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Evaluation of quality of life and postmenopausal symptoms of postmenopausal women – a prospective observational study

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Abstract

Background: Menopause is a phase of transformation from the reproductive to the non-reproductive period in a woman's life. In the aging population it is nature's defensive event against reproductive morbidity and mortality. "An individual's insight of their position in conditions such as the value and culture systems in which they survive and in relation to their goals, expectations, standards and concerns" in life is defined as QOL. A negative effect on the common health and quality of life (QOL) as well as the contentment of middle-aged women may occur due to Menopause and associated biologicals.

Objective: To evaluate the quality of life and postmenopausal symptoms in postmenopausal women.

Methods: In this present study 100 patients were recruited and studied for their demographic details and their postmenopausal quality of life related aspects. The obtained data was analysed using the SPSS software.

Results: The mean menopausal age was found to be 45.6 years. The maximum and minimum menopausal ages were 37 and 60 respectively in this study. On analysis, MSQOL revealed that 89% women suffered sexual symptoms, followed by 78% women who suffered physical symptoms like decrease in physical strength and stamina, aches in back of neck and head, aching muscles and joints. Approximately half of the women experienced vasomotor and psychological symptoms. UQOL revealed lower or poor QOL of the postmenopausal women. The overall average scores for occupational, health, emotional, sexual and total QOL for 100 participants was found to be 11.37, 21.03, 17.84, 3.67 and 53.34 respectively.

Keywords: Menopause, postmenopausal women, MSQOL, UQOL, quality of life.

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Introduction

Menopause is a commonly occurring transition that all women go through with advancing age [1]. Menopause is a transformation phase from the reproductive to the non-reproductive period in a woman's living. In the aging population it is nature's defensive event against reproductive morbidity and mortality [2]. The permanent cessation of menstruation is defined as natural menopause it happens with the termination of a woman's final menstrual period [3].

Menopause can be instinctive (natural menopause) or iatrogenic (secondary menopause). The succeeding can be caused earlier by medical interference such as bilateral oophorectomy (surgical menopause) or iatrogenic excision of ovary and its function by radiotherapy, chemotherapy or with treatment of gonadotrophin-releasing hormone analogues. Induced premature ovarian failure may be permanent or temporary in non-attendance of surgery [4].

Although menopause is a common occurrence among women, the onset time and duration time of the menopausal transition and the timing of the last menstrual period are not same [5]. When woman undergoes at least 12 months without a spontaneous menstrual period over the age of 45 then she is considered as postmenopausal women [6].

Hot flushes, cold sweats, and night sweats will be presented as vasomotor symptoms. Menopause transition may report VMS, during the first 2 years of

post-menopause, VMS reaches the maximum intensity and then declines over time. Although some may experience for 10 years or longer VMS generally lasts for 6 months to 2 years [2]. Low backpain, headaches, joint pain and stiffness, neck pain and stiffness, shortness of breath, numbness and dizziness are all a wide category of complaints that are included in a somatic symptom. Physical function if being interfered by any symptom or complaint can be referred as somatic symptom [7]. A health problem reported annually by millions of adults and frequently by many women with symptoms like insomnia, sleep disturbances, and restless sleep, that are included in poor sleep. Few difficulties with sleep disturbance or insomnia is noticed amidst of 40% and 60% of women reaching menopause [8]. In women during the menstrual transition both symptoms such as depression and anxiety are shown to be more common in some studies, and these symptoms both depression and anxiety are less in men when compared with women and said to be about twice prevalent in women. Variance in the risk of the depression and anxiety is by difference in race with few social and demographic factors (including socioeconomic status and level of education) and is considered as another important issue that requires attention [9].

“An individual’s insight of their position in conditions such as the value and culture systems in which they survive and in relation to their goals, expectations, standards and concerns” in life is defined as QOL [10]. QOL is a crucial outcome measure of complete health. Consequently, in the present-day health care system understanding the effect of menopause on the QOL in middle-aged women is critically needed [11].

A negative effect on the common health and quality of life (QOL) as well as the contentment of middle-aged women may occur due to Menopause and associated biological changes. From one individual to another symptoms of menopause and their severity differs due to the effects of different factors such as social status, lifestyle, psychological status and body composition. QOL in women may be diminished due to Menopausal symptoms, mostly the sexual and vasomotor symptoms[12].

Methods and Methodology

Study Site

This study was conducted in various departments of MAHARAJA INSTITUTE OF MEDICAL SCIENCES (MIMS hospital) which provides all facilities and health

care services to all the people in and around Vizianagaram.

Study Design

This study is a retrospective and observational design consisting of 100 patients.

Study Population

he participants enrolled in the study involve inpatients and out patients only after filling a properly written informed consent. In this study 100 patients were involved (N=100).

1.Inclusion criteria

Post menopausal women, Patients who are willing to participate in the study by giving ICF.

2.Exclusion criteria

Women who did not attain menopause, Male patients, Pregnant and lactating women, Patients who are not willing to provide ICF.

Duration of Study

8 months.

Sources of Data Collection

Data was collected through direct interview with the patients. The data is collected in a pre designed data collection form.

