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### **An Awareness Study on Physical and Psychological Challenges among Menopausal Women – Coimbatore City**

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#### **ABSTRACT:**

In recent years, the health consciousness among people is in upcoming trend especially after COVID-19. Statistically, India has the world's one of the largest populated country with more than 48.41% of female population (2024) and women's health is crucial for ensuring the well-being of women at every stage of life. The health of women is of particular concern because in many societies they are discriminated rooted in sociocultural factors. Accordingly, due to lifestyle changes, there is a change in menopausal age as well and from the survey it is interpreted that the mean menopause age  $45.59 \pm 5.59$  and it varies from the region to region among the Indian states. The primary objective is to assess the awareness and analyse the knowledge among the women through the questionnaire under the primary data type. Also the study focuses on the physical and psychological changes as well as challenges faced by women during pre-menopause and post- menopause. Statistical analysis is carried out for socio-demographic variables such as descriptive statistics, Chi-square and factor analysis. The awareness level is to be explored by improving their knowledge through programs that helps to manage the symptoms in a appropriate way for timely treatment and to develop the quality of life during and after menopause.

**KEYWORDS:** *menopause, knowledge awareness, Descriptive statistics, factor analysis*

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## INTRODUCTION

A female human health is crucial for ensuring at every stages of life. It comprehends a range of issues which include reproductive health, mental health, and preventive care. And a women need to prioritize their health through regular check-up, health lifestyle and proper medical care, self-care it leads the happier live and contribute positively to their families and surroundings. In this menopause is a natural event, denotes the final menstrual period and it is described as the menopause transition, starting with changes in the menstrual cycle both physically as well as psychologically finishing one or two years after the final menstrual period.

In the recent trends of life style changes, menopause got its importance and health care services. Accordingly proper knowledge and awareness regarding the menopause is very much essential especially for women. As menopause is a natural phenomenon, every woman will face menopause where its consequences varies as per the metabolic conditions of the individual concerned. Women's awareness regarding menopause is based on different factors such as age, age of puberty, delivery nature, number of births, educational status, economic and social factors.

Menopause is not the end it is a new beginning of life, we need to cheers it. The term menopause is defined as a female human permanently stops having menstrual periods. The ovary stops to produce egg for ovulation, which means women cannot get pregnant. An average ovulation happens 14 days per month. An average Indian women menopause age is 45.59 which is approximately equal to 5.59 years. Even in urban area most of the women doesn't know they have physical and psychological changes because of menopause. Menopause can happen in late 30's to 55's years as well but in India an average menopause age is 45 years. Menopause is a natural biological process. It happen before 40 is called pre menopause and atthe age of 40-43 years is called early menopause. And it is categorized into pre and post-menopause, where *Pre-menopause* is a Menopause ceased other than naturalcause called premature menopause. Premature menopause may happen with ovarian failure before the natural menopause. It may be happen because of hormonal changes, radiation exposure, heavy bleeding, industrious (putting in long hours and extra effort work), surgery that leads to the ovarian blood supply. And premature ovarian failure is also called primary ovarian insufficiency. Surgical menopause may happen if one or both ovaries are removed or uterus removed due to stone, over blood flow, irregular periods and soon. And surgical menopause can cause more severe symptoms than natural menopause.

Whereas *Post-menopause* - Post menopause increase risk of some health conditions, which is cardiovascular (heart related problem) disease, osteoporosis (weak bone) and urinary tract Infection. If we need to prevent this kind of problems it is important to have a healthy diet and lifestyle. After menopause women's hormone levels are no longer suitable for ovulation and natural pregnancy and birth control is no longer necessary. And there is still chance women could get pregnant through IVF (in vitro fertilization) even IVF after menopause prove to be success after menopause in many cases. In recent years the oldest age women can get pregnant naturally due to advance technology in medical filed even after attaining the age of menopause.

## SYMPTOMS OF MENOPAUSE

Menopause symptoms depends on their life style and self-care some have fewer and less severe symptoms some peoples have more frequent and stressful one. And the common symptoms of menopause is, physical symptoms like, back pain and knee pain, facial hair growth, feeling tired and worn out, weight gain, lack of energy, feeling bloated and frequent urination, difficulty in sleeping and night sweats. Psychological symptoms like feeling anxious or nervous, poor memory, feeling depressed down or blue, feeling wanting to be alone, dissatisfaction about personal life.

Both menopause and premature menopause symptoms are associated with decrease mental and physical health. Most of the women facing some common symptoms and some person may experience symptoms differently. The various symptoms which affect most of the women professional and personal life and also it affect quality of life. The world health organization defines quality of life as an individual perception of their position in life in the context of the culture and value system in which they live, and relation to their goals, expectation, standard and concerns.

