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A CROSS SECTIONAL STUDY ON KNOWLEDGE, ATTITUDES AND PRACTICES ABOUT PREMENOPAUSAL AND MENOPAUSAL CHANGES AMONG RURAL WOMEN (40-45 YEARS) OF WESTERN MAHARASHTRA.

Obstetrics & Gynaecology		-V 40	
Dr. Prashant Kale		nt, MBBS, DNB Obstetric & Gynaecology, Dr. Mane Medical Foundation & Center & SAIDHAM Cancer Hospital	
Dr. Balasaheb Khadbade	Director, MBBS MS Obstetric & Gynaecology, Yashodha IVF Center and Maternity Hospital Kamotha		
Dr. Swapnil Mane Director, MBBS MS Obstetrics & Gynaecology, Dr. Mane Medical Foundation Research Center & SAIDHAM Cancer Hospital			
Dr Kharde Anup*		ofessor, MBBS MD Community Medicine, Dr Balasaheb Vikhe Patil Rural ege PIMS-DU Loni *Corresponding Author	

ABSTRACT

Introduction: Menopause is an unspoken, unattended, reality of life, the cause of which is still un-deciphered completely by man. Every woman uniquely experiences menopause and it has been given little attention hence gaps exist concerning women's knowledge, attitude and practices. **Objective:** To determine knowledge, attitudes and practices about premenopausal and menopausal changes among rural women (40-45 Years) of western Maharashtra. **Material and Methods:** Present descriptive cross sectional study was conducted on rural women of 40-45 Years of old. Total 200 women were included as per inclusion and exclusion criteria using simple random method. A pilot study was done for validation, practicality and applicability of questionnaire. It was carried out using predesigned questionnaire. **Results:** Maximum participants (39%) were in the age group of 46 to 50 years of age and 88.5% were married. Around 98% of the participants had correct knowledge about the meaning of menopause, on attitude 44% of people believe that menopause has affected their body or daily work and 78% of people believe that menopause means loss of youth. Observation on practices of women showed that around 88% consulted with doctors on the onset of peri-menopausal and menopausal symptoms. **Conclusion:** It is imperative to intensify efforts to increase knowledge, attitudes and practices related to perimenopause and menopausal changes.

KEYWORDS

Premenopausal, Menopausal, KAP, Rural, Women

INTRODUCTION

Menopause is a universal phenomenon and every woman experiences it differently. Menopause is age age-related gradual decline of primordial ovarian follicles.¹ It is the permanent cessation of menstruation and is defined as 12-month amenorrhea after the last menstrual cycle with no known cause.² It is estimated that approximately half of the world's population will be women. It is estimated that by the end of 2015 there will be 130 million elderly women in India, necessitating substantial amount of care.³ Women will be spend one-third of their life in post reproductive stage of menopause; due to the increase in the life expectancy.⁴

Around the world, cardiovascular disease (CVD) is one of the leading causes of death among postmenopausal women.⁵ About 50 to 60% of postmenopausal women worldwide suffer silently from the epidemic of vulvovaginal atrophy caused by this condition.⁶ From 45 to 54 years and from 55 to 64 years of age, the percentage of hypertensive men is similar to that of hypertensive women. Women's blood pressure levels increase faster after 65 than men's.⁷ After 50 years of age women loses 0.5% bone density every year. Osteoporosis and fracture occur commonly in postmenopausal women.⁸ An increased risk of ovarian, breast, and uterine cancers have been observed in women who experience menopause after the age of 55 years.⁹

Most of women attain menopausal phase without having adequate knowledge about its consequences.¹⁰. In the societies where women have high knowledge about menopause, the consequences dealing with perimenopause and menopause are still less obvious.¹¹ If a woman may not be aware of what's happening to her during this period, it leads to a stressful postmenousal period. Appropriate understanding of physical, psychological changes during menopause helps to cope with these changes. Thus, the purpose of the present study was to assess knowledge, attitude, and practices of rural women (40-45 years old) of Western Maharashtra regarding premenopausal and menopausal changes.

