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Research Article

# A Study On Severity Of Menopausal Symptoms Among Perimenopausal Women In Selected Community, Thrissur

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## ABSTRACT

The present study was aimed to assess the physiological and psychological changes among perimenopausal women in selected community, Thrissur. The objectives were to assess the severity of menopausal symptoms among perimenopausal women and to find the association between menopausal symptoms and selected baseline variables. The research approach was quantitative research approach and research design was non experimental descriptive design. The data was collected using structured questionnaire of baseline variables and modified menopause rating scale. The data was collected from 84 samples in Tholur Panchayath and observation was made by Modified Menopause Rating Scale. Study results showed majority 53.57% of subjects belonged to severe – very severe category, 38.09% belonged to mild- moderate category, 8.3% belonged to asymptomatic category. The study results showed that there is a significant association between menopausal symptoms with occupational status, exercise, number of children and gynecological conditions.

**Key words :** Severity of menopausal symptoms, Modified Menopause rating scale, Perimenopausal women

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## Introduction

### Background of the study

Perimenopause, is the period that encompasses the transition from normal ovulatory cycles to cessation of menses and is marked by irregular menstrual cycles. Another term used to signal the period when a woman moves from the reproductive stage of life through the perimenopausal transition and menopause to the postmenopausal years is the climacteric.<sup>[1]</sup>

Perimenopause, which often referred to as the "menopausal transition," is a complex and gradual phase that marks the journey towards menopause—it is a natural biological process that signifies the end of a woman's reproductive years. This stage, occurring typically in the late 30s to early 40s, it is characterized by hormonal fluctuations, physical

changes, and a diverse range of symptoms that can vary widely from woman to woman.<sup>[2]</sup>

One of the hallmark features of the perimenopause is irregular menstrual cycles. As a woman approaches this stage, ovaries begin to produce fewer reproductive hormones, particularly estrogen and decline can lead to unpredictable menstrual patterns—cycles may become shorter, longer, or skipped altogether.<sup>[2]</sup>

The classic symptom of menopause is the hot flash, which is experienced by most women, and is moderately to severely problematic for about 1/3 of women. While most women will have an experience of hot flashes limited to just a year or two, others will experience them for a decade or more, and a small proportion of women will never be free of them. Poor sleep becomes more common in peri menopausal

women not only in association with the menopausal transition, with an abrupt rise in prevalence as women approach the later stages of the menopausal transition and have longer bouts of amenorrhea. These common symptoms often interact with one another such that depressed women tend to experience worse hot flashes along with worse sleep. As women enter the latter states of transition, vaginal dryness and dyspareunia also become more likely, affecting about 1/3 of the population<sup>[3]</sup>

The impact of perimenopause on the bone health is significant. Estrogen plays a significant role in maintaining bone density, and its decline during this phase increases the risk of osteoporosis. It is a major health problem in United States, affecting more than 25 million women older than 45 years approximately 50% of American women have some degree of osteoporosis 1 in 2 will have changes severe enough to predispose them to fractures. The incidence of osteoporosis related fractures has increased in past 20 years. Among those who have a rib fracture, 12% to 20% die within 1 year after fracture, and more than half are unable to return to independent living. Women advised to pay special attention to calcium and vitamin D intake and engage in weight-bearing exercises to help mitigate this risk.<sup>[1]</sup>

Managing the challenges of perimenopause involves a multifaceted approach. Adopting a healthy lifestyle that includes a balanced diet, regular exercise, and stress management and control techniques can help alleviate symptoms. Healthcare providers may recommend hormone replacement therapy (HRT) to address specific symptoms during Perimenopausal period. Duration of perimenopause is unique to each woman and can last for several years. It culminates with menopause, defined by 12 consecutive months without a menstrual period. Embracing this transition as a natural part of life and seeking support from friends, family, or health care professionals can ease challenges associated with perimenopause. The perimenopause is a phase that embodies the intricate interplay of biological, psychological, and social factors. While perimenopause can present a spectrum of physical and emotional changes, it is a natural progression that offers an opportunity for growth, reflection, and embracing new aspects of womanhood.<sup>[4]</sup>

Perimenopause, the precursor to menopause, marks a profound and intricate phase in a woman's life, a time of transition not only physically, but also emotionally (mentally) and psychologically.<sup>[6]</sup>

Hormonal fluctuations are at the heart of the emotional tempest experienced by perimenopausal women. Estrogen and progesterone, the rhythmic conductors of a woman's reproductive cycle, play an intricate duet. However, perimenopause sets in, this duet becomes less synchronized. The result is a symphony of mood swings, ranging from the gentlest melancholic strains to the crashing crescendo of irritability. Depression, anxiety and stress, often characterized as silent companions, may also make an appearance. The physiological basis for these emotional shadows lies in the impact of fluctuating hormones on

neurotransmitters.<sup>[5]</sup>

Engaging in regular exercise becomes not only a means of physical well-being but as an anchor for emotional release. Mindfulness practices offer a refuge from the turbulence of thoughts and emotions. Seeking therapy or participating in support groups provides a lifeline of understanding and shared experiences.