## REVIEW OF LITERATURE

Menopause is a natural phenomenon in the various stages of women livelihood, but it causes hormonal and biological changes in the body that result in drastic effects on quality of life. The studies related with menopause (*Liao K, Hunter M-1998*) highlights some of issues like that most of the women attain menopausal periods without having adequate knowledge and its consequences. A study by (*Pan HA, Wu MH, Hsu CC, Yao BL, Huang KE -2002*) gives that women having adequate knowledge and information of symptoms and complications of menopause are able to cope with it in a better mannered and appropriate treatments. In the study, Menopause-specific quality of life of rural women especially in the selected villages of Punjab with 150 respondents revealed that the significant effect of menopausal symptoms of Quality of life of women emphasizes the need to create awareness among the menopausal women in order to manage for their improvement. In India, a society by name *Indian Menopause Society (IMS)* is formed in 1995 by 450 doctors, which is a platform that educates women about the crucial stages in their lives. In the year 2011, the IMS started to organize National Awareness Programme among various cities in India to counsel menopausal women about their health, osteoporosis and nutritional food habits. Also educated and counseled the women folk “to be fit in the age of 60” in terms of doing regular easy exercises to build strength, flexibility and balances both physically and mentally.

## MATERIALS AND METHODS

**Need of the Study:** Most of the women unaware about menopause and doesn't pay adequate attention to these symptoms. Menopause, pre menopause and post menopause is associate with distressing symptoms. So there is a need to discover this fact and assess the knowledge and attitude of the menopause.

**Source and study area:** The sampling method adopted for this study is convenience or purposive sampling through Google forms only. The data were collected during January- march 2024. The size of the sample is limited to 102 as a Primary Source and the study area comprise of Coimbatore only.

**Research tools:** The collected data were processed with IBM SPSS 25 and tools such as data

visualization (bar diagram, pie chart, line graph and area graph) with descriptive statistics for the Socio demographic variables and Garret Ranking are studied. The significant test are used to examine the significance of the variables with Correlation, Chi square test and Factor analysis also used for the data at 5% level of significance.

## ANALYSIS AND INTERPRETATION

### Socio-Demographic Information:

The study comprised 102 women from Coimbatore district, out of total women, 85(83%) women are having knowledge about the menopause and in that more number (37) of respondents in the age category of 50-55 years followed by 45-50 years (29) – 28% of age and regarding the education qualification concerned majority of the respondents (34) – 33% are below 10<sup>th</sup> standard only. Nearly 82 respondents (80%) are Non-vegetarian and their BMI shows over weight for 42(41%) respondents followed by Normal weight 36 (35%). Out of the 102 respondents, majority of the women 74% - 75 women has undergone normal delivery when compared to the caesarean cases were less in number. The study reveals that 36 respondents are having their period duration for 4 days, followed by 34 women for 3 days and remaining 32 are having more than 4 days of the duration. Among the respondents 59(58%) are using Napkins than that of cloths. The following tables shows the details about the socio-demographic variables of the respondents:

**Table1: Demographic characteristics of study participants**

Variables	Frequency	Percentage(%)
<b>Age</b>		
35-40	1	1.0
40-45	8	7.8
45-50	29	28.4
50-55	37	36.3
above55	27	26.5
<b>Education Qualification</b>		
10 <sup>th</sup>	16	15.7
12 <sup>th</sup>	22	21.6
UG	15	14.7
PG	15	14.7
Other(blow10 <sup>th</sup> )	34	33.3
<b>Food Habit</b>		
Vegetarian	20	19.6
Non-vegetarian	82	80.4
<b>BMI</b>		
Low weight	2	2.0
Normalweight	36	35.3
Overweight	42	41.2
Obesity	22	21.5
<b>Nature of Delivery</b>		
Normal	75	73.5
Caesarean	23	22.5
None	4	3.9
<b>Duration of Periodsin Every Month</b>		
3(Days)	34	33.3
4(Days)	36	35.3
Morethan 4(Days)	32	31.4
<b>Preference of Sanitary Products</b>		
Napkins	59	57.8
Cloths	43	42.2

