

A STUDY TO ASSESS THE PREVALENCE OF PERIMENOPAUSE AMONG WOMEN ATTENDING OBS OPD AND WARD AT SRM GH

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Abstract

Methods and Materials

This study was intended to assess the prevalence of Perimenopause among women attending OBS OPD and ward at SRM GH. The objective of the study include To assess the prevalence of perimenopause among women and to associate the prevalence of perimenopause among women with their demographic variables .Descriptive research design and Quantitative approach was adapted .The study was conducted in SRMGH. Non probability purposive sampling technique was employed for selection of Perimenopausal women in to the study. INCLUSION CRITERIA : Women who are between the age group of 41 - 55, Women who are willing to participate in the study, Women who are able to read, write, speak and understand Tamil or English .EXCLUSION CRITERIA :Women who are physically ill during the time of data collection The sample size for the present study consisted of 100. The instrument used for data collection consists of two parts.section A: DEMOGRAPHIC VARIABLES ,Clinical variables and SECTION - B: Symptoms assessment scale.Results: shows that the demographic variables age in years ($\chi 2=13.941$, p=0.030), occupation $(\chi = 7.051, p = 0.029)$ and residential area $(\chi = 6.142, p = 0.046)$ had statistically significant association with level of perimenopausal symptoms among women at p<0.05 level. The other demographic variables did not show statistically significant association with level of perimenopausal symptoms among women.

Keywords: Assess, Prevalence, Perimenopause, women, OBS OPD

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1. INTRODUCTION

Natural or spontaneous menopause is a transition phase from the reproductive to the nonreproductive phase in a woman's life. It occurs with the final menstrual period which is known to occur after 12 months of amenorrhea for which there are no obvious pathological and physiological causes. It sets the stage for aging and accelerates the process of noncommunicable diseases. Worldwide the age of menopause is in-between 45 and 55 vears. Peri-menopause/menopause transition is the period immediately prior to menopause and up to 1 year after the final menstrual period. It may last for 3-5 years.

If a women is facing symptoms like Hot flashes, irregular flow, heavy flow, night sweats, mood swings, fatigue, irritability, she should check and confirm with menopause tesing kit, if she is in her early stage of menopause.

One of the most important hormone involved in maintaining fertility is FSH(Follicle stimulating Hormone). It is responsible for stimulating a woman's ovaries in order to produce eggs. After the age of 30, a woman's fertility begins to decline & more FSH is produced to stimulate the ovaries for producing eggs. As you approach menopause, FSH level rises higher than the normal level. Hence a rise in FSH hormone, coupled with other symptoms of menoapuse is an important factor associated with onset of menopause

SIGNIFICANCE AND NEED FOR THE STUDY

In all over India the average age of Menopause is 45-55 years during menopausal transition the ovary stops producing hormone oestrogen and progesterone 85% of women experience us menopausal symptoms associated with oestrogen deficiency so the oestrogen is the one of the female sex hormone and it is important role for protective health during menopause the most common symptoms are vasomotor symptoms muscular symptoms and sleep impairment usually the symptoms stars 1 year prayer to cessation of Mensuration sometimes it may be persistent for several years.

STATEMENT OF THE PROBLEM

A Study to assess the Prevalence of Perimenopause among women attending OBS OPD and ward at SRM GH OBJECTIVES

The objectives of the study are

1) To assess the prevalence of perimenopause among women

2) To associate the prevalence of perimenopause among women with their demographic variables

2. METHODS AND MATERIALS

This study was intended to assess the prevalence of Perimenopau among women attending OBS OPD and ward at SRM GH .Descriptive research design and Quantitative approach was adapted .The study was conducted in SRMGH. Non probability purposive sampling technique was employed for selection of Perimenopausal women in to the study.