Tools Used

1. The Menopause Specific QOL Questionnaire

Evaluating the consequences of the items which are parted into 4 domains, sexual (3 items), physical (16 items), psychosocial (7 items), vasomotor (3 items) basing on the life standards in women of postmenopausal stage is done by a 29item validated instrument which is a Menopause-Specific Quality of Life (MENQOL) questionnaire. Hot flushes, sweating, night sweats are estimated by vasomotor domain. The psychosocial wellbeing of a person is assessed by psychosocial domain which comprise items excepting feeling “blue”, anxiousness and memory. Sleeping, flatulence, weight gain, tiredness, bloating, energy, pain are the things which are evaluated by physical domain. Modifications in vaginal dryness, intimacy, sexual desire are enquired by the sexual domain. For all four of MENQOL domains, the systematic scoring is same. Along the management of the MENQOL

conversion the 7- point Likert scale is used for data analysis and scoring[13].

2. **Utian quality of life questionnaire (UQOL):** Modified form of original Utian questionnaire from the 1970s is the (UQOL) Utian quality of life questionnaire Score.UQOL was greatly improved with factor analysis having two stage application. This instrument comprises of 23-item along with five-point rating scar in which each item involves four sub scales such as occupational, sexual, health, emotional[14].

Ethical Considerations

Ethics Committees of MIMS hospital have reviewed and verified all documents related to Research proposal, Informed Consent, budget and granted approvals in the Ethics Committee and given proposal numbers.

Results

Age: In this study 100 postmenopausal female participants were involved within the age range 40 – 80years. The mean age calculated was found to be 58.68 years.

Table 01: Represents data on age of the participants

Age		
N	Valid	100
	Missing	0
Mean		58.68
Range		40
Minimum		40
Maximum		80

Educational status

in the study, 100 post menopausal women were involved. Out of which 64 were illiterate and 36 were those who can read and write.

Table 02: Represents data on educational status of the participants

Educational Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Illiterate	64	64.0	64.0	64.0
	can read and write	36	36.0	36.0	100.0

	Total	100	100.0	100.0	
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Subject locality

In this study, out of 100 post menopausal women, 40 belonged to rural and 54 belonged to urban communities in and around Vizianagaram and Vishakhapatnam.

Table 03: Represents data on locality of the participants

Subject Locality					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural	46	46.0	46.0	46.0
	Urban	54	54.0	54.0	100.0
	Total	100	100.0	100.0	

Marital status

In this study, out of 100 post menopausal women, 54were married, 1 was unmarried,4 were divorced, and 41 were widows.

Table 04: Represents data on marital status of the participants

Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unmarried	1	1.0	1.0	1.0
	Married	54	54.0	54.0	55.0
	Divorced	4	4.0	4.0	59.0
	Widow	41	41.0	41.0	100.0
	Total	100	100.0	100.0	

Alcoholics

In this study, out of 100 post menopausal women, 6were found to be alcoholics and 94were non-alcoholics.

Table 05: Represents data on alcohol habit of the participants

Alcoholic					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alcoholic	6	6.0	6.0	6.0

	non alcoholic	94	94.0	94.0	100.0
	Total	100	100.0	100.0	

Smokers

In this study, out of 100 post menopausal women, 17 were found to be smokers and 83 were non-smokers.

Table 06: Represents data on smoking habit of the participants

Smoker					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Smoker	17	17.0	17.0	17.0
	non smoker	83	83.0	83.0	100.0
	Total	100	100.0	100.0	

Parity

Out of 100 post menopausal women involved, there were 3 women with no children, 36 women with 2 children, 33 women with 3 children, 14 women with 5 children.

Table 07: Represents data on parity of the participants

Parity of The Subject					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	3	3.0	3.0	3.0
	2	36	36.0	36.0	39.0
	3	33	33.0	33.0	72.0
	4	14	14.0	14.0	86.0
	5	14	14.0	14.0	100.0
	Total	100	100.0	100.0	

Mode of delivery

Out of 100 post menopausal women involved in the study, 93 women had only normal vaginal delivery (NVD), 1 women had only lower section caesarean delivery, 3 women had both NVD and LSCD and 3 had none.

Table 08: Represents data on mode of delivery of the participants

Mode of Delivery					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	3	3.0	3.0	3.0
	NVD	93	93.0	93.0	96.0
	LSCD	1	1.0	1.0	97.0
	Both	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Menopausal age

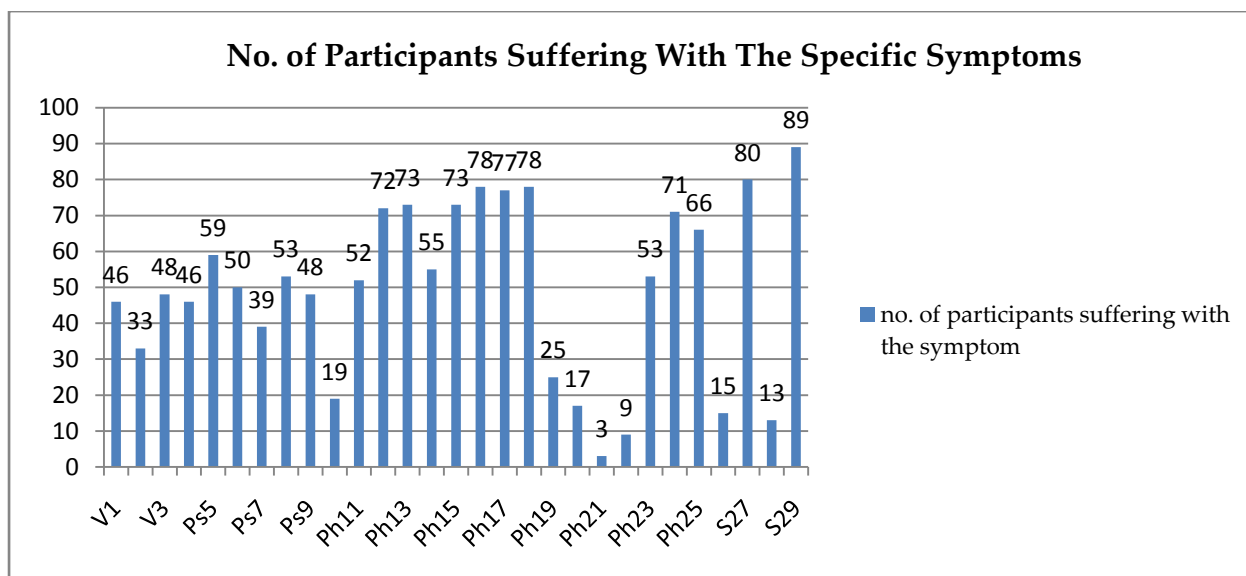
Out of 100 post menopausal women involved in the study, the mean menopausal age was found to be 45-64 years. Minimum and maximum age of menopause were found to be 37 and 60 years respectively in the study.

