(RESEARCH ARTICLE)

A descriptive study on quality of life among menopausal women residing in selected rural areas of Udupi district, Karnataka

Veena Dsouza [1] and Anitha C Rao [2]

[1] MSc Nursing student, Dept. of Obstetrics and Gynecology Nursing, Vidyarathna College of nursing, Udupi, Karnataka, India.
[2] Professor, Dept. of Obstetrics and Gynecology Nursing, Vidyarathna College of nursing, Udupi, Karnataka, India.

Abstract

Background: Menopause is defined as the period of time when ovarian function stops, resulting in permanent amenorrhea, or as the cessation of periods for a period of time equal to three prior cycles.

Materials and Methods: A descriptive study conducted among 100 menopausal women, by using The Menopause-specific Quality of Life (MENQOL) Questionnaire, The data is collected by administering a semi structured socio-demographic proforma, residing at rural area in cherkady village of udupi district.

Results: The data in Table 1 depicts the majority of the menopausal women 30 (30%) were in the age group of (46 to 50) years. The maximum percentage of the menopausal women 100(100%) were married. The maximum percentage of the menopausal women 62(62%) belong to the Hindu religion. The majority of the menopausal women with educational status 66(66%) were primary (1st std-7th std). Regarding the menopausal women occupation status 100 (100%) were unskilled workers. The majority of the menopausal women with educational status of husband 70(70%) were primary (1st std-7th std). Regarding the menopausal women occupation status of husband 55(55%) were semi-skilled worker. The majority of the primigravida women with place of residence 100(100%) were from rural area. Regarding the menopausal women type of family 53(53%) belonged to nuclear family. The highest percentage of menopausal women 100 (100%) had a monthly income ranging from Rs.2391-7101.A maximum of 34 (34%) attained menarche at the age of 12 years and 49(49%) of them were of61-70 kg weight. A maximum of menopausal women 100(100%) were doing exercise twice a week. About the majority of 99(99%) menopausal women were anemic. About the majority of 88(88%) menopausal women perceived adequate social support. None of them had habit of smoking and alcoholism.

Keywords: Quality of life; Menopausal women; Rural areas

1. Introduction

Menopause is defined as the period of time when ovarian function stops, resulting in permanent amenorrhea, or as the cessation of periods for a period of time equal to three prior cycles.[1] It is a phase in which the two most significant hormones in the female body, progesterone and estrogen, are reduced and the monthly cycle pauses for more than a year (World Health Organization [WHO], 1996). Women enter a new stage of life when this physiological development begins, which also signifies the end of their reproductive potential.[2] Women may have a wide range of symptoms and problems during the menopausal transition due to the significant fluctuations in hormone levels. But how much of an impact this variation has on different women differs. A few significant and typical symptoms that women may encounter during the menopausal transition include irregular periods, hot flashes and nocturnal sweats, vaginal and bladder

* Corresponding author: Anitha C Rao

issues, altered sexual drive, difficulty sleeping, mood swings and changes in body composition, etc. Menopause also raises certain major health risks, such as osteoporosis (the loss of bone tissue that causes the disease) and an increased risk of heart disease (the increase in weight, blood pressure, and cholesterol that comes with aging). Intense symptoms in certain women significantly impair their ability to operate both socially and personally.[3] "A person's perceptions of their position in life in the context of the cultural and value systems in which they live and in relation to their goals, expectations, standards, and concerns" is how the World Health Organization defines quality of life.[4] The onset of the menopausal transition is frequently indicated by changes in menstrual bleeding patterns. To help you remember the primary causes in each category, try using the acronym PALM-COEIN.[5] The prescription should be written at the lowest effective dose and the shortest amount of time required to alleviate symptoms in order to reduce the hazards associated with hormone therapy. There is disagreement over how long hormone therapy should be administered for and if it should be stopped abruptly or gradually. After stopping hormone medication, about half of the women will have a recurrence of vasomotor symptoms. The patient's symptoms and medical history should be taken into consideration while deciding whether to stop hormone medication.[6] Women may experience a range of symptoms throughout menopause, including hot flashes, night sweats, disturbed sleep and mood, memory and concentration issues, anxiety and melancholy, sleeping disorders, issues with the bones and joints, and muscle loss. Menopause-related issues included heart disease, osteoporosis, incontinence, increased fracture risk, cardiovascular disease, and malignancies of the reproductive system.[7] Therefore, menopausal women's quality of life is crucial, and managing menopausal symptoms improves menopausal women's quality of life in terms of their health.

