



**EFFECT OF POST MENOPAUSAL SYMPTOMS ON HEALTH-RELATED
QUALITY OF LIFE AMONG WOMEN RESIDING IN SELECTED AREAS
OF GUJARAT: A CROSS- SECTIONAL STUDY****BAVDA BM^{1*}, PATEL SB², AND TIWARI AP³**

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ABSTRACT**Introduction:**

When a woman enters the menopause, her menstrual cycle has permanently ended. Here, she experiences significant hormone fluctuation, which either directly or tangentially affects her quality of life in terms of her health. Her ovarian function is primarily declining, which will alter her vasomotor, physical, psychological, and sexual functions. She might experience hot flashes, forgetfulness, gastrointestinal discomfort, joint pain, disturbed sleep, dry skin, weight increase, and diminished sexual desire.

Material & Design:

A cross-sectional study was conducted in the rural areas of Bandhani and Mahelav in the Anand region. Participants in this study were post-menopausal women, ages of 40-60 Years. Statistics on post-menopausal women were collected between 25 & 30 January and 1 & 6 March respectively. A sample group was 30. The research tool was used for data collection was menopause-specific quality of life questionnaire (MANQOL 1-month tool). This questionnaire provided information on the symptoms that were present and their level of discomfort. These allow for the prediction of which area had the greatest impact on life quality in terms of health.

Result:

Event of vasomotor symptoms was 43.33% hot flushes. In psychosocial domain maximum was 56.67% Feeling discouraged. In physical domain 83.33% was feeling bloated, and sexual domain 40% was avoiding intimacy. So here overall physical domain was more affecting on health-related personal satisfaction among post-menopausal ladies in rural space of Anand region.

Conclusion:

Based on pilot study conclusion was found that physical domains are more affecting on well-being related personal satisfaction among women who lives in rural locale of Anand sector.

Keywords: Assess, Effect, Post-menopausal manifestations, Health related personal satisfaction, Women

INTRODUCTION:

Women are the major contributor in social and professional life. But now a day's women will forget to take proper care for self mainly in the age group 40-60 yrs. She has luxuries life in this age group so she will refuse or avoided few symptoms which may leads to major disorder or may death. In these age group mainly menopausal symptoms she may felt but because of daily busy schedule she ignores it [1].

In human existence length advancement, menopausal stage means the typical maturing measure that subjects' women from the regenerative to the non-conceptive state [2]. Menopause is portrayed as the suspension of ovarian limit, which achieves ceaseless amenorrhea. The WHO characterizes menopause as ladies with amenorrhea for 12 continuous months. In 1990, around 25 million women worldwide had achieved menopause this figure is needed to grow twice by the last part of the 2020s [3]. In India the Population

Projections Survey exposed that the amount of women developed 45 years or more is depended upon to arrive at 401 million of each 2026 from 96 million as of now. These colossal amounts of women are depended upon to go through right around 30 years in a post conceptive season of life [2].

More than 80% of the lady's acquaintance physical or mental manifestations in the years when they approach menopause, with various difficulty and trouble in their lives, prompting an abatement in the nature of life [4].

Menopause is a worldwide issue for women. It's anything but a biologic cycle, depicted by drop down in oestradiol and progesterone expansions in follicle invigorating chemical, just as a day to day existence stage, described by changing jobs, for example, the finish of childbearing potential and kids venturing out from home. While the biota influence of menopause (e.g., bone misfortune) is a lot of portrayed, the impacts

of menopause on a woman's ability and thriving, or prosperity related individual fulfilment (HRQoL) are unclear [5].

The beginning of this physiological advancement not just denotes the finish of ladies' conceptive capacity yet in addition acquaints them with another period of life. The older populace is expanding each year, and it is projected that it would increment to about 12% of the all-out populace continuously 2025. The normal time of as it is seen from past records menopause is around 48 years; however, it strikes Indian women as young as 30–35 years. On account of the addition in the future women should confront longer times of menopause [6].

Menopause includes changes in menses (more limited or more, luminous or massive with pretty much time in the middle), hot flushes or potentially night sweats, inconvenience dozing, vaginal dryness, mind-set swings, inconvenience zeroing in and less hair on the head, more on the face, experience an age-related decay of physical and intellectual ability [7].

