

**Awareness about Menopause and Menopause Hormone Therapy among women between 40 - 55 years of age group attending Gynaecology OPD in a Tertiary care Hospital in Goa**

<sup>1</sup>Dr. Rini Naik, Senior Resident, Department of Obstetrics and Gynaecology, Goa Medical College, Bambolim, Goa.

<sup>2</sup>Dr. Deepa Karmali, Associate Professor, Department of Obstetrics and Gynaecology, Goa Medical College, Bambolim, Goa

<sup>3</sup>Dr. Ajit Nagarsenkar, Associate Professor, Department of Obstetrics and Gynaecology, Goa Medical College, Bambolim, Goa

<sup>4</sup>Dr. Guruprasad Pednekar, Professor and Head of Department, Department of Obstetrics and Gynaecology, Goa Medical College, Bambolim, Goa

**Corresponding Author:** Dr. Rini Naik, Senior Resident, Department of Obstetrics and Gynaecology, Goa Medical College, Bambolim, Goa.

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**Abstract**

**Background:** Menopause is becoming an important public health issue. The role of Menopause Hormone Therapy (MHT) in improving the quality of life in menopausal women is well known. Thus, the present study was undertaken to study the level of awareness among women between the age group of 40 - 55 years attending Gynaecology OPD of Goa Medical College regarding menopause and Menopause Hormone Therapy.

**Methods:** A hospital based cross-sectional study was conducted in 153 women in the age group of 40 – 55 years attending Gynaecology OPD of Goa Medical College from December 2018 – May 2019.

**Results:** Only 2 % women had good level of awareness, 20% had fair level of awareness and 78% women had poor level of awareness about menopause and MHT. All the 153 study respondents were of the opinion that menopause is a natural event. Most of the women interviewed (64.7%) were menopausal, however 89% of the women interviewed had poor level of awareness regarding the menopausal symptoms. The most commonly identified physical symptom was muscle and joint pain (79.7%) and emotional symptom was fatigue (62.7 %). 83% of the women interviewed did not know if MHT could alleviate the menopausal symptoms.

**Conclusion:** Thus in developing countries like India, there is poor awareness among women regarding menopause. In the modern era, there is a favorable role of Menopause Hormone Therapy in menopausal women. Hence there is a need to educate women regarding effects of menopause and benefits and risks of MHT, so as to improve their physical, mental and sexual health.

**Keywords:** Menopausal symptoms, Hot flushes, Osteoporosis, Menopause Hormone Therapy.

### **Introduction**

Menopause is defined as permanent cessation of menses for a period of 12 months or more, which is a natural event that marks the termination of spontaneous ovulation and reproductive capabilities of a woman.<sup>[1]</sup> Studies have demonstrated that the average age of menopause of an Indian woman is 46.2 years, which is much less than their Western counter parts (51 years).<sup>[2, 3]</sup> Menopause is associated with various symptoms such as, vasomotor symptoms like hot flushes and night sweats, somatic symptoms like headache, body aches, joint pains and psychological symptoms like anxiety, depression, crying spells, irritability and decreased sleep.<sup>[4]</sup> Several epidemiological studies have demonstrated an association between age at menopause and multiple variants like smoking, parity, use of oral contraceptive pills, socioeconomic status and education and also genetic factors.<sup>[4]</sup> Menopause also acts as a risk factor for several chronic diseases like coronary artery diseases, stroke, diabetes, obesity and hypertension.<sup>[4]</sup>

Menopause Hormone Therapy is proven to be highly effective in alleviation of vasomotor and urogenital symptoms as well as prevention and treatment of osteoporosis.

The Indian Menopause Society recommends the use of Menopause Hormone Therapy (MHT) with an individualised approach and personalized according to the symptoms and need for prevention, as well as consideration of personal and family history, results of appropriate investigations and the women's preferences and expectations.<sup>[5]</sup> However a poor level of awareness has been observed among women regarding menopausal symptoms and use of MHT.<sup>[6, 7, 8, 9]</sup> Due to the taboo associated with reproductive and sexual health problems in India, women do not come forward with these menopausal symptoms and continue to suffer.

It has been predicted that the proportion of Indian women at age 45 years and above is likely to increase considerably in the next few decades. According to the 2011 census of India, there were about 96 million women aged 45 years and above and this number is expected to rise to approximately 401 million in 2026.<sup>[10]</sup> As the life expectancy at age 45 is 30 years, women in India, on average, would be approximately 30 years in post-menopausal stage of life. Hence there is a need to improve the awareness regarding menopause- its symptoms and complications and the use of MHT among Indian women in order to improve their quality of living. The present study was undertaken with the aim of studying the level of awareness among women between the age group of 40 - 55 years attending Gynaecology OPD of Goa Medical College regarding menopause and Menopause Hormone Therapy.