INCLUSION CRITERIA: Women who are between the age group of 41 -55, Women who are willing to participate in the study, Women who are able to read, write, speak and understand Tamil or English .EXCLUSION CRITERIA :Women who are physically ill during the time of data collection The sample size for the present study consisted of 100. The instrument used for data collection consists of two parts.section A: DEMOGRAPHIC VARIABLES, Clinical variables and SECTION – B: Symptoms assessment scale

SYMPTOMS ASSESSMENT SCALE SCORING

SYMPTOMS (YES)	(NO)
No symptoms	0-5
Mild Symptoms	6-10
Moderate Symptoms	11-15
Severe Symptoms	16-20
Very severe Symptoms	>21

PRESENTATION OF DATA SECTION A - ANALYSIS OF DEMOGRAPHIC DATA AMONG THE WOMEN IN SRM GH.

Table 1 Frequency and percentage distribution of women at OBS OPD and ward at SRMGH N = 100

Age in years 29 29.0 $41 - 45$ years 26 26.0 $51 - 55$ years 26 26.0 56 and above 19 19.0 Marital status 9 19.0 Married 100 100.0 Unmarried - - Religion - - Hindu 70 70.0 Muslim 112 12.0 Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 27.0 Middle school certificate 23 23.0 - High school certificate 23 23.0 - Iltierate 26 26.0 27.0 Intermediate or post high school diploma 1 1.0 - Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - - -			N = 100		
41 - 45 years 29 29.0 $46 - 50$ years 26 26.0 55 years 26 26.0 56 and above 19 19.0 Maritel status - - Married 100 100.0 Unmarried - - Religion - - Hindu 70 70.0 Muslim 12 12.0 Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 Primary school certificate 23 23.0 Middle school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Cupyed 48 48.0 Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - - - <th>Demographic Variables</th> <th>Frequency</th> <th colspan="3">Percentage</th>	Demographic Variables	Frequency	Percentage		
46-50 years 26 26.0 $51-55$ years 26 26.0 56 and above 19 19.0 Marital status	Age in years				
51 - 55 years 26 26.0 56 and above 19 19.0 Marital status	41 – 45 years	29	29.0		
56 and above 19 19.0 Marital status	46 – 50 years	26	26.0		
56 and above 19 19.0 Marital status	51 – 55 years	26	26.0		
Married 100 100.0 Unmarried - - Religion - - Hindu 70 70.0 Muslim 12 12.0 Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 Primary school certificate 23 23.0 High school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Cocupation - - Employed 48 48.0 Family monthly income - - <10,000	56 and above	19	19.0		
Unmarried - - Religion 70 70.0 Muslim 12 12.0 Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 Primary school certificate 23 23.0 Middle school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Cupyed 52 52.0 Unemployed 48 48.0 Family monthly income - - $< 10,000$ 65 65.0 $10,000 - 15,000$ 30 30.0 $15,001 - 20,000$ 4 4.0 $> 20,000$ 1 1.0 Type of family 53 53.0 Nuclear family 47 47.0 Residential area - -	Marital status				
Religion 70 70.0 Hindu 70 70.0 Muslim 12 12.0 Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 Primary school certificate 28 28.0 Middle school certificate 23 23.0 High school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Married	100	100.0		
Hindu 70 70.0 Muslim 12 12.0 Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 Primary school certificate 23 23.0 Middle school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Unmarried	-	-		
Muslim 12 12.0 Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 Primary school certificate 23 23.0 Middle school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - <10,000	Religion				
Christian 18 18.0 Others - - Educational status - - Illiterate 26 26.0 Primary school certificate 28 28.0 Middle school certificate 23 23.0 High school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Hindu	70	70.0		
OthersEducational status-Illiterate2626.0Primary school certificate2828.0Middle school certificate2323.0High school certificate1717.0Intermediate or post high school diploma11.0Graduate or post graduate55.0Profession or honoursOccupationEmployed5252.0Unemployed4848.0Family monthly income-<10,000	Muslim	12	12.0		
Educational status 26 26.0 Primary school certificate 28 28.0 Middle school certificate 23 23.0 High school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Christian	18	18.0		
Illiterate 26 26.0 Primary school certificate 28 28.0 Middle school certificate 23 23.0 High school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Others	-	-		
Primary school certificate 28 28.0 Middle school certificate 23 23.0 High school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Educational status				
Middle school certificate2323.0High school certificate1717.0Intermediate or post high school diploma11.0Graduate or post graduate55.0Profession or honoursOccupationEmployed5252.0Unemployed4848.0Family monthly income-<10,000	Illiterate	26	26.0		
High school certificate 17 17.0 Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Primary school certificate	28	28.0		
Intermediate or post high school diploma 1 1.0 Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Middle school certificate	23	23.0		
Graduate or post graduate 5 5.0 Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	High school certificate	17	17.0		
Profession or honours - - Occupation - - Employed 52 52.0 Unemployed 48 48.0 Family monthly income - - <10,000	Intermediate or post high school diploma	1	1.0		
Occupation 52 52.0 Employed 52 52.0 Unemployed 48 48.0 Family monthly income	Graduate or post graduate	5	5.0		
Employed 52 52.0 Unemployed 48 48.0 Family monthly income	Profession or honours	-	-		
Unemployed 48 48.0 Family monthly income	Occupation				
Family monthly income 65 65.0 <10,000	Employed	52	52.0		
<10,000	Unemployed	48	48.0		
10,000 - 15,000 30 30.0 15,001 - 20,000 4 4.0 >20,000 1 1.0 Type of family 53 53.0 Nuclear family 47 47.0 Residential area 47 47.0	Family monthly income				
15,001 – 20,000 4 4.0 >20,000 1 1.0 Type of family 53 53.0 Joint family 53 53.0 Nuclear family 47 47.0 Residential area 47 47.0	<10,000	65	65.0		
15,001 – 20,000 4 4.0 >20,000 1 1.0 Type of family 53 53.0 Joint family 53 53.0 Nuclear family 47 47.0 Residential area 47 47.0	10,000 - 15,000	30	30.0		
Type of family53Joint family53Nuclear family47Residential area47	15,001 - 20,000	4	4.0		
Joint family5353.0Nuclear family4747.0Residential area4747.0	>20,000	1	1.0		
Nuclear family4747.0Residential area47	Type of family				
Residential area	Joint family	53	53.0		
	Nuclear family	47	47.0		
Urban 47 47.0	Residential area				
	Urban	47	47.0		