Table 09: Represents data on menopausal age of the participants

Menopausal age		
N	Valid	100
	Missing	0
Mean		45.64
Range		23
Minimum		37
Maximum		60

Analysis form menopausal specific quality of life questionnaire (MSQOL)

MSQOL questionnaire consists of 4 domains which are vasomotor, physiological, physical and sexual domains. MSQOL questionnaire comprises of 29 questions which are distributed among the 4 domains as follow, vasomotor-4, psychological-6, physical-16 and sexual-3. The MSQOL questionnaire is administered to all the 100 post menopausal participants after signing the ICF. Their responses were recorded and analysed using the SPSS software.



Graph 01: Represents data on no. of participants suffering with the specific symptoms

In the vasomotor domain, out of 100 post menopausal 46 women experienced ‘Hot flushes’, 33 women experienced ‘Night sweats’ and 48 women experienced ‘sweating’. In the psychological domain, out of 100 participants, 46 women were ‘being dissatisfied with their personal life’, 57 women were experiencing ‘poor memory’, 39 women were ‘accomplishing less the they used to’, 53 women were ‘feeling depressed’, down or blue’, 48 women were ‘being impatient’ with when people and 19 women had the feeling of wanted to be alone. The physical domain, out of 100 participants, 51 women experienced ‘flatulence(wind) or gas pains’ 52 women experienced ‘aching in muscles and joints’, 55 women experienced ‘difficult by sleeping’, 75 women experienced ‘feeling tired on work out’, 73 women experienced ‘aches on back of neck or head’, 78 women experienced ‘decreased in physical strength’, 77 women experienced ‘decrease in stamina’, 78 women experienced ‘feeling a lack of energy’, 25 women experienced ‘drying skin’, 17 women experienced ‘weight gain’, 3 women experienced ‘increased facial hair’, 9 women experienced ‘changes in appearance, texture and tone of their skin’, 33 women experienced ‘feeling bloated’, 71 women experienced ‘lower back ache’, 66 women experienced ‘frequent urination’ and 15 women experienced ‘involuntary urination while laughing or coughing’. In sexual domain, out of 100 participants 80 women experienced ‘change in their sexual desire’, 13 women experienced ‘vaginal dryness during intercourse and 89 women experienced ‘avoided intimacy. Avoiding intimacy, change in sexual desire decrease in physical strength and feeling lack of energy are mostly experienced by participants. Increased facial hair, change on appearance, texture or tone of skin were least experienced by the participants.

Vasomotor domain

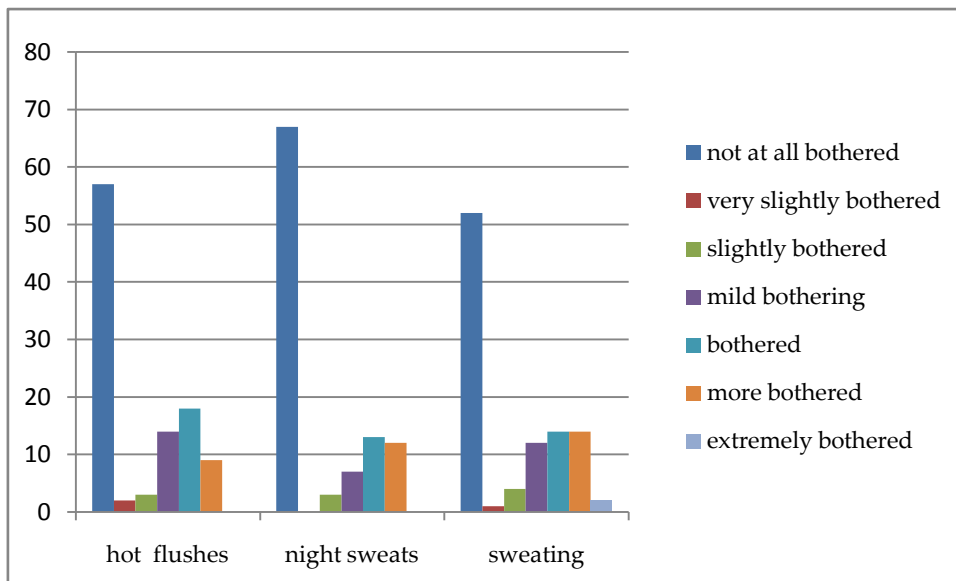
In the vasomotor domain, the mean severity scored for the 3 symptoms were found to be 1.67,1.29 and 1.86 respectively. In this domain all the three symptoms were almost equally experienced by the participants with ‘ sweating’ being slightly most experienced.