MATERIALAND METHODS

The present descriptive cross-sectional study was conducted to study the knowledge, attitudes and practices of menopausal women. The study was carried out for a period of 2 years i.e. from November 2020 to November 2022. The study was done in accordance with the ethical standards framed out in the Helsinki Declaration. Study was carried out at Saidham Hospital affiliated to Dr. Mane Medical Foundation and Research Centre (DMMFARC). In the present study, women aged 40 to 60 years, with regular or irregular menses or menopause from nonmedical fields were included. Females who are not willing to participate, having chromic debilitated conditions etc. were excluded from study.

The sample size for this study was calculated using the statistical formula. Considering 89% correct knowledge about meaning of menopause with reference to pervious study¹¹ using following formula sample size was calculated.

 $n=z^2 p (1-p)/d^2$

- Where,
- n = Estimate of minimum sample size
- $z = Value of \alpha at 95\%$ confidence level which is 1.96
- p = 89% correct knowledge about meaning of menopause
- d = Absolute precision set 5%

Using these values, the minimum sample size worked out to be 151 which was rounded to 200. A pilot study was done for validation, practicality and applicability of questionnaire. It was carried out using predesigned questionnaire. According to answers obtained and difficulties faced during pilot study, rectification was done and questionnaire modified accordingly. Predesigned and pretested questionnaire was used for data collection. Study questionnaire consists of three parts Part 1: Includes socio-demographic variables Part 2: Obstetrics and Gynaecology History and General examination Part 3 (A): knowledge questions Part 3 (B) attitude questions and Part 3 (c) practice questions. Data tools were checked for their completeness and data entry and coding was done in Microsoft Excel. The raw data was compiled, classified and presented in a tabulated and graphical manner to bring out important details.

RESULTS:

Table no 01: Social and Demography variable of participants (n=200)

А	Age	Frequency (%)
1	41-45	49 (24.5%)
2	46-50	78 (39%)
3	51-55	56 (28%)
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17 (08.5%)
Frequency (%)
177 (88.5%)
Divorcee 23 (11.5%)
Frequency (%)
27 (13.5%)
104 (52%)
57 (28.5%)
09 (04.5%)
03 (01.5%)
Frequency (%)
29 (14.5%)
171 (85.5%)
Frequency (%)
47 (23.5%)
101 (50.5%)
52 (26.0%)
on Frequency (%)
147 (73.5%)
or 27 (13.5%)
) 26 (13.0%)

Table no 01 shows various social and demography variable of participants. Maximum participants (39%) were in the age group of 46 to 50 years of age and 88.5% were married. Out of all 86.5% and 13.5% participants were literate and illiterate respectively. About 86% of women were housewife by their occupation and commonly (50.5%) lives in joint family. Friends/relatives were the most common sources of information about menopause and its related issues, followed by doctors and social media. In present study 13.5% of participants belonged to class IV socioeconomic class. (Table 02)

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Table	02: Distribution of so	ocioeconomic class (SEC)	
Class	Per capita per month income of family		Frequency
	BG Prasad's original classification 1960	Modified B G Prasad's classification for February 2019	(%)
Ι	100 and above	Rs. 7008 and above	11 (05.5%)
II	50 to 99	Rs. 3504-7007	33 (16.5%)
III	30 to 49	Rs .2102-3503	111 (55.5%)
IV	15 to 29	Rs .1051-2101	18 (09.0%)
V	Below 15	Below Rs. 1050	27 (13.5%)
Total		*	200 (100%)

*B.G Prasad Socioeconomic Status Scale 2019

Graph 01: Socioeconomic distribution of participatns

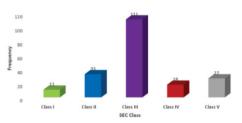


Table 03 Knowledge about premenopausal and menopausal changes in participants (n=200)

Sr. No.	Knowledge	Yes (%)	No (%)
1.	Meaning of menopause	196 (98%)	04 (02%)
2.	Knowledge of menopausal symptoms	154 (77%)	46 (23%)
3.	Does menopause increase the risk of CVD?	16 (08.0%)	184 (92%)
4.	Does menopause increase the risk of breast cancer?	06 (03%)	194 (97%)
5.	Does menopause increase the risk of osteoporosis?	132 (66%)	68 (34%)
6.	Are you aware of the use of HRT in menopause?	22 (11%)	178 (89%)
7.	Does exercise help cope with menopausal changes?	114 (57%)	86 (43%)

Table 03 shows knowledge about premenopausal and menopausal changes in participants. About 98% of the participants had correct

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knowledge about the meaning of menopause. Regarding symptoms 23% were unaware menopausal symptoms, only 8% and 3% were aware that menopause can increase the risk of CVD and breast cancer.