Menopausal period is emphatically connected with Non-Communicable illnesses like diabetes, hypertension, osteoporosis, cervical malignancy, and bosom disease. Moreover, the menopausal ladies experience complex psychosocial issues discouragement, state of mind swings, rest issues, loss of social, proficient jobs, and helpless sense of self integrity [2].

Components that influence age at menopause may have significant clinical ramifications on the grounds that early menopause is connected with an extended threat of cardiovascular ailment and osteoporosis, though deferred menopause has been related with expanded danger of bosom disease and endometrial malignancy. These affiliations may result from the immediate impact of feminine capacity (or discontinuance of capacity) and the connected chemical changes, or might be a circuitous consequence of different components that are related with age at menopause. The co-relation of menopausal age with the danger factors for such ailments makes age at menopause a important epidemiological matter. In 1990, 467 million ladies worldwide suffered with postmenopausal period and this figure is required to ascend to 1200 million by 2030. Out of these, 76% were situated in the non-industrial nations [8].

With the expanding future ladies spends just about 33% of her life in menopause. Medical problems of postmenopausal ladies accordingly would represent a critical test to general wellbeing additionally considering the way that there hasn't been a particular wellbeing program for such ladies in the country. The current geriatric medical care administrations are to a great extent dependent on the overall medical conditions

of the older and not coordinated explicitly to the postmenopausal wellbeing problems [9]. With the help of Karnataka study (Bangalore South) help to government and health personnel can be improve local area based medical care intercessions in improving the menopausal wellbeing related QOL outcome among ladies [2].

During menopausal progress, there is a great deal of vacillation in the chemical levels, and in this way, ladies may encounter numerous side effects and conditions. Notwithstanding, the impact of this change differs starting with one lady then onto the next [6].

According to Indian Menopause Society, menopausal women's wellbeing demands much higher need in Indian circumstance. In India, presently no current prosperity program that takes into account the specific welfare needs of postmenopausal female. Furthermore, Reproductive and Child Health-II and National Rural Health Mission simply addresses ladies in the infertile period age bunch, disregarding the lady who have passed their fertility stage. Likewise, less investigations have been led in rustic regions to comprehend menopause at miniature least [10].

There is a scar city of literature showing symptoms of post-menopausal ladies and personal satisfaction among post-climacteric women in Gujarat. That is why the researcher has thought to select this area.

Objectives:

- 1) To evaluate the effect of post-menopausal symptoms on health-related quality of life among women residing in selected areas of Gujarat.
- 2) To find the association of post-menopausal symptoms on health-related quality of life with selected socio-demographic and obstetrical variables of women residing in selected areas of Gujarat.

METHODS:

This cross-sectional examination was directed all post-grand climacteric women age group 40-60 years who lived in rural area of Anand district. In that rural place PHC, Bandhani and CHC, Mahelav were the area where the pilot study was conducted for two weeks on date from 25th Jan-30th Jan and 1st Mar-6th Mar 2021.

Inclusion criteria:

Women of selected area of Gujarat who have attained natural menopause with postmenopausal period of minimum 7 years.

Exclusion criteria:

Women who is receiving hormonal therapy.

Women undergone with hysterectomy.

Presence of ailment condition like diabetes mellitus, hypertension, heart sickness, venous embolism, thyroid problems.

Women who are involved in medical and paramedical profession.

Women who have undergone any reproductive tract obliteration related surgeries.

Women suffered/suffering due to infections.

Sample size: 30 sample

Sampling technique: consecutive sampling technique

Using the formula:

$$\alpha = \frac{k}{k-1} \left\{ 1 - \left(\frac{S_I^2}{S_T^2} \right) \right\}$$

Data collection process: Here in this study Anand district was selected with the help of computer based random sampling techniques. For data collection firstly medical officer PHC were contacted through telephone. After approval of medical officer, I contacted female health worker. With the help of her I talked with ASHA worker and we visited door to door for data collection. Here selection of participant was done with the help of consecutive sampling techniques. With the help of ASHA worker, I selected those participants who were interested and falling in inclusion and exclusion criteria, I gave them one consent form. For data collection used tool was the socio-demographic, obstetrical and MANQOL 1-month tool.