Objectives of the study

The objectives of the study are to:

- To find out the socio demographic and behavioral characteristics of the study population
- To assess the QOL of the study population by Menopause-Specific Quality of Life Questionnaire (MENQOL)
- To find out the variations in the menopausal symptom domains within the various socio demographic variables
- To elicit the association, if any, between menopausal symptoms and the socio demographic and behavioral characteristics of the respondents.

1.1. Operational definitions

- Assess: In this study, assess refers to the collection of data from women during menopausal period to describe, predict, compare and control as a mean towards a better understanding of the phenomena.
- Menopausal symptoms: In this study, menopausal symptoms are the features occurring during the transition to menopause such as changing hormone levels will affecting the menstrual cycle, hot flashes and sleeping problems.
- Menopausal women: In this study, menopausal women refers to the time of life when a woman's around the age of 50 years, her ovaries stop producing hormones and menstrual periods.
- Area: In this study, area refers to the selected population of women who attained menopausal period.

1.2. Assumptions

The study assumes that:

- Women will accept the new transitional role in her life during menopausal period.
- Women will attain quality of life during menopausal period.

1.3. Delimitations

The delimitations of the study are:

- Woman willing to participate in the study during menopausal period.
- Woman randomly selected in selected areas during menopausal period.

1.4. Hypotheses

All the hypothesis will be tested at 0.05 level of significance.

- H1: There will be significant relationship between the menopausal symptoms and health-promoting behaviors among women during menopausal period.

- H2: There will be significant relationship between the sleep quality and health- promoting behaviors among women during menopausal period.

2. Material and methods

- Sources of data: The data will be collected from 100 menopausal women during menopausal period in selected demographic area of Udupi district and who fulfil the inclusive criteria.
- Research design: The study will adopt descriptive survey research design.
- Setting of the study: The study will be conducted in selected areas of Udupi district, which is based on geographical proximity, feasibility of conducting the study and availability of samples.
- Population: The population for the study consists of women during menopausal period those who are selected from selected areas of Udupi district.
- Method of data collection: The data will be collected by administering a semi structured socio-demographic preform.
- Sampling procedure: In this study, purposive sampling technique used to selected demographic area of Udupi district and convenient sampling technique will be used to select approximately 100 women during menopausal period who fulfill the inclusive criteria.
- Sample size: The study will be conducted on approximately 100 women during menopausal period of selected areas in Udupi district.

2.1. Inclusive criteria for sampling

2.1.1. Menopausal women who are:

- Had attained the menopausal period for more than one year
- Willing to participate in the study
- Can read and write Kannada, English language7.2.4 Exclusion criteria for sampling

2.1.2. Exclusion criteria for sampling

- Women during menopausal period who:
- Not willing to participate in the study.
- Have trouble communicating.
- Women having serious disease or mental retardation
- Women with induced menopause, simple hysterectomy, receiving any kind of hormone therapy, presence of medical conditions such as diabetes, hypertension, cardiac disease, and thyroid disorders
- Locked houses or the women who did not give the consent were not included in the study.

2.1.3. Variables

Variables of the study are:

Dependent variables

- QOL of the study population by Menopause-Specific Quality of Life Questionnaire (MENQOL)

Demographic variables

- Age, education, occupation, religion, marital status, number of living children, primary support person, age at menarche, age at menopause, work status, type of morbidity and type of therapy

Data collection tool

- A demographic preform will be prepared to collect the baseline data from the menopausal women.
- 29-item (The menopause –specific quality of life) MENQOL questionnaire..
- Data collection method

Prior to data collection permission will be obtained from the concerned authorities of selected demographic area in Udupi district for conducting the study. The investigator will introduce herself to the participants and will explain the objectives of her study and take the informed consent from the participants. Assurance of confidentiality of the information will be maintained during the study. Convenience sampling technique will be used in the selection of the settings and samples that will fulfil the inclusion criteria of the study.

2.2. Data analysis method

Data analysis will be organized and analyzed using:

2.2.1. Descriptive statistics

Data will analyzed using frequency and percentage. The relationship between health- promoting lifestyle behaviors, menopausal symptoms and sleep quality among menopausal women will be analyzed using descriptive statistical analysis such as mean, median and standard deviation.

2.2.2. Inferential statistics

Chi square test of association will be used to find the association between perceived stress score, resilience score and selected demographic variables. Analysed data will be presented in the form of tables and figures.

3. Result

3.1. Presentation of data

To begin with, the data was entered in a master sheet for tabulation and statistical processing. The data is analyzed and interpreted using descriptive and inferential statistics. The data is presented under the following headings.