Table 04: What can be the reason for stopping menstrual cycle?			
Sr. No	Causes	Frequency (%)	
1.	Natural phenomenon	104 (52%)	
2.	Increase in age	54 (27%)	
3.	Physical illness	22 (11%)	
4.	Hormonal imbalance	16 (08%)	
5.	No idea	04 (02%)	
	Total	200 (100%)	

Regarding reasons for stopping menstrual cycle; (52%) considered it a natural phenomenon, while 27% and 11% considered advancing age and physical illness as factors responsible for cessation of menstruation. (Table 04) Irritability (82%), frequent headaches (78%), body ache (60%) and vaginal dryness (66%) and hot flushes (58%) were the commonest symptoms reported by participants of present study. (Table 05)

Table 05: What symptoms are associated with premenopausal and menopausal changes? (multiple response)

monop	ausar enanges: (muniple response)	
Sr. No	Symptoms	Frequency (%)
1.	Night sweats	20 (10%)
2.	Hot flushes	116 (58%)
3.	Urinary Incontinence	22 (11%)
4.	Backache/Joint pain/Body ache	120 (60%)
5.	Headache	156 (78%)
6.	Forgetfulness/Poor concentration	42 (21%)
7.	Irritability	164 (82%)
8.	Vaginal dryness	132 (66%)
9.	Depress mood/Sadness/Anxiety	110 (55%)
10.	Weight gain	42 (21%)

Table 06 Attitude of participants towards premenopausal and menopausal changes

menopausar enanges				
Sr. No.	Attitude	Yes (%)	No (%)	
1.	Does menopause affect body/daily routine?	88 (44%)	112 (56%)	
2.	Menopause means loss of youth?	156 (78%)	44 (22%)	
3.	Is menopause harmful?	96 (48%)	104 (52%)	
4.	Do you think menopause means end of sexual life?	176 (88%)	24 (12%)	
5.	Do you think menopause is associated with maturity and experience?	132 (66%)	68 (34%)	
6.	Does life become easier and calmer after menopause?	76 (38%)	124 (62%)	
7.	Do you think natural methods are better than HRT?	179 (89.5%)	21 (10.5%)	
8.	Do you think menopause gives women freedom from rituals, pregnancy, etc.?	176 (88%)	24 (12%)	

The outcome on the attitude towards menopause shows that 44% of people believe that menopause has affected their body or daily work and 78% of people believe that menopause means loss of youth. (Table 06). Around 88% consulted with doctors on the onset of perimenopausal and menopausal symptoms. Only 24% do exercises to ease the effects of peri-menopausal and menopause effects and 0.1% used HRT to deal with menopause problems. (Table 07)

Table 07 Practice of participants (n=200)			
Sr. No.	Practice	Yes (%)	No (%)
1.	Did you consult a doctor at the onset of symptoms?	176 (88%)	24 (12%)
2.	Have you exercised to ease the effects of peri-menopasue and menopause?	48 (24%)	152 (76%)
3.	Have you used HRT to deal with menopause problems?	03 (01.5%)	197 (98.5%)

DISCUSSION:

The present study conducted on 200 women of 41 to 45 years of age either having premenopausal symptoms or had reached menopausal stage. Maximum participants (39%) were in the age group of 46 to 50