Study device:

This poll had 3 sections:

Section 1: socio-demographic questionnaire

Section 2: obstetrical questionnaire

Section 3: MANQOL 1-month tool

It is most important tool for finding out the wellbeing related personal satisfaction among ladies. This tool has four areas which are vasomotor, psychological, physical and sexual. These four domains have 29 items. This MANQOL questionnaire were two-point options NO and YES. In YES included zero to six-point severity score. For resulting these scoring is suggested in 2 to 8 number and which interprets that not at all bothered to severe bothered.

Here tool translation was done from medical and language to regional under stable language by master with the goal that the significance, content and linguistic accuracy of things remain same without altering the meaning of items.

The menopause explicit personal satisfaction survey:

The MANQOL apparatus was presented for women who are in post-menopausal period in 1996 as an instrument to evaluate wellbeing related personal satisfaction. The effect of menopausal manifestations on wellbeing related personal satisfaction is surveyed by this instrument. The MENQOL comprises of an aggregate of 29 things is self-managed. Everything surveys the effect of quarterly spaces of menopausal indications, as suffered in the course of the post month: Neurogenic (things 1–3), Neurodevelopmental (things 4–10), Visible (things 11–26), and sexual (things 27–29). Here the rating is evaluated based on

symptoms experiences or not, is it experiences then it is present otherwise not. Zero indicates that not bother but if we raised to six it will be indicated that person experienced those symptoms and it is highly bothered. Which indicates that quality of life is affecting.

ETHICS:

Here for the study will be conducted after obtaining ethical clearance from institutional ethical committee - charusat [IEC-CHARUSAT] {CHA/IEC/ADM/21/02/105}

STATISTICS:

First, Data will be entered into the Excel sheet.

In this study article data was analysed with the help of IBM SPSS statistics 23 version. The data will be analysed using descriptive and inferential statistics.

Demographic variables will be analyzed by Descriptive statistics like frequency, and percentages.

Effect of post-menopausal symptoms on health-related quality of life among post-menopausal women will be analyzed by inferential statistics.

RESULTS:

Findings related to demographic and obstetrical variables of post-menopausal women

Table 1 indicate that present investigation was 40% of the women are falling in 46-50 years of age group. 53.3% of women had not

taken formal education, 96.7 of them are non-employed and all had their income < 10,000 per month. 86.7% women were belonging from vegetarian dietary pattern. 96.7% of them were Hindu, 56.7% were living in joint family type, 80% of them were married and 26.7% have 1child, 2 children, or more than 3 children and out of 30 post-menopausal women 76.7% were belonging from 7-10 years since menopause attained.

Findings related to the prevalence of specific post-menopausal symptoms among postmenopausal women

In this study **Table 2** suggests the items which are suffered by post-menopausal women which were assessed by me. So about 1st domain vasomotor symptoms: sweating was felt by them 53.33% which means 16 out of 30 suffered with these symptoms and 43.33% suffered with hot flushes and night sweating. Next about psychological domain: 56.67% which means 17 out of 30 women suffered with feeling depressed and being impatient with other people, 46.67% women suffered with short memory and accomplishing less than I used to, 43.33% suffered with dissatisfaction with my personal life, 36.67% were falling in to feeling anxious in this age, and last 33.33% comes under the feeling want to be alone. If we see in 3rd domain physical: here 83.33% women feeling bloated herself in post-menopausal

period, 80% feeling tired, 70% of them has frequent urination, 60% of them has difficulty in sleeping, 56.67% feeling lack of energy, 53.33% felt decline in physical power and 50% of women were having aching in muscle & joint and decreased in stamina. Last 4th domain sexual where 40% of post-menopausal women were avoiding intimacy with her partner, 33.33% women felt decreased in her sexual desire and 23.33% had vaginal dryness.