Table 10: Represents data on mean scores of each symptom in the vasomotor domain

	N	Mean score
Hot flushes	100	1.67
Night sweats	100	1.29
Sweating	100	1.86

Table 11: Represents data on severity scores of each symptom in the vasomotor domain

	Not at all bothered	Very slightly bothered	Slightly bothered	Mild bothering	Bothered	More bothered	Extremely bothered
Hot flushes	57	2	3	14	18	9	0
Night sweats	67	0	3	7	13	12	0
Sweating	52	1	4	12	14	14	2



Graph 02: Represents data on no. of participants suffering with the vasomotor symptoms according to severity

Psychological domain

In psychological domain, the mean severity scores for the 7 symptoms were found to be 1.38, 2.17, 1.62, 1.39, 1.87, 1.69, and 0.57 respectively. Among the women experiencing psychological symptoms most women experienced ‘feeling anxious or nervous’ followed by ‘feeling depressed, down or blue’ where as ‘feeling of wanting to be alone’ was the psychological symptom which was least experienced. ‘feeling anxious’ and feeling depressed’ had high severity where as ‘feeling of wanted to be alone’ had least severity score in the psychological domain.

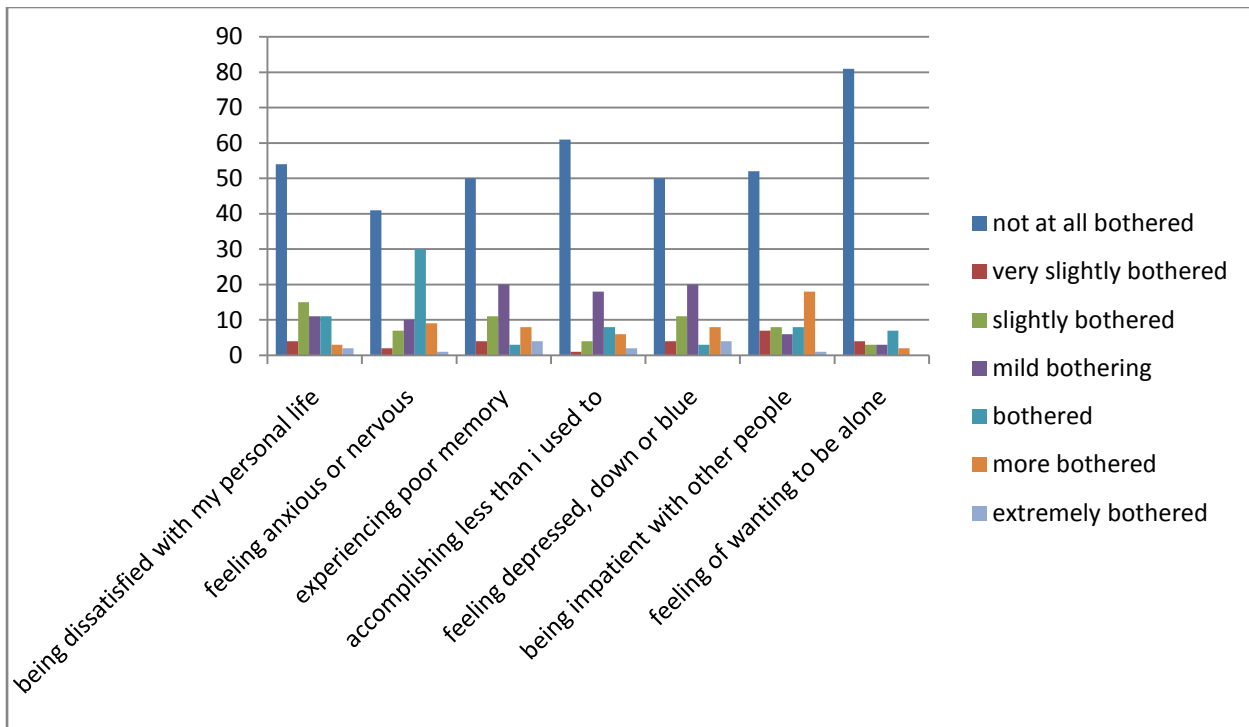
Table 12: Represents data on mean scores of each symptom in the psychological domain

	N	Mean score
being dissatisfied with my personal life	100	1.38
feeling anxious or nervous	100	2.17
experiencing poor memory	100	1.62
accomplishing less than i used to	100	1.37
feeling depressed, down or blue	100	1.87
being impatient with other people	100	1.69
feeling of wanting to be alone	100	0.57

Table 13: Represents data on severity scores of each symptom in the psychological domain

	Not at all bothered	Very slightly bothered	Slightly bothered	Mild bothering	Bothered	More bothered	Extremely bothered
Being dissatisfied with my personal life	54	4	15	11	11	3	2
Feeling anxious	41	2	7	10	30	9	1

or nervous							
Experiencing poor memory	50	4	11	20	3	8	4
Accomplishing less than i used to	61	1	4	18	8	6	2
Feeling depressed, down or blue	50	4	11	20	3	8	4
Being impatient with other people	52	7	8	6	8	18	1
Feeling of wanting to be alone	81	4	3	3	7	2	0



Graph 03: Represents data on no. of participants suffering with the psychological symptoms according to severity
Physical domain

In the physical domain, the mean severity scores for symptoms were found to be 1.86, 2.97, 2.55, 2.05, 2.70, 2.52, 2.77, 2.68, 0.71, 0.58, 0.12, 0.34, 1.99, 3.02, 2.61 and 0.61. Among the women experienced physical symptoms, most women experienced 'decreases in physical strength' the most whereas 'increases facial hair' was the physical symptom which was least experienced. Low back ache and aching muscles and joints had high severity score. Whereas, increased facial hair and changes in skin texture recorded least severity score in physical domain.

