women. 53 percent reported comorbid physical illness and 66 percent had current psychosocial concerns.
10.	Rahman	Malaysia	356 participants	Modified	45 percent of postmenopausal women

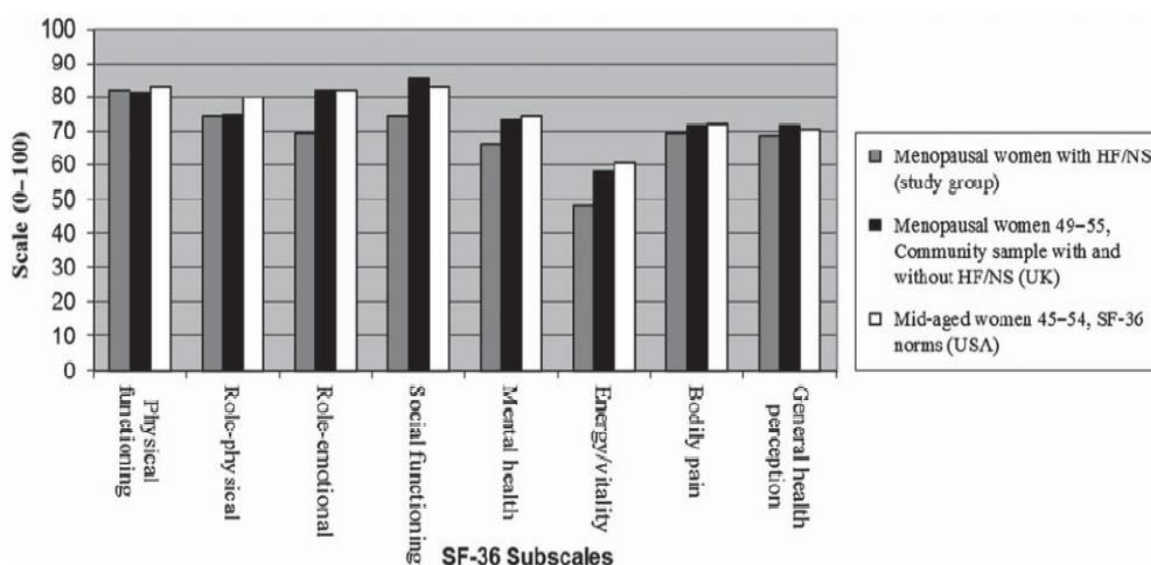
	SASA, & Zainudin SR, 2010		40-65 years	Menopause Rating Scale (MRS)	reported major symptoms like joint and muscular discomfort, physical and mental exhaustion, anxiety, depressive mood, and irritability.
<b>India</b>					
11.	Dilip Patil and Deshmukh, 2019	Pune	288 women belonged to 40-65 years	Modified MRS(Menopausal Rating Scale)	The most prevalent symptoms reported were joint and muscular discomfort 77.77 percent, physical and mental exhaustion 54.51 percent, heart discomfort 32.63 percent, and sleep problems 32.29 percent.
12.	Madan <i>et al.</i> , 2019	Delhi	105 women aged 40 years and above	Menqol	85.7 percent of women reported a decrease in physical strength. The prevalence of symptoms for the physical domain was found 89 percent and the sexual domain of symptoms was least prevalent i.e. 11 percent
13.	Senthilvel <i>et al.</i> , 2018	Kerala, India	150 postmenopausal women	Menqol	The prevalence levels of the classical menopausal symptoms such as hot flushes, night sweats, and vaginal dryness in women aged 50–65 years were 75.3 percent, 58 percent, and 30.7 percent, respectively. The majority of them experienced physical symptoms.
14.	Ganapathy and Al Furaikh, 2018	Bangalore, Karnataka	140 participants of age 40 to 60 years	Menqol	The Prevalence of symptoms in physical, vasomotor, psychological, and sexual domains was 74.56 percent, 60.7 percent, 44.68 percent, and 26.4 percent, respectively.
15.	Sreerenjini, 2018	Coimbatore	250 menopausal women aged between 46 to 60 years	1.Menopausal Rating Scale 2.Menqol	53.2 percent experiencing hot flushes weekly once, 53.6 percent had excessive sweating in the night on alternate days, 54 percent experiencing palpitation weekly once and 50.8 percent experiencing chest tightness weekly once.
16.	Karma, 2018	Punjab	100 postmenopausal women.	Menqol	Menopausal women had worse Qol in the vasomotor domain and psychosocial domain.
17.	Somak and Aparajita, 2016	Kolkata	100 postmenopausal women of 40-60 years	Menqol	Psychosocial symptoms were the most prevalent with anxiety, loss of memory, and nervousness to be 76 percent. The occurrence of vasomotor symptoms was average with 55 percent of them reporting hot flashes and 40 percent reported sweating.
18	Kumar <i>et al.</i> , 2016	Karnataka	214 menopausal women of 40-60 years	Menqol	Physical symptoms (98.6%) like aching in muscles or joints, decrease in physical strength were the predominant symptoms experienced by peri-menopausal women

					and concluded that the quality of life of postmenopausal women was poor when compared to pre-menopausal women.
19.	Ray and Dasgupta, 2012	West Bengal	315 postmenopausal women	Menqol	77 percent of postmenopausal women had poor quality of life.