### **Materials and Methods**

A hospital based cross-sectional study was conducted in the Department of Obstetrics and Gynaecology (OBG), Goa Medical College, Bambolim - Goa for a period of 6 months, from December 2018 – May 2019.

The institutional ethical committee approval was taken prior to the commencement of the study. The study participants included all women in the age group of 40- 55 years attending the Gynaecology OPD in Goa Medical College. Women who are already on Menopause Hormone Therapy were excluded from the study. 153 women fulfilling the inclusion criteria, attending Gynaecology OPD of Goa Medical College were interviewed with a structured questionnaire (Annexure-1) after obtaining their informed consent. Their socio-demographic characteristics were recorded and the completed questionnaires were assessed and their responses were scored. The responses of the study participants were scored as 1 point for a correct response, 0 for no response (don't know), and - 1 point for an incorrect response. These scores were added up and percentages of total obtainable points were calculated. A score of  $\geq 70\%$  was considered as good level of awareness, 50-69% considered as fair level of awareness and a score of  $< 50\%$  was considered as poor level of awareness about menopause. Associations between the socio-demographic characteristics and awareness of Menopause its symptoms and Menopause Hormone Therapy were studied. The data was analysed using SPSS (version 20.0). A p value of  $< 0.05$  was considered as statistically significant.

### Results and Discussion

153 women in the age group of 40-55 years attending the Gynaecology OPD of Goa Medical College during the study period of 6 months were included in the study.

Most of the study respondents were in the age group of 46 – 50 years (42%), the mean age being 47 years. 144 women interviewed were married (94.1%). Majority of the study participants were Hindu (84.3%), while only 7.8% were Muslims and 7.8% were Christians.

Most of our study participants had at least secondary education (64.7%), whereas 23.5% had higher secondary education and 1.96% were graduates. 19.6% of the study participants were illiterate. A large majority of the women interviewed were homemakers i.e 82.4%, while 13.7% had unskilled occupation, 3.3% were skilled workers and only 1 (0.6%) of them was a professional. Only 41.1% of the study participants belonged to socioeconomic class II and above, while 29.4% belonged to class III, 19.6% were class IV and 3.2% belonged to class V. 93 women (60.8%) interviewed were from rural areas while 60 (39.2%) resided in urban areas. Majority of the study participants were multiparous (98.1%), while only 1.9% were nulliparous women. Most of the women interviewed i.e. 82 (53.6%) were menstruating, whereas 71 women (46.4%) that were interviewed were menopausal.

Among the 153 women interviewed, only 3 women (2%) had good level of awareness and 30 women (20%) had a fair level of awareness regarding menopause. Majority of the study participants i.e. 120 women (78%) had poor level of awareness regarding menopause- its physiology, symptoms and MHT.

Similar studies done in India and different other parts of the world showed limited awareness and knowledge about menopause among women.<sup>[6, 7, 8,9,11]</sup> A study done by Uma Pandey in Varanasi showed that 60% women interviewed had heard about menopause and 40% were aware about the symptoms of menopause.<sup>[7]</sup> Similarly study done by Madiha Mohamed Tosson et al showed 44.4% of Egyptian women were aware of the symptoms of menopause.<sup>[8]</sup> Fatemeh Bakouei et al found that 44.1% of Iranian women had good level of awareness regarding menopause while 25% had poor awareness of menopause.<sup>[6]</sup>

Our study showed a lower percentage of women with good level of awareness regarding menopause (2%) probably because majority of our study population belonged to rural areas, lower socioeconomic status and most of them were still menstruating (53.6%) and not yet experienced the menopausal symptoms.

As seen in Table 1, the statistical analyses demonstrated that the level of awareness among the study participants about menopause was significantly influenced by increasing age, level of development, higher education, occupational skills and better socioeconomic status. Religion, marital status and parity did not significantly affect the awareness of menopause among our study participants. Menopausal women had significantly better level of awareness regarding menopause as compared to menstruating women. The study done by Fatemeh Bakouei et al showed that the awareness level of women about menopause was significantly influenced by level of education, occupation, socioeconomic status, marital status and parity.<sup>[6]</sup> C. Cinthura et al demonstrated poor level of awareness of menopause among the rural study population which was also found in our study.<sup>[9]</sup>

All the 153 women that were interviewed had heard about menopause and were aware that menopause is a natural phenomenon. Majority of the study participants (76.5%) correctly opined that “women can no longer become pregnant spontaneously once menopause is achieved”, whereas 5 women (9.8%) believed this statement to be false and 21 women (13.7%) were unaware of it. Only 9 women (5.9%) were aware that during menopause the hormone production by the ovaries reduces, while the remaining 80.4% women were unaware of this fact and 13.7% of the women had misconceptions about it.