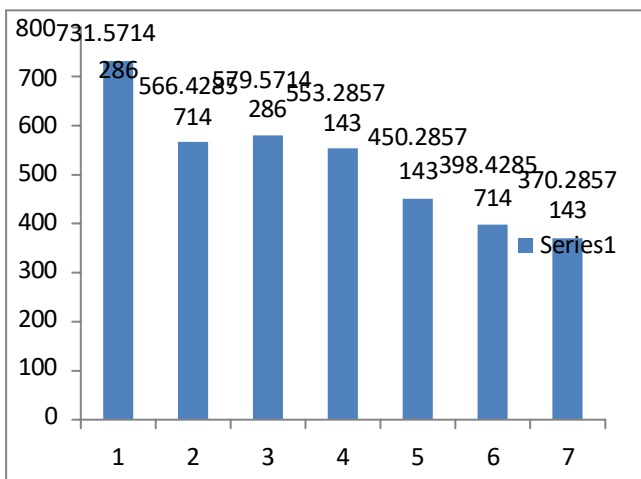
**Knowledge about Menopause among Participants:** Table 2 shows the Knowledge and awareness of the respondents. 85 participants are having the knowledge about the menopause and the menopause attained age is 41-45 years by the 34 respondents followed 24 in the age of both 35-40 years and 51-55 years. In the study 83 respondents got their menopause naturally without any discomforts and hence only 20 respondents went for consultation with medical practitioners for further medications. The respondents faced the menopause duration starting from 6 months to more than 9 months, that is 46 respondents faced the menopause for 6 months, 32 for 9 months and remaining 24 for more than 9 months duration. In this research 78 respondents had faced both physical and psychological problems during the menopause time.

**Table 2: Knowledge and awareness of the study population**

<b>KNOWLEDGE ABOUT MENOPAUSE</b>		
Yes	85	83.3
No	17	16.7
<b>MENOPAUSE ATTAINED AGE</b>		
35-40	24	23.5
41-45	34	33.3
46-50	20	19.6
51-55	24	23.5
<b>OTHER THAN NATURAL CAUSE</b>		
Yes	19	18.6
No	83	81.4
<b>MENOPAUSE CEASED DURATION</b>		
6 months	46	45.1
9 months	32	31.4
More than 9 months	24	23.5
<b>TREATMENTS AND DOCTOR CONSULTANT</b>		
Yes	20	19.6
No	82	80.4
<b>PHYSICAL PROBLEM</b>		
Yes	78	76.5
No	24	23.5
<b>PSYCHOLOGICAL PROBLEM</b>		
Yes	77	75.5
No	25	24.5

## **RANKING ANALYSIS-GARRETT RANKING**

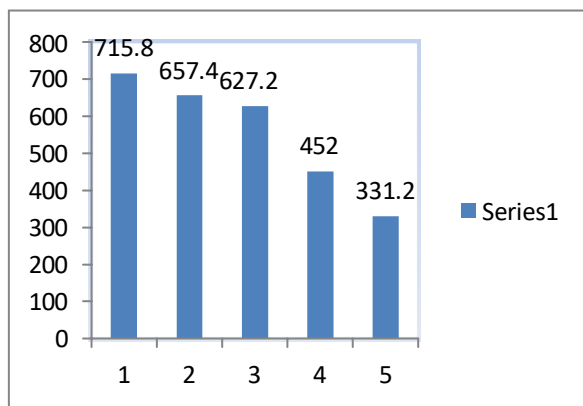
Garrett's ranking techniques is used to study and identify the most important factors influencing a respondent's preferences with numerical scores known to be ranks. The main advantage is that the constraints are arranged based on the severity from the point of view of respondents. In this study, the physical problems and psychological problems are assessed based on the Garrett's ranking analysis which is shown in the table 3 and 4 and figures 1 and 2.



PROBLEMS	RANK
Backpainand kneepain	1
Facialhairgrowth	3
Feelingtiredor worn out	2
Weight gain	4
Lackofenergy	5
Feelingbloatedandfrequenturination	6
Difficultyinsleepingand nightsweats	7

Fig:1 Bar diagram of Physical Problems Ranking and Table 3

All of the study respondents ranked the physical problems faced by them during the menopause period. In that majority of the respondents faced Back pain and knee pain followed by Feeling tired or worn out. Also their appearance is affected due to facial hair growth and weight gain. Lack of energy and feeling bloated and often urination leads to sleeping difficulties. In a similar way psychological problems are also ranked and shown in the Fig: 2 and Table 4.



PROBLEMS	RANK
Feeling anxiousornervous	1
Poormemory	2
Feeling depresseddownorblue	3
Feelingwantingtobealone	4
Dissatisfactionaboutpersonallife	5

Fig:2 Bar diagram of Psychological Problems Ranking and shown in Table 4

In a similar way the Psychological problems such as Anxious/nervous, lack of memory, depressed, dissatisfaction in personal life are considered for ranking. In that respondents ranked the Feeling Anxious as the top followed by poor memory and feeling depressed down and wanting to be alone.

**Analysis:** Using Chi-square, correlation and factor analysis the significance is examined with certain variables. In this Chi-square shows significant difference (0.036) in the educational qualification and their knowledge level regarding the menopause. There is low positive degree (0.280) of relationship exists between the age the feeling bloated and frequent urination among the respondents which shows that due to the myth the assumption may be wrong. Using multivariate analysis –factor analysis is used to examine the influencing factor among the various factors.

