



GERIATRIC GYNECOLOGICAL DISORDERS & QOL IN MENOPAUSAL WOMEN IN URBAN POPULATION OF CENTRAL INDIA.

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ABSTRACT

Objective: Assess menopausal symptoms & QOL, Importance of early symptom recognition, knowledge and importance of each domain of menopausal symptom, their occurrence and relation with socio-demographic variables. **Materials and Methods:** Hospital-based descriptive study at Outpatient and Inpatient Department of Gynecology at Shri Mahaveer Hospital, Raipur, CG with 140 postmenopausal women (PM), from March 1-June 30, 2020, using simple random sampling & structured Menopause-specific QOL (MENQOL) questionnaire.

Results:

- **Socio-demographic** - 9(6.4%) premature menopause, 113 (80.715%) natural menopause, 134 (95.71%) married, 126 (90%) housewives, 112(80%) literate. 109 (77.86%) had no co morbidities.
- **Mean age menopause:** - natural 43.88 + 5.01, surgical 40 + 7.73 yrs.
- **Prevalence** of classical menopausal symptoms- hot flushes 64.29% and vaginal dryness 50%, highest in 46-50 age group (17.14%, 12.14%) followed by 51-55yrs (15%, 10%).
- **MENQOL mean total score** = 67.51 + 17.88, highest score 104. Mean physical symptom score 38.81 + 11.25 (95% CI 36.94, 40.66) was highest followed by psychosocial 16.21 + 5.12 (15.36, 17.06), vasomotor 6.81 + 2.91 (6.33, 7.29) and least for sexual symptoms 5.94 + 3.19(5.38, 6.44).
- **Associations** between QOL scores with educational, socioeconomic & marital status were statistically significant with $P < 0.05$

Conclusion: Postmenopause-related physical symptoms are frequently reported by middle age group. By nursing education, creating appropriate awareness and health education on management of postmenopausal symptoms to that age group could help in reducing burden of healthcare.

KEYWORDS : menopause-specific quality of life questionnaire, postmenopausal symptoms, postmenopausal women.

INTRODUCTION

Menopause is permanent cessation of menstruation which is retrospectively determined following twelve months of amenorrhea during midlife period and is most identifiable event of perimenopausal period⁽¹⁾. The year immediately preceding and decade afterwards, however, are of far greater clinical significance. Immediate symptoms of menopause are effects of hormonal changes on many organ system, most extensively cardiovascular and musculoskeletal system affecting their quality of life. Menopausal symptoms have been widely studied in women from western societies. There is evidence of differences in prevalence of symptoms in Asian versus Western women. Further, wide variations have been observed in sub population studies, including studies in Indian women from selected regions^(2,8, and 10).

MATERIALS AND METHODS

Study design: Hospital-based descriptive study.

Study setting, period: Outpatient and Inpatient Department (IPD) of Gynecology, Shri Mahaveer Hospital, Raipur, CG, 1.3.2020 till 30.6.2020.

Sample size calculation : Based on previous publication by Borker et al.,⁽⁴⁾ prevalence of menopausal symptoms was 80% with 10% allowable error (d) and using formula, sample size (n) = $4pq/d^2$. Calculated sample size was 100. However we have included 140 postmenopausal women.

Sampling technique: Simple random sampling.
Study population: Target population was postmenopausal women having > 1 year of amenorrhea and local resident.

Study tool: Two-part questionnaire. Part I, sociodemographic information face-to-face interview. Part II, postmenopausal symptoms standard validated menopause-specific QOL (MENQOL) questionnaire⁽²⁾. The questionnaire was in English, translated to local language Hindi/Chhattisgarhi. This study has been approved by the institutional ethics committee.

- MENQOL questionnaire **29-item survey questionnaire**, designed to describe QOL in menopausal women and measures extent of affection.
- **Four domains:** Vasomotor, Psychosocial, Physical, Sexual.
- Each woman asked whether she experienced symptoms in **previous six months** if no she was asked next item and if answer yes, asked to indicate how bothered she is on six point scale ranging from 0 = not at all to 6 extremely bothered.
- For analysis score becomes **1 for 'No', 2 for 'Yes'** through to **7 for "Yes (Extremely bothered)"**.

