Original Research Article

Assessment of Quality of Life and Associated Factors amongst Menopausal Women in DK: A Hospital Based Study

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ABSTRACT

Objectives: The objectives of this study are to evaluate 1) the Quality of life of post menopausal women using Menopause-Specific Quality of Life Questionnaire and 2) the association between Quality of life and reproductive, demographic factors.

Methods: A cross- sectional study was done at SIMS & RC, Mukka, Mangalore from January 2012 to April 2012. Total 115 eligible women participated in the study attending outpatient clinic. All postmenopausal women between the age of 35-85 years living in the study area that satisfied the inclusion and exclusion criteria were included in the study. Menopause specific quality of life questionnaire (MENQOL) was used to assess the frequency and severity of symptoms. The Chi square test, rate, ratio calculations were applied to compare the heath related quality of life scoring and associated factors. A p-value of less than 0.05 was considered to be statistically significant. The Statistical Package for the Social Sciences software Version 20.0 (SPSS, 20.0) was used for analysis.

Results: Mean age of women was 51±6.37 years. Age and BMI are significantly associated with scoring of vasomotor domain. Age, exercise, hysterectomy and Post menopause are statistically significant with scoring of Quality of life of Physical domain. Age and post menopause are significantly associated with sexual domain scoring while hysterectomy is associated with psychological domain scoring. There is significant difference present in vasomotor, physical, psychological and sexual domain (p<0.0001).

Conclusion: There is significant association of reproductive and demographic factors such as age, Exercise, BMI, hysterectomy, post menopause and Domains of MENQOL. The MENQOL shows significant difference with the Domain Specific scoring.

Key words: Quality of Life, Menopausal women.

INTRODUCTION

A woman transitioning through midlife may be experiencing many adjustments with family and work life and bothersome menopausal symptoms may only add to this burden and discomfort. During this transitory period, it is important to identify and counteract these bothersome symptoms where possible, through traditional medications or alternative medicine. Reducing the degree of bother from menopausal symptoms May greatly enhance the quality of life of the menopausal woman. [1] Menopause is

defined as the day that is one year (365 days) after the last menstrual period. [2] The menopausal experience involves a multifaceted interaction between psychological socio-cultural, and environmental factors, as well as the biological changes relating to altered ovarian hormone status or deficiency. [3,4] World Health Organization defines Quality of life (qol) as an individual's perception of their position in life in the context of culture and values system in which they live and in relation to their goal expectations, standards and concerns. [5] More than 80% of the women experience physical or psychological symptoms in the years when they approach menopause, with various distress and disturbances in their lives, leading to a decrease in the quality of life [6]

About 130 million Indian women are expected to live beyond menopause by 2015. [7] With the general increase in life expectancy, many women are likely to live for more than 20 years after menopause, spending about one quarter of their lives or more in a state of estrogen deficiency. [8] If people are to live longer, it is important that their extra years of life are of as high a quality as possible. [9]

The objectives of this study are to evaluate 1) the Quality of life of post menopausal women using Menopause-Specific Quality of Life Questionnaire and 2) the association between Quality of life and reproductive, demographic factors.

MATERIALS AND METHODS

A cross- sectional study was done at SIMS & RC, Mukka, Manglore from January 2012 to April 2012. Total 115 eligible women participated in the study attending outpatient clinic. All postmenopausal women between the age of 35-85 years living in the study area who satisfied the inclusion and exclusion criteria were included in the study. Inclusion criteria

for the study were postmenopausal women with at least 1 year of amenorrhea and those who had attained natural menopause in last 5 years, while women whose last menstrual period occurred 12 months or more ago were categorized as post menopause (PM) and women who reported still having normal menstrual cycles or with slight change in the length of cycle were classified as menopause transition (MT). Women with a known history of chronic diseases such as hypertension, diabetes, migraine, cardiovascular disease, tumors, tuberculosis, rheumatoid arthritis, and osteoarthritis were excluded from the study. The study instrument consisted of a pretested, self-designed, semi structured, oral, interview based questionnaire which is interviewed in vernacular (Kannada, Tulu) language with informed written consent. The data such as the socio-demographic information, the menstruation status which was based on the reported length of time since the last menstrual period and the experience of the symptoms, as were tested according to the Menopause Specific Quality of Life (MEN-QOL) questionnaire, were collected from each patient.