**VASOMOTOR SYMPTOMS**

The most prevalent vasomotor symptoms were hot flushes. Women with vasomotor symptoms reported somewhat reduced HrQoL compared to SF-36 US norms and a general sample of UK menopausal women; 53%

reported comorbid physical illness and 66% had current psychosocial concerns Overall, poor HrQoL was associated with having problematic hot flushes, current psychosocial concerns, (younger) age, (higher) body mass index and poor general health. (Ayers and Hunter, 2013).



**Figure 2: Means for the SF-36 subscales (for menopausal women with hot flushes/night sweats (HF/NS), a general sample of menopausal women not selected for HF/NS, and women aged 45 – 54 years) adapted from reference (B. Ayers and M. S. Hunter)**

A third of (33%) women experienced moderate to severe menopause-related symptoms in menopausal transition time or early postmenopausal phase in a study based in Greece. Four out of ten women in this group (40%) had moderate to severe vasomotor symptoms. (Grigoriou *et al.*, 2013). Studies from India showed that the occurrence of vasomotor symptoms was average, with a maximum prevalence of hot flushes followed by sweating among all the vasomotor symptoms.

**PSYCHOSOCIAL SYMPTOMS**

A study from Australia reported perimenopausal was associated with increased risk of greater symptoms of depression while being postmenopausal was associated with increased risk of greater symptoms of anxiety (Mulhall *et al.*, 2018). A study conducted in Sri Lanka

reported, irritability (48.2%), depressive mood (43.4%), were the prevalent symptoms. (Rathnayake *et al.*, 2019)

According to the studies conducted in India Psychosocial symptoms were the most prevalent with anxiety, loss of memory, and nervousness.

**PHYSICAL SYMPTOMS**

According to a study from China (Shanghai), the top three reported symptoms were fatigue (38.08%), hot flushes and sweating (33.65%), and joint ache (28.81%). (Du *et al.*, 2020). According to a study conducted in Iran, the score of the physical domain for menopause symptoms was higher in postmenopausal women. Joint and muscle problems were the most frequent symptoms in the post and peri-menopausal women. (Masjoudi *et al.*, 2017)

Studies conducted in India showed that physical symptoms like aching in muscles or joints, decrease in physical strength were the predominant symptoms experienced by peri-menopausal women (Kumar *et al.*, 2016)

## SEXUAL SYMPTOMS

According to a study from Nigeria the most prevalent menopausal symptoms were loss of libido (92.47%), muscle pain (87.53%), joint pain (85.45%), and tiredness (80.26%). Urinary symptoms had the least prevalence (7.79%) (Dienye *et al.*, 2013) Another study from Greece showed that Sexual symptoms (34.5%) were the most prevalent symptoms after vasomotor symptoms (39.2%) (Grigoriou *et al.*, 2013)

According to the studies conducted in India (Delhi), Sexual symptoms were the least prevalent (Madan *et al.*, 2019). Among Sexual symptoms, vaginal dryness was the most prevalent one (Senthilvel *et al.*, 2018)

The world population is more conscious about the symptoms of menopause either vasomotor or sexual symptoms while the Indian population is less aware of menopausal symptoms. They generally do not disclose their sexual history easily, probably that is the reason why sexual symptoms are very less prevalent in India.

## CONCLUSION AND RECOMMENDATIONS

Though the majority of women did suffer severe menopausal symptoms, they have poor health-seeking behaviour, which leads to most of them having the poor health-related quality of life. Active intervention should be done in increasing their health-seeking behaviour to reduce the severity of their menopausal symptoms, as well as controlling their health risk to ensure a better quality of life.

Sensitization of both women and the health care system may serve to address this issue of menopause-related symptoms and the possibility of treatment for these. It is important to have a national policy with an individualized approach in addressing the menopause-related symptoms which is sensitive to the clear event in the women's life cycle