Majority of the women i.e. 99 (64.7%) were aware that the average age of menopause is 45- 55 years. Almost half of the study participant (52.9%) correctly opined that “Irregular menstruation is the sign of beginning of the menopause period”, while 9.8% of the study participants did not believe this statement to be true and 37.3% of them were unaware of it. Similar findings were observed in the comparative studies.<sup>[6, 8, 9]</sup>

Out of the 153 women interviewed, 136 women (88.9%) had poor level of awareness, while 8 women had fair level of awareness (5.2%) and 9 women (5.9%) had good level of awareness regarding menopausal symptoms. As seen in Table 2, the commonest physical symptoms of menopause identified by the study participants were muscle and joint pains (79.7%), followed by weight gain (26.1%) and urinary problems (22.2%). While the commonest emotional symptoms of menopause identified by the study participants were feeling of fatigue (62.7%), irritability (49%) and insomnia (18.9%).

A study done by Madiha Mohamed Tosson et al showed that the knowledge of the study participants regarding the symptoms of menopause was average (66.5%) and regarding the signs was poor (44.4%) with joint and muscle ache (81.8 %) and tiredness (70.7%) being identified as the commonest symptoms of menopause and only 57.6% of the women identified hot flushes as the symptom of menopause.<sup>[8]</sup> Fatemeh Bakouei et al also found that only 20.7% of the women interviewed were aware of hot flushes being the commonest symptom of menopausal transition which was also observed by us in the present study (21.6%).<sup>[6]</sup> C. Cinthura et al on the other hand found mood swings (68%) and hot flushes (48%) as the commonest menopausal symptoms being identified by the study participants.<sup>[9]</sup>

As seen in the above Figure 2; among the 153 women interviewed by us, a large majority i.e. 147 women (96%) were unaware of Menopause Hormone Therapy (MHT) and its use in management of menopausal symptoms while only 6 women (4%) had heard about it. Only these 6 women believed that use of MHT can alleviate the menopausal symptoms, while 20 women (13.1%) believed that MHT cannot reduce the symptoms and 127 women (83%) were unaware and had no opinions on this. Out of these 6 women only 4 were aware that topical oestrogen application can improve the vaginal symptoms of menopause whereas the rest of them were unaware of topical oestrogens.

Similar studies done by Fatemeh Bakouei et al, Madiha Mohamed Tosson et al and Uma Pandey showed that there was poor awareness among women about MHT wherein 60.5%, 62% and 98% women were unaware about the use of MHT in relief of menopausal symptoms.<sup>[6,8,7]</sup>

As seen in Figure 3 below the commonest source of information about menopause among the study participants was family and friends(73%) while health professionals was just 21%, followed by social media (4%) and mass media (2%) . Similarly Fatemeh Bakouei et al <sup>[6]</sup> found that the commonest source of information about menopause among the study participants was family and friends (52.3%) followed by health professionals (20%), whereas Madiha Mohamed Tosson <sup>[8]</sup> demonstrated the commonest source of information as friends and family (40.4%) followed by health professionals (38%) and mass media (10%).

### Conclusion

The present study shows poor awareness among Goan women regarding the effects of menopause and its management.

The symptoms and complications of menopause are often not fully understood among the general population. In developing countries like ours, there is a lack of awareness and understanding about the risks and benefits of Menopause Hormone Therapy among women as well as general practitioners. As a result, women do not get the support they need, making them suffer in silence, when their domestic and professional life is impaired by the symptoms. Thus there is a need to improve knowledge regarding the long-term benefits and risks of MHT. Health education programs and awareness talks need to be arranged by the health professionals not only for general population but also for the general practitioners and medical staff so that they can guide the women regarding menopause and use of MHT after adequately weighing the risk benefit ratio. Mass media and social media awareness programs need to be instituted in order to empower the menopausal women and enable them to improve their mental and sexual health and wellbeing.