Scoring of the MENQOL (Menopause Specific Quality Of Life Questionnaire):

Menopausal Rating Scale and same had been acknowledged in references. [1,10,11] MENQOL consists of 29 items and four domains i.e.1.Vasomotor (1-3), psychological (4-10), physical (11-26), sexual (27-29) The participants were asked to rate whether or not they had experienced the symptom in the past month. If the answer was yes, then they were asked to rate the degree to which that symptom was bothersome on a 7-point Likert scale. The scale ranged from 0 (not at all bothered) to 6 (extremely bothered). For each of the 29 items, this seven-point Likert scale is converted to an eight point scale, ranging from 1 to 8. Each domain is scored by

averaging the manipulated values. Hence, the average for each domain is constrained between 1 (not at all a problem; respondent selected "no" for each item in the domain) to 8 (respondent reported experiencing each symptom in the domain at the highest degree of bother).The Chi square test, rate, ratio calculations were applied to compare the heath related quality of life scoring and associated factors. P-value of less than 0.05 was considered to be statistically significant. The Statistical Package for the Social Sciences software Version 20.0 (SPSS, 20.0) was used for analysis. [10,11]

RESULTS

The mean age of 115 women was 51±6.37 years. More than half were aged between 46-55 years. The proportion of women who received education upto primary level was 51(44.4%), Only 4(3.5%) was illiterate. 48.7% women weren't doing any exercise and 60% women were overweight. In reproductive factors 85.2% women didn't underwent hysterectomy

operation and 63.4% women completed 1-5yr postmenopausal period while only 2.6% women were in menopausal transition period.

Table 1: Distribution of postmenopausal women according to demographic characteristics

Covariate	Key	DistributionN(%),n=115
Age	36-45	22(19.17)
	46-55	77(67.0)
	56-65	13(11.3)
	66-75	2(1.7)
	76-85	1(0.9)
Education	Illiterate	4(3.5)
	Primary	51(44.4)
	High school	26(22.6)
	College	13(11.3)
	Degree	21(18.3)
Exercise	0= no work	56(48.7)
	1=1-3 day/ mnth	4(3.5)
	2=1-3 days / wk	21(18.3)
	3=3-5 days / wk	22(19.1)
	4=6-7 days /wk	12(10.4)
BMI	1.<18.5	9(7.8)
	2.18.5-24.99	37(32.2)
	3.≥25	69(60.0)
Hysterectomy done	Yes	17(14.8)
	No	98(85.2)
PM	1.>1yr-5yr	73(63.4)
	2.5yr-15yr	23(20)
	3.>15yr	4(3.4)
MT		3(2.6)

Table 2: Domain Specific Scoring distribution (n=115)

Domain Scoring	Vasomotor (1-3) n(%)	Psychological (4-10) n(%)	Physical (11-26) n(%)	Sexual (27-29) n(%)
1(1-<4)	23(20)	75(65.2)	82(71.3)	80(69.6)
2(4-<6)	52(45.2)	28(24.3)	27(23.5)	28(24.3)
3(6-8)	40(34.8)	12(10.4)	6(5.2)	7(6.1)

$X^2=97.32, df=6, p=<0.000$

Table 3: Association between MENQOL Domain specific score and demographic and reproductive factors.

Domain covariate	Vasomotor	Psychological	Physical	Sexual
Age	0.003*	0.078	0.000**	0.000**
BMI	0.003*	0.863	0.918	0.206
Education	0.545	0.522	0.420	0.311
Exercise	0.179	0.290	0.038*	0.562
Marital status	0.720	0.798	0.439	0.092
Hysterectomy	0.330	0.019*	0.041*	0.450
PM	0.428	0.104	0.009*	0.020*

*p=<0.05,**p=<0.001

In physical domain 71.3% respondents belongs class first i.e. in between 1-<4.The lowest respondents in the physical (5.2%) and sexual (6.1%) domain

which belongs to class three (6-8). In the last class (6-8) 34.8 % respondents were from vasomotor domain which is highest than

other domain. The table shows significant difference in all domains.