Table 14: Represents data on mean scores of each symptom in the physical domain

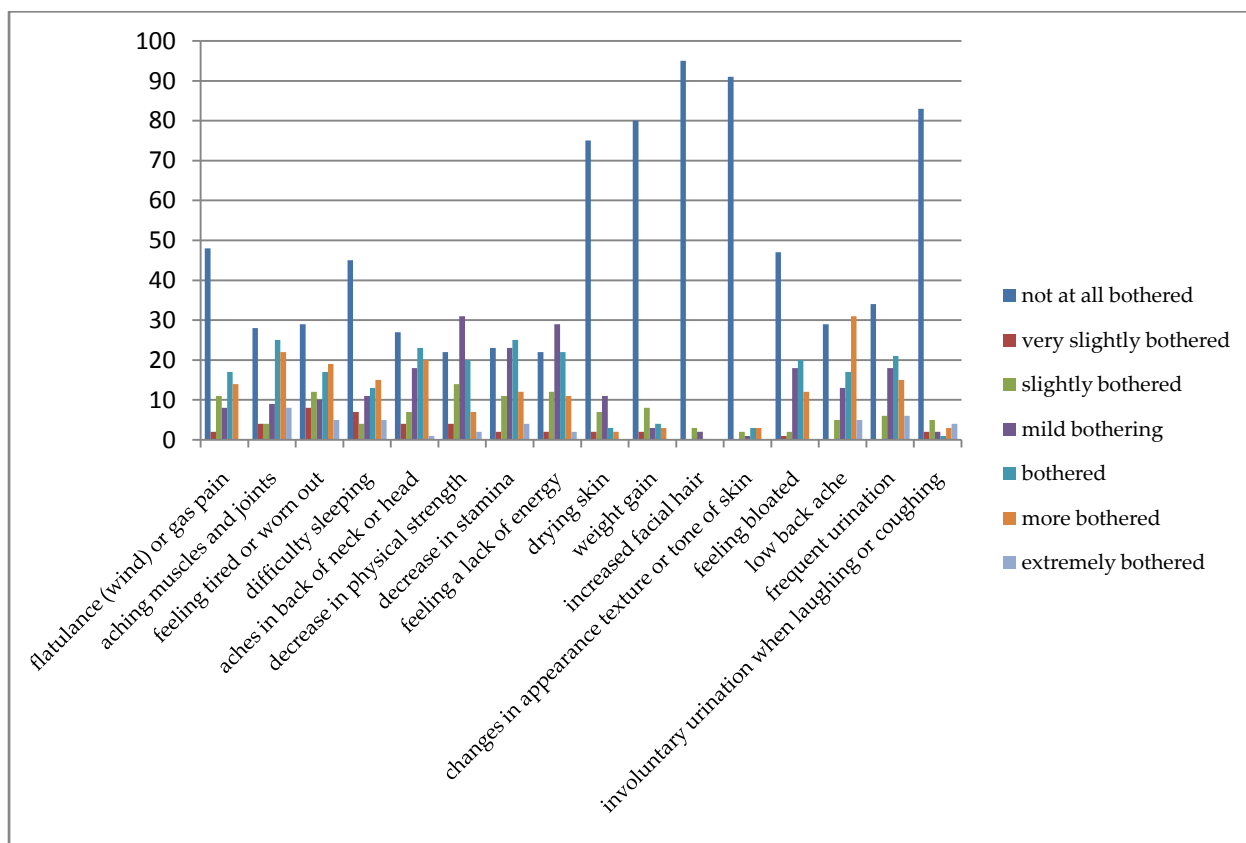
	N	Mean score
Flatulence (wind) or gas pain	100	1.86
Aching muscles and joints	100	2.97
Feeling tired or worn out	100	2.55

Difficulty sleeping	100	2.05
Aches in back of neck or head	100	2.70
Decrease in physical strength	100	2.52
Decrease in stamina	100	2.77
Feeling a lack of energy	100	2.68
Drying skin	100	0.71
Weight gain	100	0.58
Increased facial hair	100	0.12
Changes in appearance texture or tone of skin	100	0.34
Feeling bloated	100	1.99
Low back ache	100	3.02
Frequent urination	100	2.61
Involuntary urination when laughing or coughing	100	0.61

Table 15: Represents data on severity scores of each symptom in the physical domain