Using **Likert scoring method**, each question scored by 6 points

- 1: no problem.
- 2: problem causing mild distress.
- 3: moderate distress.
- 4: relatively severe distress.
- 5: severe distress, and
- 6: very severe distress.
- 7: affecting day to day life/bed ridden.

Statistical analysis

- Data coded, entered, analyzed using SPSS 15. Chi-square test, proportions, percentages used.
- QOL score for each domain median with quartiles.
- Demographic features, symptoms as frequency with percentages.

Results - Table 1: Demographic characteristics

Age distribution (in years)	Number (n)	Percentage (%)
<40	9	6.43
41-50	59	42.14
51-60	43	30.76
>60	29	20.7
Duration of Menopause (in years)		

0-5	54	38.57
>5-10	39	27.86
>10	47	33.57
Religion		
Hindu	121	86.43
Muslim	10	7.14
Christian	4	2.86
Sikh	5	3.57
Educational status		
Uneducated	33	23.57
Upto 4 th	40	28.57
5-10 th Std	36	25.71
11-12 th Std	17	12.14
>12 th Std	14	10
Employment status		
House Wife	126	90
Government Job	2	1.43
Private Job	9	6.43
Retired	3	2.14
Marital Status		
Married	133	95
Unmarried	1	0.71
Widow/Divorcee	6	4.29
Socioeconomic class	(Revision Of The Prasad's	Social Classification 2018)5
Class 1	39	27.86
Class 2	36	25.71
Class 3	21	15
Class 4	23	16.43
Class 5	21	15
Co-morbid conditions		
None	109	77.86
Hypertension (HT)	19	13.57
Diabetes (DM)	8	5.71
Arthritis	2	1.43
Others	11	7.86

Table 2 - Prevalence of symptoms

Symptoms	Number	Percentages (%)
Hot Flushes	90	64.29
Night Sweats	85	60.71
Sweating	86	61.43
Dissatisfied with life	61	43.57
Feeling anxious/nervous	96	68.57
Poor Memory	104	74.29
Decreased Phy. Performance	77	55
Depressed feeling	88	62.86
Impatient with others	70	50
Gas/Gas Pains	97	69.29
Decreased Sexual Drive	86	61.43
Vaginal Dryness	70	50
Avoid Intimacy	65	46.43
Joint/ Muscle pain	119	85
Feeling to be alone	82	58.57
Feeling Tired	105	75
Difficulty in sleep	111	79.29
Head/Neck aches	98	70.00
Weakness	116	82.86
Decreased stamina	95	67.86
Lack of energy	89	63.57

Dry skin	84	60.00
Weight gain	102	72.86
Increased facial hair	75	53.57
Skin change	87	62.14
Bloating	102	72.86
Backache	113	80.71
Frequent urination	87	62.14
Involuntary urination	75	53.57

MENQOL Total score 67.51 +/- 17.88 (64.55, 70.47)

- Physical 38.81 +/- (36.94, 40.66)
- Psychosocial 16.21 +/- (15.36, 17.06)
- Vasomotor 6.81 +/- (6.33, 7.29)
- Sexual Symptoms 5.94 +/- 3.19 (5.38, 6.44)

Association between - QOL scores- statistically significant (P<0.05)

- Marital status -Z Score = 66.83, P< 0.00001
- Education-F ratio = 7.11, P = 0.000031
- Socioeconomic status -F ratio= 1.61, P = 0.002.