In this table Age and BMI are significantly associated with scoring of vasomotor domain. Age, exercise, hysterectomy and Post menopause are statistically significant with scoring of Quality of life of Physical domain. Age and post menopause are significantly associated with sexual domain scoring while hysterectomy is associated with psychological domain scoring.

DISCUSSION

For this study MENQOL questionnaire was used which was developed in 1996 and it consists of four domains: vasomotor, psychological, physical and sexual. MENQOL has been applied in Europe, [12] China and in some other developing countries [13,14] The age at menopause was found to be varied in different studies. The mean age of 202 women was 52.17 ± 6.019 years. More than half were aged between 51-60 years in Nusrat et al study which is conducted in Pakistan. In a regional survey which was done by Boulet et al, on approximately 400 women from each of the seven south-east Asian countries (Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore and Taiwan), the median age at menopause was found to be 51.1 years. [15,16] Similarly, in our study, the mean menopausal age was 51 ± 6.37 years.

The literature surrounding the association between hot flashes and physical activity is unclear. Some studies have found a dose response relationship that demonstrated increased physical activity was helpful in reducing hot flashes. [17] In this study 48.7% women attain menopause without doing any physical activity. The removal of a woman's uterus and, more specifically, ovaries causes the onset of surgical menopause. [18] But in this study

85.2% women attain menopause didn't undergone hysterectomy.

There is significant difference found in the Vasomotor, Psychological, Physical, Sexual domains and scoring of quality of life. During menopausal transition, women may experience vasomotor, Urogenital and psychological symptoms as well as sexual dysfunction. These problems are often attributed to hormonal changes during midlife and are projected as health risk. [19] Similarly in this study age is significantly associated with vasomotor, physical and sexual domain. Foruhari S et.al. suggested that an increase educational status and appropriate training can improve the awareness level, quality of life and may promote satisfactory health to the menopausal women. [20] But in this study, education is not significantly associated with any of the domain. Physical activity has been shown also to enhance quality of life among menopausal women [21] and some studies suggest that physical activity is associated with decrease of hot flushes in menopausal women. [22] In this study physical domain is significantly associated with physical activity.

The impact that marital status has on both vasomotor and psychosocial outcomes has been debated. While studies have shown that separated women have significantly high MENQOL scores for vasomotor and psychosocial domains. [23] A study reported that numerous factors play roles in the sexual dysfunction encountered after menopausal transition, including the absence of a partner. [24] But in this study shows no significant association with marital status and any of the domains.

Hysterectomy procedure will produce hot flashes in the same manner as would a natural menopause. It has been suggested that a hysterectomy would also cause feelings of depression; if so, this is an important potential confounder which would

need to be controlled for in analysis. [25] So as in this study Hysterectomy is associated with physical and psychological domain significantly. The study shows significant association between Post menopausal state with physical and sexual domain. This may be because Estrogen deficiency causes the appearance of dyspareunia and vaginal dryness in menopausal stage and it becomes more complex because of anatomical, physiological and psychological modification and negative culture influence. [26]

Limitations of study were that this study was cross sectional hospital based having small sample size, might not reflect the situation of community. Second the MENQOL questionnaire is a self reporting questionnaire, women were asked to provide some retrospective information such as climacteric symptoms experienced in the preceding weeks, regularity of menstruation and last menstrual period, hence recall bias is unavoidable especially in some elderly women.

CONCLUSION

There is significant association of reproductive and demographic factors such as age, Exersize, BMI, hysterectomy, post menopause and Domains of MENQOL. The MENQOL shows significant difference with the Domain Specific scoring.

To improve the Quality of life in post reproductive age group can be implemented through the health services to women and including them in National health programmes.

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