Demographic Variables	Frequency	Percentage		
Rural	53	53.0		
Dietary habits				
Vegetarian diet	17	17.0		
Mixed diet	83	83.0		
Age of menarche				
<11 yrs	9	9.0		
11 – 13 yrs	39	39.0		
14 – 16 yrs	47	47.0		
>16 yrs	5	5.0		
Frequency of menstruation				
Regular	93	93.0		
Irregular	7	7.0		
Parity				
Nullipara	11	11.0		
Primipara	6	6.0		
Multipara	71	71.0		
Grand multipara	12	12.0		
Type of delivery				
Normal	85	85.0		
Assisted	4	4.0		
Caesarean	11	11.0		
Number of living children				
One	9	9.0		
Two	41	41.0		
>Two	48	48.0		
No issues	2	2.0		
Duration of attainment of				
premenopausal				
1 – 2 yrs	33	33.0		
>2 – 3 yrs	30	30.0		
>3 – 4 yrs	8	8.0		
>4 – 5 yrs	29	29.0		

The table 1 shows that most of the perimenopausal women, 29(29%) were aged between 41 - 45 years, 100(100%) were married, 70(70%) were Hindus, 28(28%) had primary school education, 52(52%) were employed, 65(65%) had family monthly income of <10,000, 53(53%) belonged to joint family, 53(53%) were residing in rural area, 83(83%) were mixed dietician, 47(47%) were aged between 14 - 16 years at the

age of menarche, 93(93%) had regular frequency of menstruation, 71(71%) were multipara, 85(85%) had normal delivery, 48(48%) had two living children and 33(33%) had attained premenopausal for 1 -2 yrs.