Findings related to MANQOL items score among post-menopausal women

Here in present study **Table 3** suggests that mean score of vasomotor domain symptoms are 2.83 ± 2.88 is of sweating. For night sweats 2.37 ± 2.92 and hot flushes were reported 2.23 ± 2.8 . In mean psychological domain 3.47 ± 2.51 participants are feeling depressed and down or blue. 3.17 ± 2.71 mean score of participants are those who suffered with being impatient with other people, 3.03 ± 2.45 participants are those who suffered with Accomplishing less than i used to, 2.77 ± 3.41 women are those who felt dissatisfaction with my personal life. In physical domain mean score 5.13 ± 2.47 participants are those who suffered with Feeling bloated, 5.00 ± 2.39 are those who suffered by Feeling tired or worn out, 4.43 ± 2.66 women are those who felt that they

has a frequent urination, difficulty in sleeping was felt by 4.07 ± 2.78 and last sexual domain mean score 3.10 ± 2.88 was felt by women as a avoiding intimacy with her partner and decreased in my sexual desired item was felt by 2.60 ± 2.53 women in rural area of Anand district, Gujarat.

Finding related to mean score of post-menopausal symptoms on HRQOL domains among post-menopausal women

Table 4 clarifies that here, out of four domains physical domain is more affecting on wellbeing related to personal satisfaction. In physical domain mainly affecting symptoms are Feeling bloated 83.33 % [5.13 ± 2.47], Feeling tired or worn out 80 % [5.00 ± 2.39], Frequent urination 70 % [4.43 ± 2.66], Difficulty in sleeping 60 % [4.07 ± 2.78], Lack of energy 56.67 % [3.47 ± 2.51], Decrease in physical strength 53.33 % [3.27 ± 2.41], Aching in muscles and joints 50 % [3.47 ± 2.76], Decrease in stamina 50 % [3.00 ± 2.39], Low backache 40 % [2.90 ± 2.62]. Here participants are experiencing the symptoms but they are minimally bothered to their health-related quality of life.

Here, cross relationship between wellbeing related personal satisfaction and selected socio-demographic and past-obstetrical related variables all are non-significant.

Table 1: Findings related to demographic and obstetrical variables of post-menopausal women. [n=30]

S. No.	Characteristics	Frequency	Percent [%]	
1.	Age group in years	40-45 years	05	16.7
		46-50 years	12	40.0
		51-55 years	04	13.3
		56-60 years	09	30.0
2.	Educational level	No formal education	16	53.3
		Primary education	08	26.7
		Secondary/ higher secondary education	05	16.7
		Post - graduation	01	3.3
3.	Employment status	Non-employed	29	96.7
		Government sector	01	3.3
4.	Household income per month	< 10,000 Rs.	30	100
5.	Diet	Vegetarian	26	86.7
		Mixed	04	13.3
6.	Religious	Hindu	29	96.7
		Christian	01	3.3
7.	Types of family	Nuclear	13	43.3
		Joint	17	56.7
8.	Marital status	Married	24	80.0
		Widow	05	16.7
		Divorced	01	3.3
9.	Number of children	0	03	10.0
		1	08	26.7
		2	08	26.7
		3	03	10.0
		More than 3	08	26.7
10.	Area of living	Rural	30	100
11.	Since menopause attained in year	7-10	23	76.7
		11-14	01	3.3
		15-18	06	20.0
12.	A) Given birth	Yes	28	93.33
		No	2	6.67
	B) Years of last delivery	Not applicable	3	10
		< 1980	0	0
		1981-1990	10	33.33
		1991-2000	15	50
		>2001	2	6.67
	C) Period of gestation of last pregnancy	Not applicable	4	13.33
		< 27 weeks	1	3.33
		28-38 weeks	20	66.67
		> 38 weeks	5	16.67
	D) Health status of mother	Not applicable	17	56.67
Good		12	40	
Poor		1	3.33	
13.	Mode of last delivery	Not applicable	2	6.67
		NVD [Normal vaginal delivery]	15	50
		AVD [Assisted vaginal delivery]	11	36.67
		CS [Caesarean section]	2	6.66
14.	History of abortion	Not applicable	0	0
		No	29	96.67
		Yes	1	3.33
15.	Menstrual History			
	A) Age of menarche	< 12 y	0	0
		12y - 14y	9	30
		15y - 17y	18	60
		> 17y	3	10
	B) Cycle length	< 28 days	0	0
28 - 32 days		29	96.67	