- Section1: Description of the sample characteristics of menopausal women based on socio-demographic variables.
- Section 2: Description of the Quality of Life Questionnaire (MENQOL) among menopausal women
- Section 3: Description of variations in the menopausal symptom domains within the various socio demographic variables
- Section 4: Description of the association between the menopausal symptoms and the socio demographic and behavioral characteristics

3.1.1. Section 1: Description of the sample characteristics of menopausal women based on socio-demographic variables.

This section deals with socio-demographic data of menopausal women such as age in years, marital status, religion, education, occupation, educational status of husband, occupation of husband, area of residence, type of family, family income, age at which attained first menarche, current weight, exercise, anemia, social support, alcohol drinking. It has been presented in the form of frequency and percentage.

Description of sample characteristics based on socio-demographic variables

Table 1 Distribution of samples according to demographic variables n= 100

Sl. No	Demographic variables	Frequency	Percentage
1	Age in years		
	40-45	21	21.0
	46-50	30	30.0
	51-65	27	27.0
	55-60	22	22.0
2	Marital status		
	Single		
	Married	100	100.0
	Separated		
	Divorced		

3	Religion		
	Hindu	62	62.0
	Muslim	22	22.0
	Christian	16	16.0
	Others		
4	Education		
	Illiterate	22	22.0
	Primary(1st std-7th std)	66	66.0
	Secondary(8th std-12th std)	12	12.0
	Diploma		
	Graduate		
	Post graduate		
5	Occupation		
	Unemployed		
	Unskilled worker(cleaners, grocery clerk, agriculture)	100	100.0
	Semiskilled worker (drivers, flight attendants, security)		
	Skilled worker (nurse, doctors, teachers, lawyer)		
6	Educational Status of Husband		
	Illiterate		
	Primary (1st std-7th std	70	70.0
	High school (8th std-12th std)	30	30.0
	Diploma		
	Graduate		
	Post graduate		
7	Occupation of Husband		
	Unemployed		
	Unskilled worker (cleaners, grocery clerk, agriculture) ( )	45	45.0
	Semi-skilled worker (drivers, flight attendants, security	55	55.0
	Skilled worker (nurse, doctors, teachers, lawyer)		
8	Area of Residence		
	Urban		
	Rural	100	100.0
9	Type of family		
	Nuclear	53	53.0
	Joint	47	47.0
10	Family income per month (in Rupees)		
	Less than 2390		
	Rs. 2391-7101	100	100.0

	Rs.7102-11836		
	Rs.11837-17755		
	Rs.17756-23673		
	Rs.23674-47347		
	Rs.47348 and above		
11	Age at which attained first menarche specify		
	12yrs	34	34.0
	13yrs	23	23.0
	14yrs	29	29.0
	15yrs	6	6.0
	16yrs	7	7.0
	1yrs	1	1.0
12	Current weight in kg's		
	≤ 50	19	19.0
	51-60	14	14.0
	61-70	49	49.0
	>70	18	18.0
13	Exercise		
	Once a week		
	Twice a week	100	100.0
	Three times and more		
	Never		
14	Anemia		
	Yes	1	1.0
	No	99	99.0
15	Social Support		
	Perceived adequate	86	86.0
	Perceived inadequate	14	14.0
16	Smoking		
	Yes		
	No	100	100.0
17	Alcohol Drinking		
	Yes		
	No	100	100.0

Table 1 shows that the majority of menopausal women are aged 46-50, married, and belong to Hindu religion. They have primary education and occupations, with most being unskilled workers. The majority of menopausal women reside in rural areas and belong to nuclear families. The majority of menopausal women are anemic, have adequate social support, and do not have habits of smoking or alcoholism.

Table 2 Range, mean, standard deviation, median and mean percentage of menopausal symptoms n=100

Range	Mean	Standard deviation	Median
39-107	65.84	14.71	63.0

The data in Table 2 depicts the overall mean value was 65.84 with standard deviation of 14.71.