Table 2 Shows assessment of level on the
prevalence of Perimenopause among
women in OBS OPD and ward at SRM
GH

		$\mathbf{N} = 100$
Level of Symptoms	Frequency	Percentage
No symptoms $(0-5)$	-	-
Mild symptoms $(6 - 10)$	-	-
Moderate symptoms $(11 - 15)$	5	5.0
Severe symptoms $(16 - 20)$	50	50.0
Very severe symptoms (≥21)	45	45.0

 Table 2: Frequency and percentage distribution of level of Perimenopausal symptoms among women.

The table 2 shows that 50(50%) had severe perimenopausal symptoms, 45(45%) had very severe perimenopausal symptoms and 5(5%) had moderate perimenopausal symptoms.

 Table 3: Assessment of mean and standard deviation of Perimenopausal symptoms among women.

	N = 100
Symptoms Score	Score
Minimum	13.0
Maximum	25.0
Median	20.0
Mean	20.02
Standard Deviation (S.D)	2.76

The table 3 shows that the mean score of perimenopausal symptom was 20.02 with standard deviation of 2.76. The minimum score was 13.0 and maximum score was 25.0. The median score was 20.0

Table 4; To associate the prevalence of perimenopause among women with their demographic variables in SRMGH Table 4; shows association between the prevalence of perimenopause women with their demographic variables in SRMGH

							N = 100
Domographic Variables	Mod	erate	Sev	vere	Very Severe		Chi-Square
Demographic Variables	F	%	F	%	F	%	& p-value
Age in years							2 12 0 41
41 - 45 years	0	0	11	11.0	18	18.0	$\chi^2 = 13.941$
46 – 50 years	4	4.0	15	15.0	7	7.0	d.f=7
51 – 55 years	0	0	13	13.0	13	13.0	p=0.030 S*
56 and above	1	1.0	11	11.0	7	7.0	3.
Marital status							
Married	5	5.0	50	50.0	45	45.0	-
Unmarried	-	-	-	-	-	-	
Religion							-2 1 102
Hindu	4	4.0	39	39.0	27	27.0	$\chi^2 = 4.462$ d.f=4 p=0.347 N.S
Muslim	0	0	5	5.0	7	7.0	
Christian	1	1.0	6	6.0	11	11.0	
Others	_	-	-	-	-	-	C./1
Educational status							$\chi^2 = 11.364$

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Domographic Variables	Moderate Severe		Very	Severe	Chi-Square		
Demographic Variables	F	%	F	%	F	%	& p-value
Illiterate	1	1.0	14	14.0	11	11.0	d.f=10
Primary school certificate	2	2.0	10	10.0	16	16.0	p=0.330
Middle school certificate	0	0	11	11.0	12	12.0	N.S
High school certificate	2	2.0	12	12.0	3	3.0	
Intermediate or post high school diploma	0	0	0	0	1	1.0	
Graduate or post graduate	0	0	3	3.0	2	2.0	
Profession or honours	-	-	-	-	-	-	
Occupation							$\chi^2 = 7.051$
Employed	2	2.0	20	20.0	30	30.0	d.f=2 p=0.029
Unemployed	3	3.0	30	30.0	15	15.0	S*
Family monthly income							2 10 225
<10,000	4	4.0	38	38.0	23	23.0	$\chi^2 = 10.225$ d.f=6
10,000 - 15,000	1	1.0	12	12.0	17	17.0	p=0.116
15,001 - 20,000	0	0	0	0	4	4.0	N.S
>20,000	0	0	0	0	1	1.0	
Type of family							$\chi^2 = 0.584$
Joint family	3	3.0	28	28.0	22	22.0	d.f=2 p=0.747
Nuclear family	2	2.0	22	22.0	23	23.0	N.S
Residential area							χ ² =6.142
Urban	3	3.0	29	29.0	15	15.0	d.f=2 p=0.046
Rural	2	2.0	21	21.0	30	30.0	p=0.040 S*
Dietary habits							$\chi^2 = 2.024$
Vegetarian diet	1	1.0	11	11.0	5	5.0	d.f=2 p=0.364
Mixed diet	4	4.0	39	39.0	40	40.0	N.S
Age of menarche							·· ² -8 407
<11 yrs	0	0	4	4.0	5	5.0	$\chi^2 = 8.407$ d.f=6
11 – 13 yrs	1	1.0	25	25.0	13	13.0	p=0.210
14 – 16 yrs	3	3.0	20	20.0	24	24.0	N.S
>16 yrs	1	1.0	1	1.0	3	3.0	
Frequency of							$\chi^2 = 1.826$
menstruation							d.f=2
Regular	4	4.0	46	46.0	43	43.0	p=0.401
Irregular	1	1.0	4	4.0	2	2.0	N.S
Parity		ļ					χ ² =6.592
Nullipara	0	0	6	6.0	5	5.0	$\chi = 0.392$ d.f=6
Primipara	1	1.0	3	3.0	2	2.0	p=0.360
Multipara	2	2.0	36	36.0	33	33.0	N.S
Grand multipara	2	2.0	5	5.0	5	5.0	
Type of delivery							$\chi^2 = 2.275$