	Not at all bothered	very slightly bothered	slightly bothered	mild bothering	bothered	more bothered	extremely bothered
Flatulence (wind) or gas pain	48	2	11	8	17	14	0
Aching muscles and joints	28	4	4	9	25	22	8
Feeling tired or worn out	29	8	12	10	17	19	5
Difficulty sleeping	45	7	4	11	13	15	5
Aches in back of neck or head	27	4	7	18	23	20	1
Decrease in physical strength	22	4	14	31	20	7	2
Decrease in stamina	23	2	11	23	25	12	4
Feeling a lack of energy	22	2	12	29	22	11	2
Drying skin	75	2	7	11	3	2	0

Weight gain	80	2	8	3	4	3	0
Increased facial hair	95	0	3	2	0	0	0
Changes in appearance texture or tone of skin	91	0	2	1	3	3	0
Feeling bloated	47	1	2	18	20	12	0
Low back ache	29	0	5	13	17	31	5
Frequent urination	34	0	6	18	21	15	6
Involuntary urination when laughing or coughing	83	2	5	2	1	3	4



Graph 04: Represents data on no. of participants suffering with the physical symptoms according to severity

Sexual domain

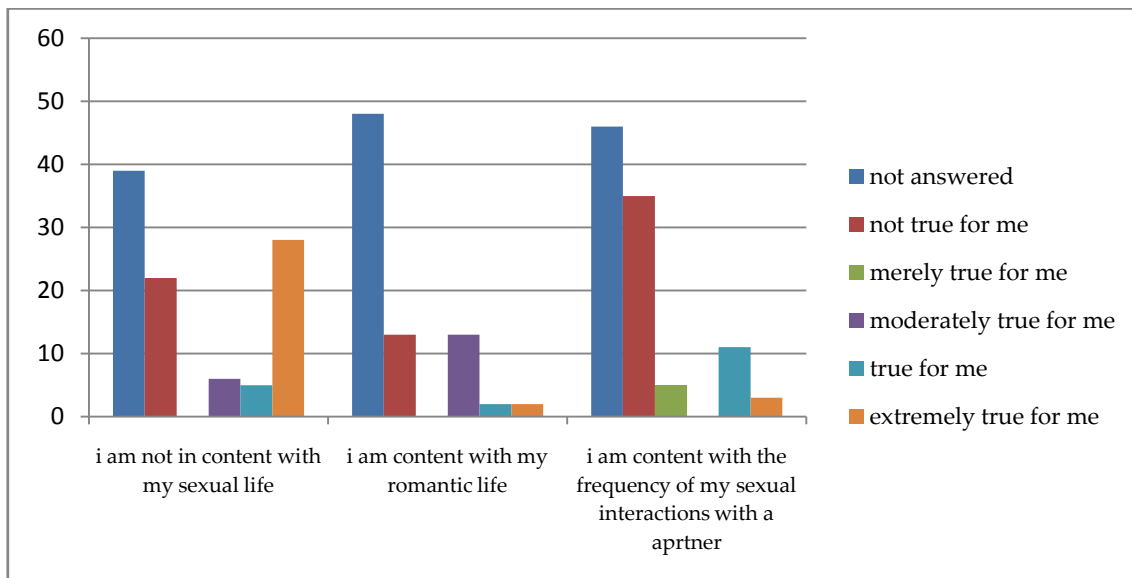
In the sexual domain, the mean severity scores for 3 symptoms were found to be 3.39, 0.39 and 4.61 respectively. Among the women experiencing sexual symptoms, most women experienced 'avoiding intimacy' followed by 'decreased in sexual desire'. Avoid intimacy had high severity scores where as vaginal dryness during intercourse had least severity score for the sexual domain.

Table 16: Represents data on mean scores of each symptom in the sexual domain

	N	Mean score
Change in sexual desire	100	3.39
Vaginal dryness during intercourse	100	0.39
Avoiding intimacy	100	4.61

Table 17: Represents data on severity scores of each symptom in the sexual domain

	N	Not answered (0)	Not true for me (1)	Merely true for me (2)	Moderately true for me (3)	True for me (4)	Extremely true for me (5)
I am not in content with my sexual life	100	39	22	0	6	5	28
I am content with my romantic life	100	48	13	0	13	2	2
I am content with the frequency of my sexual interactions with aaprtner	100	46	35	5	0	11	3



Graph 05: Represents data on no. of participants suffering with the sexual symptoms according to severity

Analysis from Utian Quality of Life questionnaire (UQOL)

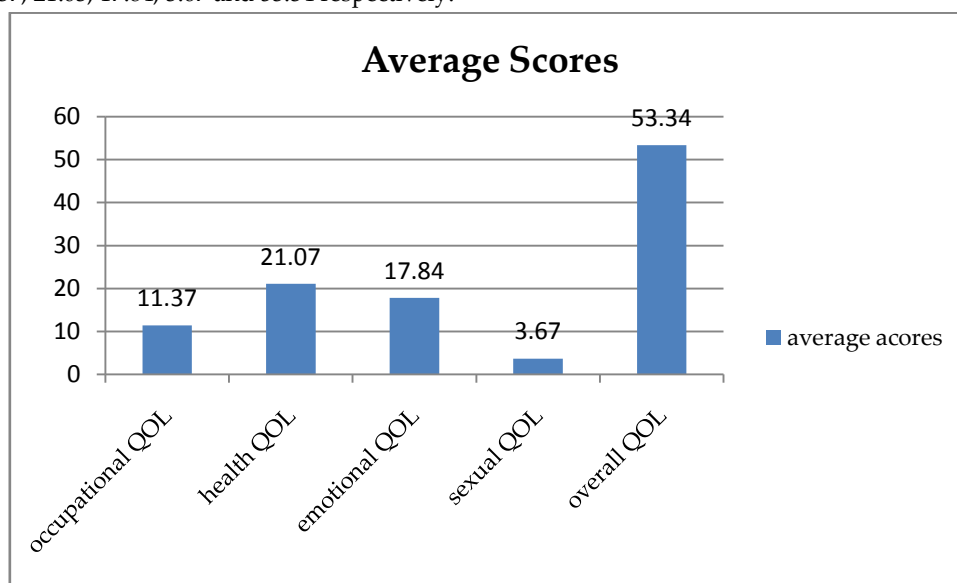
Utian quality of life questionnaire consists of 23 questions categorised into 4 divisions which are occupation quality of life, health quality of life, emotional quality of life, sexual quality of life and together, the total quality of life. The first four categories consist of 7, 7, 6 and 3 questions respectively. The UQOL questionnaire was administered to all the 100 post menopausal women participants after signing the ICF, and their responses were recorded and analysed using SPSS software. The reference scores which indicates the quality of life are enlisted in the table below.