3.1.2. Section 2: Description of the Quality of Life Questionnaire (MENQOL)among menopausal women

Table 3 Item wise analysis of various menopausal symptoms n=100

Items	Score													
	0		1		2		3		4		5		6	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Vasomotor Hot flushes	15	15.0	1	1.0	48	48.0	14	14.0	2	2.0	1	19.0	1	1.0
Night sweats	16	16.0	4	4.0	32	32.0	30	30.0	4	4.0	13	13.0	1	1.0
Sweating	25	25.0	4	4.0	15	15.0	24	24.0	6	6.0	21	21.0	5	5.0
Psychological Dissatified	23	23.0	3	3.0	25	25.0	16	16.0	8	8.0	15	15.0	10	10.0
Anxious	26	26.0	6	6.0	30	30.0	17	17.0	3	3.0	13	13.0	5	5.0
Poor memory	26	26.0	4	4.0	28	28.0	22	22.0	8	8.0	11	11.0	1	1.0
Accomplishing	34	34.0	4	4.0	26	26.0	16	16.0	6	6.0	10	10.0	4	4.0
Depressed	20	20.0	2	2.0	34	34.0	20	20.0	9	9.0	11	11.0	4	4.0
Impatient	31	31.0	8	8.0	20	20.0	21	21.0	4	4.0	14	14.0	2	2.0
Wanting to be alone physical	21	21.0	2	2.0	31	31.0	25	25.0	7	7.0	9	9.0	5	5.0
Flatulence	22	22.0	2	2.0	32	32.0	23	23.0	4	4.0	9	9.0	8	8.0
Aching muscles	33	33.0	4	4.0	25	25.0	12	12.0	5	5.0	19	19.0	2	2.0
Tired	23	23.0	5	5.0	32	32.0	25	25.0	2	2.0	10	10.0	3	3.0
Sleeping	24	24.0	4	4.0	30	30.0	21	21.0	4	4.0	10	10.0	7	7.0
Ache in back of neck	30	30.0	3	3.0	28	28.0	18	18.0	5	5.0	14	14.0	2	2.0
Physical strength	21	21.0	5	5.0	30	30.0	27	27.0			14	14.0	3	3.0
Stamina	30	30.0	3	3.0	26	26.0	21	21.0	6	6.0	8	8.0	6	6.0
Energy	26	26.0	4	4.0	37	37.0	14	14.0	4	4.0	11	11.0	4	4.0
Drying skin	33	33.0	3	3.0	21	21.0	25	25.0	3	3.0	14	14.0	1	1.0
Weight gain	23	23.0	10	10.0	27	27.0	22	22.0	1	1.0	13	13.0	4	4.0
Facial hair	25	25.0	2	2.0	32	32.0	20	20.0	1	1.0	15	15.0	5	5.0
Appearance	28	28.0	2	2.0	34	34.0	19	19.0	1	1.0	14	14.0	2	2.0
Bloated	19	19.0	2	2.0	33	33.0	25	25.0	3	3.0	14	14.0	4	4.0
Low backache	25	25.0	1	1.0	29	29.0	30	30.0	2	2.0	11	11.0	2	2.0
Urination	22	22.0	4	4.0	42	42.0	17	17.0	5	5.0	8	8.0	2	2.0
Involuntary urinationsexual	24	24.0	2	2.0	31	31.0	25	25.0	1	1.0	16	16.0	1	1.0
Sexual desire	22	22.0	5	5.0	39	39.0	20	20.0	2	2.0	11	11.0	1	1.0

Vaginal dryness	24	24.0	3	3.0	35	35.0	17	17.0	5	5.0	14	14.0	2	2.0
Intimacy	30	30.0	4	4.0	40	40.0	14	14.0			9	9.0	3	3.0

3.1.3. Section 3: Description of variations in the menopausal symptom domains within the various socio demographic variables

Table 4 Variance of various menopausal symptoms within demographic variables n=100

MAJOR SYMPTOMS	SD	MEAN	SUM OF SQUARE	VARIANCE (S²)
Vasomotor Hot flushes	1.579	2.48	246.96	2.4945
Night sweats	1.5134	2.45	226.75	2.2904
Sweating	1.9559	2.65	378.75	3.8257
Psychological Dissatified	1.9807	2.70	384.50	3.9235
Anxious	1.8264	2.24	330.24	3.3357
Poor memory	1.661	2.19	273.39	2.7615
Accomplishing	1.8366	2.02	333.96	3.3733
Depressed	1.684	2.45	280.75	2.8358
Impatient	1.815	2.09	326.19	3.2948
Wanting to be alone	1.6888	2.42	282.36	2.85212
Physical Flatulence	1.7940	2.44	318.64	3.21858
Aching muscles	1.9282	2.17	368.11	3.71828
Tired	1.6329	2.2	264	2.6666
Sleeping	1.8167	2.35	326.75	3.3005
Ache in back of neck	1.788	2.15	316.75	3.1994
Physical strength	1.677	2.34	278.44	2.8125
Stamina	1.833	2.18	332.76	3.3612
Energy	1.7371	2.15	298.75	3.0176
Drying skin	1.7791	2.08	313.36	3.1652
Weight gain	1.7515	2.23	303.71	3.0677
Facial hair	1.8222	2.35	328.75	3.3207
Appearance	1.7212	2.13	293.31	2.9627
Bloated	1.6847	2.49	280.99	2.8382
Low backache	1.6337	2.24	264.24	2.6690
Urination	1.5301	2.11	231.79	2.3413
Involuntary urination	1.6775	2.29	278.59	2.8140
Sexual Sexual desire	1.539	2.12	234.56	2.3692
Vaginal dryness	1.7033	2.26	287.24	2.9014
Intimacy	1.6385	1.89	265.79	2.6847