Domographic Veriables	Moderate		Severe		Very Severe		Chi-Square	
Demographic Variables	F	%	F	%	F	%	& p-value	
Normal	5	5.0	43	43.0	37	37.0	d.f=4	
Assisted	0	0	1	1.0	3	3,0	p=0.685	
Caesarean	0	0	6	6.0	5	5.0	N.S	
Number of living children							~2 2 280	
One	0	0	4	4.0	5	5.0	$\chi^2 = 3.280$ d.f=6	
Two	2	2.0	19	19.0	20	20.0		
>Two	3	3.0	25	25.0	20	20.0	p=0.773 N.S	
No issues	0	0	2	2.0	0	0	11.5	
Duration of attainment of								
premenopausal							$\chi^2 = 7.512$	
1-2 yrs	4	4.0	17	17.0	12	12.0	d.f=6	
>2 – 3 yrs	0	0	14	14.0	16	16.0	p=0.276	
>3 – 4 yrs	0	0	3	3.0	5	5.0	N.S	
>4 – 5 yrs	1	1.0	16	16.0	12	12.0		

*p<0.05, S – Significant, N.S – Not Significant

The table 4 shows that the demographic variables age in years (χ^2 =13.941, **p=0.030**), occupation (χ^2 =7.051, **p=0.029**) and residential area (χ^2 =6.142, **p=0.046**) had statistically significant association with level of menopausal symptoms among perimenopausal women at p<0.05 level. The other demographic variables did not show statistically significant association with level of menopausal symptoms among perimenopausal women at p<0.05 level. The other demographic variables did not show statistically significant association with level of menopausal symptoms among perimenopausal women.

ETHICAL CONSIDERATION HUMAN RIGHTS

Formal approval was obtained from the institution review board and institutional ethical committee of SRM University, Kattankulathur, Kancheepuram, Tamil nadu, India

Content validity was received from the various experts from the field of nursing , bio – statistician and research experts

BENEFICENCE AND NON – MALEFFICIENCY

1) The investigators gets permission from the head of the department to execute the study for prevalence of perimenopause 2) Potential benefits and risk was explained to the faculty and head of the department

DIGINITY

1) Informed consent was obtained from the samples related to the study purpose, type of data, nature of commitments, participation and procedure

2) Clients have the "Rights to withdraw / withhold the information was enforced before data collection "

3) Investigator's contact information was disseminated to all the women who have participated in the study

CONFIDENTIALITY

Confidentiality and anonymity pledge was ensured

JUSTICE

The client who have perimenopause was explained with risk factors, treatment and they were referred to SRM general hospital and research centre

3. CONCLUSION

The researcher concluded that perimenopausal women are at more risk of developing physical and psychological

these women require symptoms, so increased attention in comparison to postmenopausal achieve women. To holistic care for perimenopausal women, the primary health care provider should train them to tackle these symptoms by various modalities such as pelvic floor exercise, nutritious diet, increase physical activity and meditation by their mutual participation. PeriMenopause does not really require medical treatment since it is a natural biological process. Hormone therapy (HT) must be Implemented .So the government should started Perimenopausal clinic to combat these problems and help to sensitize and increase awareness among the women

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