Table 18: Represents data on reference scores of UTIAN QOL

	Lower QOL		MEAN	Higher QOL	
	-2SD	-1SD		+1SD	+2SD

Occupational QOL	13	19	25	31	35
Health QOL	11	16	21	26	31
Emotional QOL	12	16	20	24	28
Sexual QOL	0	4	8	12	15
Total QOL	48	61	74	87	100

The overall average scores for occupational, health, emotional, sexual and total quality of life for 100 participants was found to be 11.37, 21.03, 17.84, 3.67 and 53.34 respectively.



Graph 06: Represents data on average scores for each domain of UTIAN QOL

According to the responses recorded and analysed, only health QOL has a mean value i.e., 21.07. In the other hand the occupational, emotional, sexual and total QOL are analysed to be lower than the mean QOL. This means the quality of life of post menopausal women in greatly lowered after menopause. Women need to take more self care and must follow healthy life style after menopause in order to maintain higher quality of life.

Discussion

The present study " Evaluation of quality of life and postmenopausal symptoms of post-menopausal women" done in Maharaja Institute of Medical Sciences, Vizianagaram. This study was carried out prospectively for 100 patients and evaluation of quality of life and symptoms in post-menopausal women were evaluated. Tools used in this study are MENQOL consisting of questionnaire with 29 item that are distributed among the 4 domains as vasomotor 3, psychological-7, physical -16, sexual -3 and UTIAN questionnaire consisting of questionnaire with 23 item that are categorised into 4

divisions as occupation quality of life, health quality of life, emotional quality of life, sexual quality of life and together the total quality of life.

Out of 100 post-menopausal women involved in the study, the maximum age of menopause was found to be 60 and the minimum age of menopause was found to be 37 with a range of 23 and the mean menopausal age was found to be 45.64 years which is in resemblance with Yan Lu *et al* which is 45.7%.

The responses after administering MSQOL to 100 patients were recorded and analysed using the SPSS software.

Out of 100 participants involved, vasomotor domain of MSQOL showed responses with average mean score of 1.60 which is in contrast with Rachel E Williams *et al* where the mean score was 3.79.

The 3 symptoms of vasomotor domain individually are as, women with Sweating were found to be highest 48 and with Mean score of 1.86. The severity scores of 3 symptoms are also reported where sweating in post-menopausal women was found to be women who not

at all bothered (52), more bothered (14), bothered (14), mild bothering (12), slightly bothered (4), extremely bothered (2), very slightly bothered (1) followed by the symptom Hot flushes in (33) women with mean score 1.67 and whose severity scores are women who not at all bothered (57), bothered (18), mild bothering (14), more bothered (9), slightly bothered (3), very slightly bothered (2), extremely bothered (0) and symptom Night sweats in (48) women with mean score 1.29 and whose severity scores are women who not at all bothered (67), bothered (13), more bothered (12), mild bothering (7), slightly bothered (3), very slightly bothered (0), extremely bothered (0)

Out of 100 participants involved, psychological domain involving 7 symptoms of MSQOL showed responses with average mean score of 1.52 which is in contrast with Rachel E Williams *et al* where the mean score was 3.89.

The 7 individual psychological symptoms are as, women with feeling anxious or nervous were found to be with highest Mean score of (2.17) and with the severity scores as women who not at all bothered (41), very slightly bothered (2), slightly bothered (7), mild bothering (10), bothered (30), more bothered (9),extremely bothered (1).

The above symptom is followed by feeling depressed, down or blue having mean score of (1.87) and with severity scores of women who not at all bothered (50), very slightly bothered (4), slightly bothered (11), mild bothering (20), bothered (3), more bothered (8),extremely bothered (4).

The psychological symptom, being impatient with other people have mean score of (1.69) and severity scores as women who not at all bothered (52), very slightly bothered (7), slightly bothered (8), mild bothering (6), bothered (8), more bothered (18),extremely bothered (1).

The psychological symptom, experiencing poor memory is found to have a mean score of (1.62) and its severity scores as women who not at all bothered (50), very slightly bothered (4), slightly bothered (11), mild bothering (20), bothered (3), more bothered (8),extremely bothered (4).

The psychological symptom, being dissatisfied with my personal life is found to have a mean score of (1.38)and its severity scores are found to be as women who not at all bothered (54), very slightly bothered (4), slightly bothered (15), mild bothering (11), bothered (11), more bothered (3),extremely bothered (2).