### Annexure 1

#### Questionnaire on Awareness of Menopause and MHT

Read the following statements and tick appropriate answers:

1. Is menopause – Natural event / Disease
2. After menopause is completed a woman can no longer become pregnant.
  - a) True
  - b) False
  - c) I don't know
3. All women have gone through menopause by the time they are 55 years of age.
  - a) True
  - b) False
  - c) I don't know

4. An early indicator of menopause is irregularities in menstruation.
  - a) True
  - b) False
  - c) I don't know
5. During menopause the ovaries produce an increasing amount of hormones – oestrogen and progesterone.
  - a) True
  - b) False
  - c) I don't know
6. Mention any 2 physical and 2 emotional symptoms of menopause:
7. Answer which of the following physical symptoms are secondary to menopause :
  - a) Hot flushes
  - b) Muscle and joint pain
  - c) Increased weight
  - d) Breast sensitivity
  - e) Vaginal dryness
  - f) Urinary problems – soreness and increased frequency
8. Answer which of the following emotional symptoms are secondary to menopause :
  - a) Irritability
  - b) Fatigue
  - c) Depression
  - d) Early awakening
  - e) Insomnia
9. Use of Menopause Hormone Therapy will usually decrease symptoms of menopause.
  - a) True
  - b) False
  - c) I don't know

10. Topical oestrogen therapy can improve symptoms of vaginal dryness/ dyspareunia ( pain while having intercourse )
  - a) True
  - b) False
  - c) I don't know
11. What is your source of information regarding menopause and MHT?
  - a) Radio / Television / Newspaper / Books
  - b) Health workers
  - c) Family and friends
  - d) Social Media
  - e) Others

**Tables and Figures**

Table 1: Association between level of awareness about menopause and socio-demographic characteristics

Variables	Level of awareness about menopause (n=153)			p - value
	Good	Fair	Poor	
1. Age (years)				
a. 40- 45	0	7	51	0.034
b. 46 – 50	2	11	49	
c. 51-55	1	12	20	
2. Religion				
a. Hindu	2	23	104	0.278
b. Muslim	0	3	9	
c. Christian	1	4	7	
3. Marital status				
a. Married	2	28	114	0.328
b. Unmarried	0	0	1	
c. Divorced	0	0	1	
d. Widow	1	2	4	
4. Level of Development				
a. Urban	3	24	33	0.000



b. Rural	0	6	87	0
5. Level of Education				
a. Illiterate	0	0	30	0.000 0
b. Primary	0	4	20	
c. Secondary	0	10	50	
d. Higher Secondary	2	14	20	
e. Graduate	1	2	0	
6. Level of Occupation				
a. Unemployed	0	13	113	0.000 0
b. Unskilled	0	15	6	
c. Skilled	2	2	1	
d. Professional	1	0	0	
7. Socioeconomic Status				
a. Class I	2	12	22	0.000 5
b. Class II	1	11	15	
c. Class III	0	6	39	
d. Class IV	0	1	29	
e. Class V	0	0	15	
8. Parity				
a. Nulliparous	0	0	3	0.924 1
b. Para 1	1	11	45	
c. ≥ Para 2	2	19	72	
9. Menstrual Status				
a. Menstruating	1	9	72	0.010 1
b. Menopausal	2	21	48	

Table 2 Distribution of menopausal symptoms identified by the study participants

Symptoms	Number of women (n)	Percentage (%)
Physical Symptoms		
1. Hot flushes	33	21.6

2. Muscle and joint pain	41	79.7
3. Weight gain	13	26.1
4. Breast sensitivity	7	13.7
5. Vaginal dryness	10	19.6
6. Urinary problems	11	22.2
Emotional Symptoms		
1. Irritability	75	49
2. Fatigue	96	62.7
3. Depression	21	13.7
4. Early Awakening	19	12.4
5. Insomnia	10	18.9

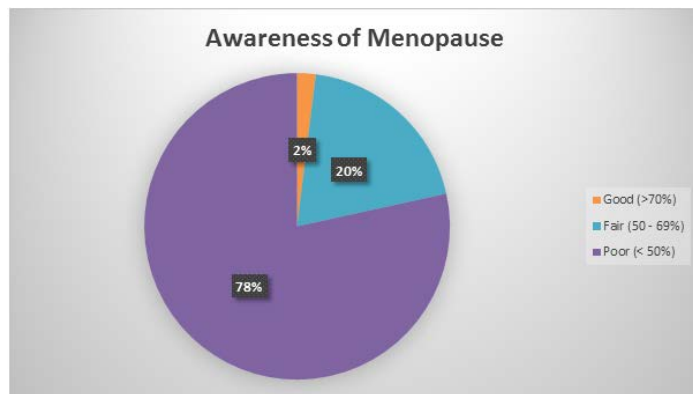


Figure 1: Distribution of study participants as per their level of awareness regarding menopause.