## REFERENCES

- Ahuja M., 2016. Age of menopause and determinants of menopause age: A PAN India survey by IMS. *Journal of Mid. Life Health*, **7**(3): 126-131. <https://doi.org/10.4103/0976-7800.191012>
- Ayers B. and Hunter M.S., 2013. Health-related quality of life of women with menopausal hot flushes and night sweats. *Climacteric*, **16**(2): 235-239. <https://doi.org/10.3109/13697137.2012.688078>
- Dienye P.O., Judah F. and Ndukwu G., 2013. Frequency of symptoms and health-seeking behaviours of menopausal women in an out-patient clinic in Port Harcourt, Nigeria. *Global Journal of Health Science*, **5**(4): 39-47. <https://doi.org/10.5539/gjhs.v5n4p39>
- Dilip Patil S. and Deshmukh J.S., 2019. Prevalence and Pattern of Menopausal Symptoms among Menopausal Women in Central India: A Community Based Cross Sectional Study. *Galore International Journal of Health Sciences and Research*, **4**(3): 60-65.
- Du L., Xu B., Huang C., Zhu L. and He N., 2020. Menopausal symptoms and perimenopausal healthcare-seeking behavior in women aged 40–60 years: A community-based cross-sectional survey in Shanghai, China. *International Journal of Environmental Research and Public Health*, **17**(8). <https://doi.org/10.3390/ijerph17082640>
- Ganapathy T. and Al Furaikh S., 2018. Health-related quality of life among menopausal women. *Archives of Medicine and Health Sciences*, **6**(1): 16. [https://doi.org/10.4103/amhs.amhs\\_122\\_17](https://doi.org/10.4103/amhs.amhs_122_17)
- Grigoriou V., Augoulea A., Armeni E., Rizos D., Alexandrou A., Dendrinou S., Panoulis K. and Lambrinoukaki I., 2013. Prevalence of vasomotor, psychological, psychosomatic and sexual symptoms in perimenopausal and recently postmenopausal Greek women: Association with demographic, life-style and hormonal factors. *Gynecological Endocrinology*, **29**(2): 125-128. <https://doi.org/10.3109/09513590.2012.708801>
- Karma D.D., 2018. Quality of Life among Post-Menopausal Women in Rural area of Punjab. *Journal of Medical Science And Clinical Research*, **6**(1): 32471-77. <https://doi.org/10.18535/jmscr/v6i1.168>
- Kumar R., Nawaz A.S., Holyachi S.K. and Rao V., 2016. A Study of Quality of Life Among Peri-Menopausal Women in a Rural Field Practice Area of a Medical College in Karnataka. *National Journal of Community Medicine*, **7**(3): 160–164.

- Madan U., Chhabra P., Gupta G. and Madan J., 2019. Menopausal symptoms and quality of life in women above 40 years in an urban resettlement colony of East Delhi. *International Journal of Medical Science and Public Health*, **8**(7): 514-19.  
<https://doi.org/10.5455/ijmsph.2019.0203012052019>
- Masjoudi M., Amjadi M.A. and Leili E.K.N., 2017. Severity and frequency of menopausal symptoms in middle aged women, Rasht, Iran. *Journal of Clinical and Diagnostic Research*, **11**(8): QC17-QC21.  
<https://doi.org/10.7860/JCDR/2017/26994.10515>
- Mulhall S., Andel R. and Anstey K.J., 2018. Variation in symptoms of depression and anxiety in midlife women by menopausal status. *Maturitas*, **108**: 7-12.  
<https://doi.org/10.1016/j.maturitas.2017.11.005>
- Rathnayake N., Lenora J., Alwis G. and Lekamwasam S., 2019. Prevalence and Severity of Menopausal Symptoms and the Quality of Life in Middle-aged Women: A Study from Sri Lanka. *Nursing Research and Practice*, **2019**: 1-9.  
<https://doi.org/10.1155/2019/2081507>
- Ray S. and Dasgupta A., 2012. An assessment of QOL and its determining factors of post menopausal women in a rural area of West Bengal, India: A multivariate analysis. *International Journal of Medicine and Public Health*, **2**(4): 12-19.  
<https://doi.org/10.5530/ijmedph.2.4.3>
- Sánchez-Rodríguez M.A., Castrejón-Delgado L., Zacarías-Flores M., Arronte-Rosales A. and Mendoza-Núñez V.M., 2017. Quality of life among post-menopausal women due to oxidative stress boosted by dysthymia and anxiety. *BMC Women's Health*, **17**(1): 1-9.  
<https://doi.org/10.1186/s12905-016-0358-7>
- Senthilvel S., Vasudevan S., Anju P.S., Sukumaran A. and Sureshbabu J., 2018. Assessment of symptoms and quality of life among postmenopausal women in a tertiary care hospital in Kochi, South India: A hospital-based descriptive study. *Journal of Mid-Life Health*, **9**(4): 180-184.  
[https://doi.org/10.4103/jmh.JMH\\_98\\_18](https://doi.org/10.4103/jmh.JMH_98_18)
- Somak M. and Aparajita D., 2016. Quality of life among menopausal women - is it still an enigma? *Indian Journal of Community Health*, **28**(4): 383-388. Retrieved from <http://www.iapsmupuk.org/journal/index.php/IJCH/article/view/1364/837>  
<https://www.cabdirect.org/cabdirect/abstract/20173188610>
- Sreerenjini B., 2018). Correlation between menopausal symptoms and quality of life among postmenopausal women. *Advance Research Journal of Multi-Disciplinary Discoveries*, **27**(4): 14-18.  
<http://www.journalresearchijf.com/wp-content/uploads/Correlation-between-menopausal-symptoms-and-quality-of-life-among-postmenopausal-women-PP-14-18.pdf>.
- Wieder-Huszla S., Szkup M., Jurczak A., Samochowiec A., Samochowiec J., Stanisławska M., Rotter I., Karakiewicz B. and Grochans E., 2014. Effects of socio-demographic, personality and medical factors on quality of life of postmenopausal women. *International Journal of Environmental Research and Public Health*, **11**(7): 6692-6708.  
<https://doi.org/10.3390/ijerph110706692>