### **Need and significance of the study**

The psychological and emotional changes experienced by the perimenopausal women hold an immense significance due to their profound impact on well-being and quality of life. This transitional phase is manifested by hormonal fluctuations and the eventual cessation of menstruation, typically occurs in the late 45 to 55 years. It marks a crucial juncture in a woman's life, and understanding the need to address the psychological and emotional changes during this period is of importance.<sup>5</sup>

One of the primary reasons for acknowledging and addressing these changes is the prevalence and intensity of the symptoms that many perimenopausal women encounter. Hormonal shifts, particularly a decrease in estrogen levels, can lead to a range of emotional and psychological fluctuations. Mood swings, stress, irritability, anxiety, and even depression are common manifestations.<sup>6</sup>

The physiological basis for these changes lies in the intricate interplay between hormones and neurotransmitters that regulate mood and emotional stability. Recognizing the biological underpinnings of these changes emphasizes the need for sensitivity and support from health care professionals, family, and society.<sup>7</sup>

Furthermore, significance of the psychological and emotional changes in perimenopausal women stems from their potential to disrupt daily life and interpersonal relationships. The main nature of mood swings and irritability can strain personal and professional interactions, leading to misunderstandings and conflicts. Women might find it challenging to manage their emotional responses, affecting their overall sense of self-control and confidence. The resulting distress can further exacerbate emotional turmoil and hinder a woman's ability to navigate this transition smoothly.

A study conducted on, Psychological well-being, mid-life and the menopause by Lorraine Dennerstein, Anthony M A Smit. The present study aimed to determine whether well-being during mid-life related to menopausal status, social circumstance, health status, interpersonal stress, attitudes and lifestyle behaviours. A random sample of 2000 Melbourne women aged 45–55 years were sought by random digital telephone dialing. Well-being was found to be significantly related to current health status variables of general psychosomatic symptoms, general respiratory symptoms, history of premenstrual complaints, overall health assessment and interpersonal stress. Attitudes to ageing and to menopause were also significantly related to well-being scores. Life style behaviours of smoking, exercise and marital status were also significantly related to well-being. Thus well-being of

urban Australian-born, mid-aged women was related to current health status, psychosocial and life style variables rather than to endocrine changes of the menopausal women.

Quality of life after the menopause in Iran: a population study by Hossien Fallahzadeh: Quality of Life. There results showed that the menopausal women have worse QoL scores in vasomotor dimension and higher QoL scores in physical dimension. Univariate analysis showed that there were significant differences in the MENQOL scores by age, number of children, education, post menopausal stage, employment status, and BMI. Women aged 60–65 ( $P < 0.05$ ), with a university level of education ( $P < 0.01$ ), who had employment ( $P < 0.01$ ), who had post menopausal stage 5 or more years ( $P < 0.05$ ), with a body mass index  $\leq 18.5$  kg m<sup>-2</sup> ( $P < 0.05$ ), and who had significantly lower scores indicating better quality of life.

Perimenopause can be the time of reflection on self-identity and body image. Relationships, are the another facet of the emotional landscape, undergo transformation. Communication breakdowns due to moods wings or misunderstandings can strain even the strongest connections. Navigating these relational nuances requires patience, empathy, and open dialogue.<sup>[6]</sup>

Assessment of the variation in menopausal symptoms with age, education and working/non-working status in north-Indian sub population using menopause rating scale (MRS) V by Kakkar, D Kaur, K Chopra, A Kaur, IP Kaur Maturitas. There results were evaluated for psychological (P), somatic (S), and urogenital (U) symptoms. The average set in, in the cohort was found to be  $48.7 \pm 2.3$  years (46.4–51 years). Based on the average age at the menopause, the cohort was divided into peri (35–45), menopausal/ early menopause (46–51) and the postmenopausal (52–65) groups. A significantly higher % of perimenopausal women (36%) showed a P score of  $\geq 7$ ; while a higher % of postmenopausal showed S score and U score  $\geq 7$  ( $>40\%$ ;  $p \leq 0.001$ ). Working women seem to suffer more from psychological symptoms whereas non-working women showed a greater incidence of somatic symptoms. Educated women showed a lower incidence of psychological and somatic symptoms. Present study indicates that age, level of education and working/non-working status (in a group of women with same socio-cultural background) may also contribute to significant variations in menopausal symptoms. The present study aimed to determine whether well-being during mid-life related to menopausal status, social circumstance, health status, interpersonal stress, attitudes and lifestyle behaviours.