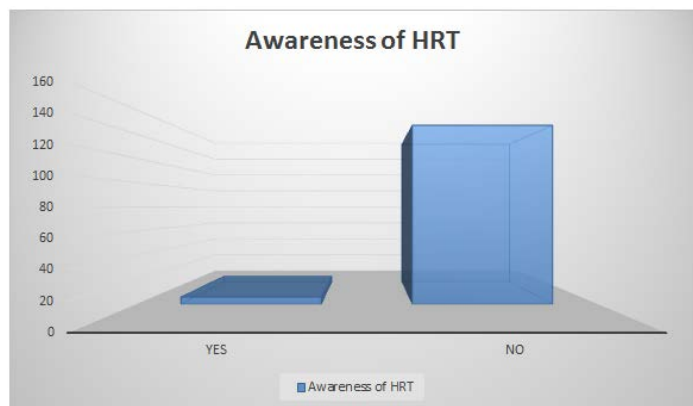


Figure 2: Distribution of study participants as per awareness about Menopause Hormone Therapy (MHT)

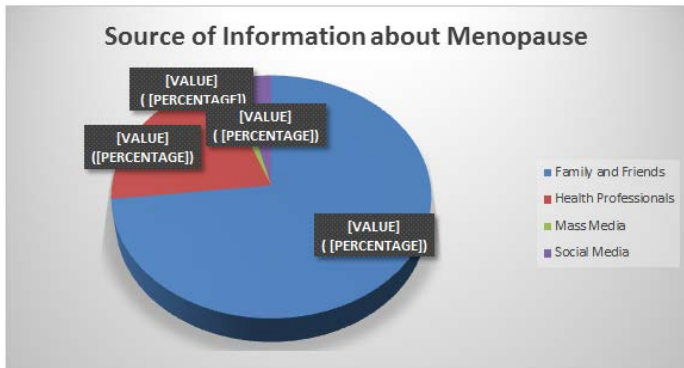


Figure 3: Source of Information regarding menopause among study participants.

### References

- Warren MP, Shu AR, Dominguez JE. Menopause and Hormone Replacement. [Updated 2015 Feb 25]. In: Feingold KR, Anawalt B, Boyce A, et al., editors. Endotext [Internet]. South Dartmouth (MA): MDText.com, Inc.; 2000.
- Ahuja M. Age of menopause and determinants of menopause age: A PAN India survey by IMS. *J Midlife Health*. 2016; 7(3):126–131.
- Pallikadavath S, Ogollah R, Singh A, Dean T, Dewey A, Stones W. Natural menopause among women below 50 years in India: A population-based study. *Indian J Med Res*. 2016; 144(3):366–377.
- Unni J. Third consensus meeting of Indian Menopause Society (2008): A summary. *J Midlife Health*. 2010; 1(1):43–47.
- R. J. Baber, N. Panay & A. Fenton the IMS Writing Group (2016) 2016 IMS Recommendations on

women's midlife health and menopause hormone therapy, *Climacteric*, 19:2, 109-150.

- Bakouei F, Basirat Z, Salmalian H, Omidvar S, Bakouei S. Assessment of women's awareness level about symptoms and complications of menopause and methods to their prevention, *Journal of Local and Global Health Science* 2013:6.
- Pandey U. Awareness of menopause and MHT among women attending OPD of University teaching hospital. *Int J Reprod Contracept Obstet Gynecol* 2014; 3:1033-6.
- Madiha Mohamed Tosson; Alsaeed Elsayed A. Askar and Shokria Adly Labeeb. Assessment of Women Knowledge and Attitude toward Menopause and Menopause Hormone Therapy (MHT) in Assiut University Hospital. *J Am Sci* 2014; 10(12):250-255.
- C. Cinthura, Gowri Sethu, Awareness about Symptoms of Menopause among Women Aged 40 to 55 Years. *Int. J. Pharm. Sci. Rev. Res.*, 44(1), May - June 2017; Article No. 59, Pages: 292-294.
- Population Projections for India and States 2001-2026. New Delhi: Government of India; 2006. Office of the Registrar General and Census Commissioner.
- Tao M, Teng Y, Shao H, Wu P, Mills EJ (2011) Knowledge, Perceptions and Information about Hormone Therapy (HT) among Menopausal Women: A Systematic Review and Meta-Synthesis. *PLoS ONE* 6(9): e24661.