years of age and 88.5% were married. In John NN et al (2021)¹² study 46% were in the age group of 41 to 50 years and 74.6% were married. In study conducted by Sultan S et al (2017) majority of women were in age group 46 to 50 years (42%).¹³ In present study 86.5% and 13.5% participants were literate and illiterate respectively and majority had completed their primary education (52%). About 86% of women were housewife by their occupation and commonly (50.5%) lives in joint family. John NN et al (2021) also reported a mixed educational background of his participants. Majority of the participants 65 (43.3%) were graduates in his study. Satpathy M et al study $(2016)^{11}$ 97% were married, 92% women were literate and 89% lives in joint family. Sultan S et al (2017)¹³ reported that out of 150 women included in study 117 (78%) were married, 18 (4%) were widow, 9 (6%) were unmarried and 6 (4%) were divorcee. All women included in her study had received higher education. Out of which 68% were Ph.D. Friends/relatives were the most common sources of information about menopause and its related issues, followed by doctors and social media. Sultan S et al (2017)¹³ study most of the participants (62%) received information about menopause/HRT from Friends and relatives. This finding consistent with finding of our study. In present study 13.5% of participants belonged to class IV socioeconomic class. In the present study 98% of the participants had correct knowledge about the meaning of menopause. About symptoms 23% were unaware of menopausal symptoms, only 8% and 3% were aware that menopause can increase the risk of CVD and breast cancer. In this study 66% of all participants previously knew that the risk of osteoporosis may increase after menopause. Only 11% of participants were aware of the usefulness of HRT (hormone replacement therapy) in menopause. Almost 60% of participants knew that exercise can help cope with menopausal changes. John NN et al $(2021)^{12}$ study 64 (42.6%) women had prior knowledge of menopausal symptoms, around 47 (31.3%) of women knew, menopause increases risk of cardiovascular disease followed by 57 (38%) aware that menopause increases risk of osteoporosis, followed by 39 (26%) aware that menopause increase the risk of breast cancer. He reported that only 63 (42%) are aware of HRT and 44 (29.3%) think indulging in recreational activities and physical exercises are beneficial practices. Participants in this study reported several reasons for stopping menstruation. Majority of them (52%) considered it a natural phenomenon, while 27% and 11% considered advancing age and physical illness as factors responsible for cessation of menstruation respectively. Hormonal imbalance reported by 08% participants and 02% had no knowledge regarding reasons for stopping of menstrual cycle. Banole SP et al (2022)¹⁴ study revealed that 85% of women felt that cessation/stopping of menstruation is a natural phenomenon and

42% of women felt that it was due to advancing age. Irritability (82%), frequent headaches (78%), body ache (60%) and vaginal dryness (66%) and hot flushes (58%) were the commonest symptoms reported by participants of present study. Satpathy M et al study $(2016)^{11}$ the prevalence of symptoms like joint pain and weight gain found to be (65%) &(69%) very high, which was followed by backache (59%), hot flushes(56%), forgetfulness (53%), irritability (48%), headache(43%) and (32%) suffered from vaginal dryness and itching while (39%) had urinary urgency.

In this study, the outcome on the attitude towards menopause shows that 44% of people believe that menopause has affected their body or daily work and 78% of people believe that menopause means loss of youth. Around 88% perceived that menopause means end of sexual life, 66% think that menopause is associated with maturity and experience and 38% reported that their life become easier and calmer after menopause. In the present study 89.5% of participants reported that they preferred the natural methods of coping with menopausal changes over HRT while 88% of participants think that menopause gives women freedom from rituals, pregnancy etc. John NN et al $(2021)^{12}$ study reported the attitude towards menopause reveals that around 77 (51.3%) perceive menopause as loss of youth and 91 (60.6%) think menopausal psychological symptoms affect quality of life. The same study also reveals that around 76 (50.6%) thinks that menopause means end of sexual life followed by 71 (47.3%) assumes that menopause is associated with maturity and experience. Around 64 (42.6%) think that absence of menstruation in postmenopausal period is a relief. Sultan S et al (2017)¹³ study about 50% reported that post menopause life become easier, calmer and post-menopausal life means freedom from rituals and pregnancy.

In our study, observation on practices of women showed that around 88% consulted with doctors on the onset of peri-menopausal and menopausal symptoms. Only 24% do exercises to ease the effects of peri-menopausal and menopause effects and 0.1% used HRT to deal with menopause problems. John NN et al (2021)¹² study 53 (35.3%) were willing to consult a physician at the onset of menopause and around 56 (37.3%) adopted favourable practices in postmenopausal years. Sultan S et al (2017)¹³ nearly half (48%) women preferred gynaecologist as treatment provider rest relied on physician (34%) and general practitioner and only 4.6% of women were taking HRT while maximum women have not adopted healthy practices. Banole SP et al (2022)¹⁴ study to cope up with menopausal and perimenopause changes, 52% of the women opted for medicine and only 45% have chosen exercises of which 2% women opted for both the treatment options.

CONCLUSION

It is imperative to intensify efforts to increase knowledge, attitudes and practices related to perimenopause and menopausal changes.

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