From the above mentioned studies and reasons investigator recognized the need to assess physiological and psychological changes among perimenopausal women.

## STATEMENT OF THE PROBLEM

A study on severity of menopausal symptoms among perimenopausal women in selected community, Thrissur.

## OBJECTIVES

- To assess the severity of menopausal symptoms among perimenopausal women.
- To find the association between severity of menopausal symptoms with selected baseline variables.

## Methodology

**Research approach:** Quantitative research approach.

**Research design:** Descriptive research design.

**Setting of the study:** The study is conducted in selected wards of Tholur panchayat, Thrissur, Kerala.

## Population

Women in perimenopausal period from Tholur Panchayath, Thrissur, Kerala.

## Sample

Women in perimenopausal period from Tholur Panchayat, Thrissur who meets the inclusion criteria.

## Sampling Technique-

Convenience sampling technique

## Sample Size

Sample consist of 84 perimenopausal women from Tholur Panchayath, Thrissur

## Inclusion Criteria

Women who are:

- In the age group of 45 to 55 years.
- Willing to participate in the study.

## Exclusion Criteria

The women who are having:

- Hormonal replacement therapy.
- Mentally ill.

## Tools and technique

Tools used for the present study are:

### Tool 1 : Baseline variables

#### Section A: Sociodemographic variables

This section deals with socio demographic variables consist of age, educational status, marital status, occupation, diet, exercise, type of family, history of co morbidities.

#### Section B: Obstetrical and gynecological variables

This section deals with variables such as age of menarche, number of children, complications during delivery, menstrual history, history of gynecological conditions.

### Tool II: Menopause rating scale

This section contains questions related to menopausal symptoms during perimenopausal period. Menopause rating scale consists of 11 number of questions. Each questions contains a maximum score of 4. The scoring system is asymptomatic ( $\leq 11$ ), mild to moderate (12–35) and severe- very severe ( $\geq 39$ ).

**Data Collection Procedure**

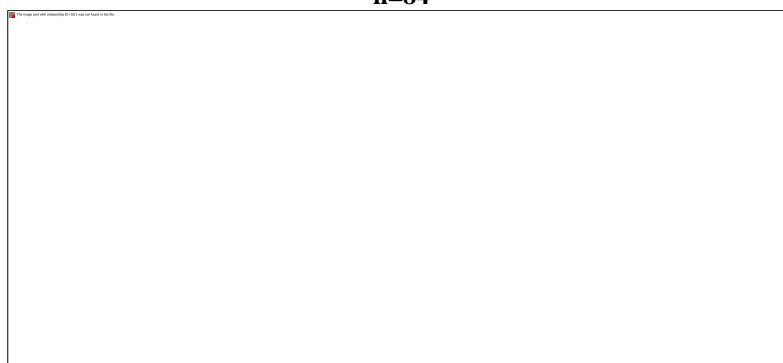
Data collection is the gathering of information to address a research problem. Institutional approval is needed to be obtained. The formal permission will be obtained from Medical Superintendent, Tholur Family Health Centre Thrissur. 84 perimenopausal women were selected using convenience technique based on inclusion criteria. The data collection was done using structured questionnaire which consisted of socio demographic, menstrual, obstetrical and gynecological variables and Modified Menopause rating scale. After a brief self introduction, the purpose of study was

explained and obtained informed consent from the samples. It took a maximum of 20 minutes to fill a questionnaire from the samples. All samples cooperated well during the study.

**SECTIONA: DISTRIBUTION OF PERIMENOPAUSAL WOMEN ACCORDING TO BASELINE VARIABLES SOCIODEMOGRAPHIC VARIABLES**

This section deals with frequency and percentage distribution of perimenopausal women according to sociodemographic variables.

**Figure1: Frequency and percentage distribution of perimenopausal women according to age.**  
n=84



group of 51 to 55years.

Figure1 shows that majority(55%) of the samples were in the age group of 45to50years,45%were in the age

**Table1: Frequency and percentage distribution of perimenopausal women according to educational status.**  
n=84

EDUCATIONALSTATUS	FREQUENCY	PERCENTAGE
ILLITRATE	0	0%
PRIMARYEDUCATION	4	5%
HIGHSCHOOLEDUCATION	51	61%
DIPLOMA/UG	26	31%
PG	3	3%

diploma and 3% completed PG.