	C] Regularity	< 32 days	1	3.33
		Regularity	29	96.67
		Irregular	1	3.33
	D] Days of flow	< 3 days	6	20
		3 - 5 days	16	53.33
		5 days	8	26.67
	E] No. of pad changed / day	< 2 pads	13	43.33
		2 - 3 pads	15	50
		> 3 pads	2	6.67
	F] Associated symptoms			
i.	Back pain	Yes	11	36.67
		No	19	63.33
ii.	Bloating	Yes	2	6.67
		No	28	93.33
iii.	Bowel issues	Yes	1	3.33
		No	29	96.67
iv.	Breakouts	Yes	3	10
		No	27	90
V	Cramps in abdominal	Yes	4	13.33
		No	26	86.67
vi.	Fatigue	Yes	7	23.33
		No	23	76.67
vii.	Headache	Yes	9	30
		No	21	70
viii.	Lower back pain	Yes	6	20
		No	24	80
Ix.	Lower abdominal pain	Yes	10	33.33
		No	20	66.67
x.	Mood swing	Yes	11	36.67
		No	19	63.33
xi.	Trouble sleeping	Yes	2	6.67
		No	28	93.33

Table 2: Findings related to the prevalence of specific post-menopausal symptoms among postmenopausal women [n=30]

Sr. No.	DOMAINS	Menopausal symptoms	Frequency	Percent [%]
A.	VASOMOTOR DOMAIN	Hot flushes and flashes	13	43.33
		Night sweats	13	43.33
		Sweating	16	53.33
B.	PSYCHOSOCIAL DOMAIN	Dissatisfaction with my personal life	13	43.33
		Feeling anxious or nervous	11	36.67
		Poor memory	14	46.67
		Accomplishing less than i used to	14	46.67
		Feeling depressed, down or blue	17	56.67
		Being impatient with other people	17	56.67
		Feelings of wanting to be alone	10	33.33
C.	PHYSICAL DOMAIN	Flatulence (wind) or gas pains	9	30
		Aching in muscles and joints	15	50
		Feeling tired or worn out	24	80
		Difficulty sleeping	18	60
		Aches in back of neck or head	12	40
		Decrease in physical strength	16	53.33
		Decrease in stamina	15	50
		Lack of energy	17	56.67
		Dry skin	12	40
		Weight gain	5	16.67
		Increased facial hair	3	10
		Changes in appearance, texture or tone of my skin	7	23.33
		Feeling bloated	25	83.33
		Low backache	12	40
		Frequent urination	21	70
D.	SEXUAL DOMAIN	Involuntary urination when laughing and coughing	8	26.67
		Decrease in my sexual desire	10	33.33
		Vaginal dryness	7	23.33
		Avoiding intimacy	12	40

Table 3: Findings related to MANQOL items score among post-menopausal women [n=30]

Sr. No.	DOMAINS	Menopausal symptoms	Score [Mean \pm SD]
A.	VASOMOTOR DOMAIN	Hot flushes and flashes	2.23 \pm 2.84
		Night sweats	2.37 \pm 2.92
		Sweating	2.83 \pm 2.88
B.	PSYCHOSOCIAL DOMAIN	Dissatisfaction with my personal life	2.77 \pm 3.41
		Feeling anxious or nervous	2.37 \pm 3.28
		Poor memory	2.20 \pm 2.49
		Accomplishing less than i used to	3.03 \pm 2.45
		Feeling depressed, down or blue	3.47 \pm 2.51
		Being impatient with other people	3.17 \pm 2.71
		Feelings of wanting to be alone	2.63 \pm 2.64
C.	PHYSICAL DOMAIN	Flatulence (wind) or gas pains	2.47 \pm 2.42
		Aching in muscles and joints	3.47 \pm 2.76
		Feeling tired or worn out	5.00 \pm 2.39
		Difficulty sleeping	4.07 \pm 2.78
		Aches in back of neck or head	2.70 \pm 2.42
		Decrease in physical strength	3.27 \pm 2.41
		Decrease in stamina	3.00 \pm 2.39
		Lack of energy	3.47 \pm 2.51
		Dry skin	2.43 \pm 2.27
		Weight gain	1.57 \pm 1.33
		Increased facial hair	1.20 \pm 0.66
		Changes in appearance, texture or tone of my skin	1.90 \pm 2.01
		Feeling bloated	5.13 \pm 2.47
		Low backache	2.90 \pm 2.62
		Frequent urination	4.43 \pm 2.66
D.	SEXUAL DOMAIN	Involuntary urination when laughing and coughing	2.27 \pm 2.30
		Decrease in my sexual desire	2.90 \pm 2.62
		Vaginal dryness	4.43 \pm 2.66
		Avoiding intimacy	2.27 \pm 2.30