Mean age of Menopause-

- Natural = 43.88 + 5.01 (43.05, 44.71) (N= 113, 80.7%)
- Surgical = 40.00 + 7.73 (38.72, 41.28) (N= 27, 19.29%)

Table3-Comparison of Mean age at menopause from literature-

S.No.	Study	Region	Mean age (years)
Indian			
	Present Study	Urban & Rural, CG. (2020)	43.88
	Sharma et al ⁷	Urban ,Jammu	47.5
	Gayathry Nayak et al. ⁷	Costal Karnataka	48.7
	Chunki Piplai et al. ⁷	Tea-laborers , West Bengal	47.3
	Pandit et al. ⁷	urban slum, Mumbai	42.6
	Nirmalan et al. ⁷	Rural, South Indian	43.4
	Somola Devi et al. ⁷	Manipur, India	41.9
	Maninder ahuja. ⁸	Pan India Survey (2016)	46.2
	Saseendran Pallikadavath ¹⁰	India- Population Study (2016)	41.9 -49.4
	Doyen et al ¹¹	East India (2015)	41.69-40.65
	Ganitha et al ¹²	Rural, Tamil Nadu (2017)	45.75
	Avin et al ¹³	Rural, Manglore, Karnataka.	45.32
Outside India			
	Kazerooni et al. ⁷	Shiraz, Islamic Republic of Iran	47.8
	Foo et al. ⁷	Singapore	49.0
	Israt et al. ⁷	Indian Women in Sydney	48.2
	Velez, Maria P. ⁹	Canada (2019)	49.8

Discussion

Present study records menopausal symptom profile in women from CG, India. Compared to similar studies conducted in India ^(7,8,10-13) and outside India ^(7,9) indicate wide variation in peri-menopausal symptoms. Women from present study reported higher physical and psychosocial symptoms. Although overall symptom profile is consistent with other Indian women, actual

percentage, intensity and frequency of individual symptom varies in Indian sub-populations^(2,4). Similarly, some symptoms in women from other countries were comparable with present study (physical and psychosocial), while others differed (vasomotor and sexual). In countries such as India, hot and humid weather may mask symptoms associated with climacteric. Dietary factors in Asians would contribute to lower frequency of hot flushes, as phytoestrogens help in reducing VMS. There might be a relationship between cultural life style factors, estrogen level, environmental, social factors such as diet, exercise that determine menopausal symptom profile⁽⁴⁾. Reporting of sexual symptoms related to socioeconomic status, was low in present study. Several other factors seem to influence physical and psychosocial development of symptoms -progressive aging, growing family responsibilities, possible mid-life crisis and other non-menopausal factors. Understanding, belief, values, attitudes, education, cultural factors seems to indirectly influence the symptom profile⁽³⁾.

These kinds of community surveys **serve several purposes**.

- They educate participating women; create awareness that perimenopausal symptoms are natural consequences of progressive life events. Many women mistake these symptoms as part of serious systemic disease and waste lots of time, energy, effort and money on pursuing ineffective medical remedies.
- Understanding physiology of perimenopause and symptoms helps to cope more effectively.
- Identifying predominant symptoms in local community also helps to plan suitable intervention to reduce symptom burden and improve QOL.
- For populations with high incidence of vasomotor and sexual symptoms hormonal therapy is more beneficial while for physical and psychosocial symptoms other alternative therapies may work better.

Limitations

- Study done in **semi urban setting on limited sample** so findings may not be generalized to rural areas and greater sample required.
- Study **period was limited** so women in transition period could not be followed up to notice impact of symptoms on their life with time. (**Longitudinal study** required.)
- Although 6 months recall is reasonable time-frame, there is possibility of **recall bias**.

Conclusions

Menopausal symptoms are either ignored or not spoken of. Establishment of menopausal clinic within current PHC system can centralize attention to menopausal women. Multidisciplinary approach to problems of menopause with stress on promotive and preventive interventions required. **Suitable, simple interventions** –Establishing healthy dietary practices like intake of protein, calcium, fruits, and vegetables through family health education is recommended. **Yoga-meditation, brisk walking, simple daily moderate exercises, hormonal therapy, early detection and effective treatment of co morbid conditions, screening for various malignancies can be suggested to improve QOL.**

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