### FACTOR ANALYSIS

When observing large numbers of variables, some common patterns emerge, that is called factors. Factor analysis is a statistical technique that reduces a set of variables by extracting all their

commonalities into a smaller number of factors. KMO test and Bartlett's test have been used for sufficient checking of the data and the results as 0.845 indicate the value is acceptable and satisfactory for principle component analysis.

Total Variance Explained									
Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	7.321	61.006	61.006	7.321	61.006	61.006	4.618	38.481
2	1.504	12.531	73.537	1.504	12.531	73.537	4.207	35.056	73.537

From this table, it is clear that 73.537% of the original data has been retained to the components using principal component analysis. The stated set of 12 variables represents two components called as Physical and Psychological factors where these factors comprises the variables shown in the Ranking Analysis.

## DISCUSSION AND CONCLUSION

Women experiencing menopausal symptoms reported significantly lower levels of QOL and significantly higher work impairment, and healthcare utilization than women without menopausal symptoms. Back pain and knee pain, facial hair growth, feeling tired or worn out, weight gain, lack of energy, feeling bloated and frequent urination, difficulty in sleeping and night sweats, feeling anxious or nervous, poor memory, feeling depressed down or blue, feeling wanting to be alone, dissatisfaction about personal life were symptoms with the strongest associations with health outcomes. One can prevent from this problem before attaining menopause, based on some precautionary measures such as regular exercise habits, practice a healthy diet to maintain a moderate weight. Avoid trigger foods, refined sugar and processed foods. Women should undergo assessing bone density scanning and consumer a diet rich in Calcium and Vitamin D foods with medical practitioner's guidance. Hydrate ourselves by drinking enough water each and every day and for mental well-being women must undertake Yoga and Meditation on a regular basis in order to manage menopause.

According to this study the respondents are having enough awareness and symptoms about the menopause management. But there is a need to raise awareness among females regarding menopause, symptoms and how to face it may be given through the health awareness and training programmes.

## REFERENCES

1. Bruce D, Rymer J (2009): Symptoms of the Menopause. Best Pract Res Clin Obstet Gynaecol 2009; 23:25-32.
2. Palacios S, Henderson V, Siseles N, et. al (2010): Age of menopause and impact of climacteric symptoms by geographical region. Climacteric 2010; 13:419-28.
3. Thurston RC, Aslanidou Vlachos HE, Derby CA, et al (2021): Menopausal vasomotor symptoms, and risk of incident cardiovascular disease events in SWAN. J Am Heart Assoc 2021;10: e017416.

4. Whiteley J, da Costa Di Bonaventura M, Wagner J-S, et al (2013): The impact of menopausal symptoms on quality of life, productivity , and economic outcomes. *J Women's Health (Larchmt)* 2013; 22:983-90.
  5. Nelson HD (2008): Menopause. *Lancet* 2008Mar; 371(9614):760-770.
  6. Hilditch JR, Lewis J, Peter A, van Maris B, Ross A, Franssen E, et al (2008): A menopause specific quality of life questionnaire: development and psychometric properties. *Maturities* 2008 Sep-Oct 61(1-2):107-121.
  7. Bothe S, Panse R (2015): Assessment of knowledge about Climacteric Symptoms in pri menopausal Women, *IOSR Journal of Nursing and Health Science* 4(3):59-6.2015.
  8. S. Puri, V. Bhatia & C. Mangat(2008): perceptions of Menopause and Postmenopausal Bleeding in Women of Chandigarh, India. *The Internet Journal of Family Practice*.6 (2) 2008.
  9. Kaur S, Walia I, Singh A (2005):How Menopause effects the lives of Women in Sub- urban Chandigarh, *Climacteric*. 8(2):177-84.2005.
  10. Mashiloane CD, Bagratee J, Moodley J(2001):. Awareness of an attitude toward menopauseand hormone replacement therapyin an African community, *International Journal of Gynaecology and Obsterics*.76: 91-93.2001.
  11. Liao K, Hunter M. Perception for menopause(1998): prospective evaluation of a health education intervention for mid-aged women. *Maturitas*. 29(3):215-224. 1998.
  12. Pan HA, Wu MH, Hsu CC Yao BL, Huang KE(2002): The perception of menopause among women in Taiwan. *Maturitas*. 41(4):269-274. 2002.
  13. Monica Satpathy(2013): A Study on the Knowledge and Awareness about Menopause among Middle aged Women from Western Odisha, *International Journal of Science and Research (IJSR) ISSN (Online) 2319-7064*.
  14. Vijaya S Danannaar1 , Seem Doe2 , Harreet Kour3 , ubair ngolar4(2023): Knowledge, Attitude, Symptoms and Management Practices among Middle aged Menopausal Women: A Cross-sectional Study, *Journal of Clinical and Diagnostic Research* 2023, Oct, Vol-17(10): CC06-CC11.
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