The psychological symptom, accomplishing less than I used to was found to have a mean score of (1.37)and its

severity scores are found to be as women who not at all bothered (61), very slightly bothered (1), slightly bothered (4), mild bothering (18), bothered (8), more bothered (6),extremely bothered (2).

The psychological symptom that had least severity is feeling of wanting to be alone was found to have a mean score of (0.57)and its severity scores are found to be as women who not at all bothered (52), very slightly bothered (7), slightly bothered (8), mild bothering (6), bothered (8), more bothered (18),extremely bothered (1). Among 100 participants involved in the study, physical domain involving 16 symptoms showed an average mean score of 1.88 which is in contrast with Rachel E Williams *et al* where the mean score was 3.74.

Of 16 symptoms the highest noticed symptom is low back ache with a mean score of (3.02) and its severity scores are found to be as women who not at all bothered (29), very slightly bothered (0), slightly bothered (5), mild bothering (13), bothered (17), more bothered (31),extremely bothered (5).

The second highest symptom is aching muscles and joints with a mean score of (2.97) and its severity scores are found to be as women who not at all bothered (28), very slightly bothered (4), slightly bothered (4), mild bothering (9), bothered (25), more bothered (22),extremely bothered (8).

The third highest symptom is decrease in stamina with a mean score of (2.77) and its severity scores are found to be as women who not at all bothered (23), very slightly bothered (2), slightly bothered (11), mild bothering (23), bothered (25), more bothered (12),extremely bothered (4).

The following symptom is aches in back of neck or head with a mean score of (2.70) and its severity scores are found to be as women who not at all bothered (27), very slightly bothered (4), slightly bothered (7), mild bothering (18), bothered (23), more bothered (20),extremely bothered (1).

The symptom, feeling a lack of energy is with a mean score of (2.68) and its severity scores are found to be as women who not at all bothered (22), very slightly bothered (2), slightly bothered (12), mild bothering (29), bothered (22), more bothered (11),extremely bothered (2).

The symptom, frequent urination is with a mean score of (2.61) and its severity scores are found to be as women who not at all bothered (34), very slightly bothered (0), slightly bothered (6), mild bothering (18), bothered (21), more bothered (15),extremely bothered (6).

The symptom, feeling tired or worn out is with a mean score of (2.55) and its severity scores are found to be as women who not at all bothered (29), very slightly bothered (8), slightly bothered (12), mild bothering (10), bothered (17), more bothered (19),extremely bothered (5).

The symptom, decrease in physical strength is with a mean score of (2.52) and its severity scores are found to be as women who not at all bothered (22), very slightly bothered (4), slightly bothered (14), mild bothering (31), bothered (20), more bothered (7),extremely bothered (2).

The symptom, difficulty sleeping is with a mean score of (2.05) and its severity scores are found to be as women who not at all bothered (45), very slightly bothered (7), slightly bothered (4), mild bothering (11), bothered (13), more bothered (15),extremely bothered (5).

The symptom, feeling bloated is with a mean score of (1.99) and its severity scores are found to be as women who not at all bothered (47), very slightly bothered (1), slightly bothered (2), mild bothering (18), bothered (20), more bothered (12),extremely bothered (0).

The symptom, flatulence or gas pain is with a mean score of (1.86) and its severity scores are found to be as women who not at all bothered (48), very slightly bothered (2), slightly bothered (11), mild bothering (8), bothered (17), more bothered (14),extremely bothered (0).

The symptom, drying skin is with a mean score of (0.71) and its severity scores are found to be as women who not at all bothered (75), very slightly bothered (2), slightly bothered (7), mild bothering (11), bothered (3), more bothered (2),extremely bothered (0).

The symptom, involuntary urination when laughing or coughing is with a mean score of (0.61) and its severity scores are found to be as women who not at all bothered (83), very slightly bothered (2), slightly bothered (5), mild bothering (2), bothered (1), more bothered (3),extremely bothered (4).

The symptom, weight gain is with a mean score of (0.58) and its severity scores are found to be as women who not at all bothered (80), very slightly bothered (2), slightly bothered (8), mild bothering (3), bothered (4), more bothered (3),extremely bothered (0).

The least reported symptom increased facial hair is with a mean score of (0.12) and its severity scores are found to be as women who not at all bothered (95), very slightly bothered (0), slightly bothered (3), mild bothering (2), bothered (0), more bothered (0),extremely bothered (0).

Among 100 patients involved in the study the sexual domain of MSQOL involved showed an average mean score of 2.79 which is in some resemblance with Rachel E Williams *et al* where the mean score was 3.39.

Of the 3 symptoms, avoiding intimacy is reported the highest with a mean score of (4.61) followed by change in sexual desire (3.39) and vaginal dryness during intercourse with means score of (0.39).

The responses after administering UQOL to 100 patients were recorded and analysed using the SPSS software. Only health QOL was found to have a mean value (21.07) followed by emotional QOL (17.84), occupational QOL (11.37), sexual QOL (3.67).

Conclusion

From this study, it is clearly evident that the quality of life among the post menopausal women is greatly affected by various postmenopausal symptoms and complications that they face. From this study, it is clear that about 99% of the postmenopausal women have poor quality of life. Major postmenopausal symptoms are related to sexual followed by physical, vasomotor and psychological.

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Conflict of interest

The authors declare that there are no conflicts of interest.

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