3.1.4. Section 4: Description of the association between the menopausal symptoms and the socio demographic and behavioral characteristics

Table 5 Association of menopausal symptoms with selected socio-demographic variables n= 100

Sl. No	Demographic variables	Knowledge score		Total	χ² test
		≤Median (63.0)	>Median (>63.0)		
1	Age in years				χ²=0.656, df=3, p=0.883 (NS)
	40-45	10	11	21	
	46-50	16	14	30	
	51-65	15	12	27	
	55-60	10	12	22	
3	Religion				χ²=4.402, df=2, p=0.111 (NS)
	Hindu	29	33	62	
	Muslim	10	12	22	
	Christian	12	4	16	
	Others				
4	Education				χ²=1.264, df=2, p=0.532 (NS)
	Illiterate	13	9	22	
	Primary(1st std-7th std)	31	35	66	
	Secondary(8th std-12th std)	7	5	12	
	Diploma				
	Graduate				
	Post graduate				
6	Educational Status of Husband				χ²=3.523, df=1, p=0.061 (NS)
	Illiterate				
	Primary (1st std-7th std	40	30	70	
	High school (8th std-12th std)	11	19	30	
	Diploma				
	Graduate				
	Post graduate				
7	Occupation of Husband				χ²=1.407, df=1, p=0.236 (NS)
	Unemployed				
	Unskilled worker (cleaners, grocery clerk, agriculture)	20	25	45	
	Semi-skilled worker (drivers, flight attendants, security	31	24	55	
	Skilled worker (nurse, doctors, teachers, lawyer)				
9	Type of family				χ²=0.151, df=1,
	Nuclear	28	25	53	

	Joint	23	24	47	p=0.697 (NS)
11	Age at which attained first menarche specify				χ^2=3.999, df=5, p=0.550(NS)
	12yrs	16	18	34	
	13yrs	9	14	23	
	14yrs	18	11	29	
	15yrs	3	3	6	
	16yrs	4	3	7	
	1yrs	1	0	1	
12	Current weight in kg's				χ^2=1.126, df=2, p=0.771 (NS)
	≤ 50	11	8	19	
	51-60	6	8	14	
	61-70	26	23	49	
	>70	8	10	18	
14	Anemia				χ^2=0.970, df=1, p=0.325 (NS)
	Yes	1	0	1	
	No	50	49	99	
15	Social Support				χ^2=0.246, df=1, p=0.620 (NS)
	Perceived adequate	43	43	86	
	Perceived inadequate	8	6	14	

3.2. No significance at 0.05 levels

The data presented inn Table 5 shows that the computed values Chi square test for the selected variables such as age in years, religion, education, educational status of husband, occupation of husband, area of residence, type of family, age at which attained first menarche, current weight, anemia, social support, do not have a statistically significant association with menopausal symptoms. Hence, the null hypothesis is accepted for all the variables and there search hypothesis is rejected.

4. Discussion

A descriptive study was conducted among 100 menopausal women, by using The Menopause-specific Quality of Life (MENQOL) Questionnaire, The data is collected by administering a semi structured socio-demographic proforma . The objectives of the study were:

- To find out the sociodemographic and behavioral characteristics of the study population
- To assess the QOL of the study population by Menopause-Specific Quality of Life Questionnaire (MENQOL)
- To find out the variations in the menopausal symptom domains within the various sociodemographic variables
- To elicit the association, if any, between menopausal symptoms and the sociodemographic and behavioral characteristics of the respondents.

The study concludes that there was no significant association between menopausal symptoms and demographic variables. There is a need to identify the menopausal symptoms pertaining to vasomotor, psychological, physicaland sexual so that it is treated promptly and timely.

5. Conclusion

The study concludes that there was no significant association between menopausal symptoms and demographic variables. There is a need to identify the menopausal symptoms pertaining to vasomotor, psychological, physical and sexual so that it is treated promptly and timely.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study- Yes

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