Table 4: Finding related to mean score of post-menopausal symptoms on HRQOL domains among post-menopausal women. [n=30]

Sr. No.	Domains	Mean \pm SD
1	Vasomotor Domains	2.47 \pm 0.280
2	Psycho-social Domains	2.81 \pm 0.390
3	Physical Domains	3.08 \pm 1.15
4	Sexual Domains	2.55 \pm 0.56

DISCUSSION:

In this present study menopause is a natural process of every women's life who are menstruating in her adolescent periods. Based on previous study we get idea that climacteric symptoms effect on wellbeing related quality of life ². Mainly post-menopausal women have revealed that they are suffering from vasomotor, psychological, physical and sexual symptoms.

Main objective of this study was to assess those items effect of post-menopausal symptoms on wellbeing related to personal satisfaction, with the help of MANQOL tool which gives result that out of 29 items and 4 domains, which symptoms are felt by women and those symptoms are how much bothered to self and affecting on health status. Here in present study all women have dissimilar symptoms which she feels during this age group. 40-60 years age range is very

prone to get many hormonal fluctuations in women body which she can't understand easily and so she ignores those symptoms which may take very dangerous effect on health.

Menopausal women are more prone to get medical emergency because we can consider her as a risk population. Aging is the natural phenomena and no one can escape from it [11]. Main reason for choosing this study was to make a screening programme for menopausal women who suffered very badly by the symptoms like anxiety, sleep disturbance, joint pain, urine incontinence, sweating, hot flushes, feeling to live alone, poor memory, mood swing, decreased strength, dry skin, increased facial hair, decreased sexual activity, avoiding intimacy, during laughing and coughing urination in her post-menopausal period. But if we make one screening programme or preliminary assessment for those women to get idea on how to treat menopausal symptoms it will affect on wellbeing-related quality of life and through that we can improve her health-related personal satisfaction.

Based on present study tool it is divided in to 3 phases: socio-demographic characteristics, obstetrics questions and MANQOL questionnaires. After checking reliability and validity of tool it was used during this study. If we discuss about data collection process so firstly contacted to

medical officer of PHC or CDHO of CHC. Then contacted to female health worker and after that for sample selection ASHA worker was contacted. We went home to home for data collection and selecting them as a part of study based on criteria.

So, in this study out of these four domains mainly physical domain is more affecting on wellbeing-related personal satisfaction among ladies in selected countryside of Anand district, Gujarat. From this present study we can find out based on four domains and 29 items that out of 30 post-menopausal women how many suffered with climacteric symptoms and its effect on health-related personal satisfaction. Also assure about how much it bothered on her health.

- **CONCLUSION:**

Here, in the present study we get the superficial view that direct or indirect menopausal symptoms are affected on women wellbeing related personal satisfaction. In association to health-related quality of life socio-demographical data is not significant. Out of four domains physical domains items are more affecting on post-menopausal ladies who lived in rural place of Anand district. And in 40-60 years age group more risky or post-menopausal symptoms are felt by 46-50 years of age groups.

Menopausal symptoms are felt by women in selected geographical area of Anand district

but it varies one to another. So, we have to specify those symptoms and its bothering nature to particular post-menopausal women and explain her about how to treat it and its effects on health-related quality of life. But if the effects are severe than immediately contact gynaecologist and start the treatment to control it and live normal life.

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