Table1 shows that majority (61%) of subjects completed high school education,31% completed

**Table2: Frequency and percentage distribution of perimenopausal women according to occupation.**  
n=84

OCCUPATION	FREQUENCY	PERCENTAGE
GOVERNMENTEMPLOYEE	10	12%
PRIVATEEMPLOYEE	17	20%
HOUSEWIFE	51	61%
OTHERS	6	7%

Table 2shows that majority (61%) of subjects were housewife, 20% were private employee,12% were government employee, others

were7%.Figure2:Frequency and percentage distribution of perimenopausal women according to marital status .

n=84

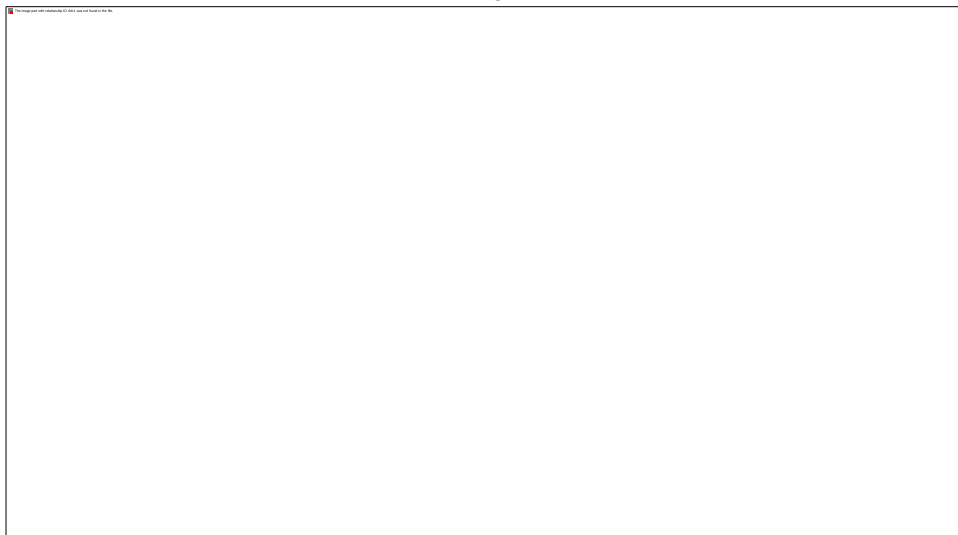


Figure2 shows that majority (92%) of subjects were married, 3% were unmarried, 5% were widowed and others were divorced.

**Figure3:Frequency and percentage distribution of perimenopausal women according to type of diet. n=84**



Figure3 shows that majority(99%) of subjects were taking mixed diet,1% were vegetarian.

**Table3:Frequency and percentage distribution of perimenopausal women according to exercise.n=84**

Exercise	Frequency	Percentage
YES	21	25%
NO	63	75%

Table3 shows that majority(75%) subjects were doing exercise and 25% were not doing exercise.

**Figure4:Frequency and percentage of perimenopausal women according to their family.n=84**

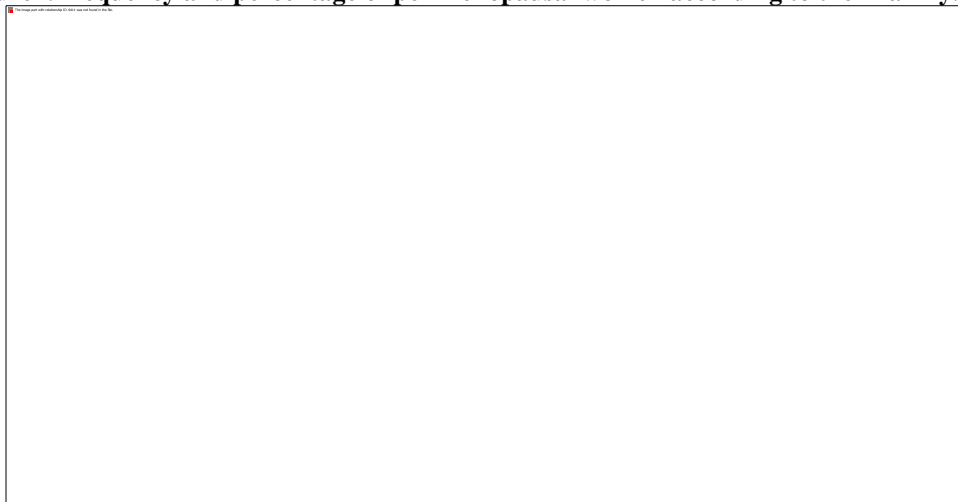


Figure4 shows that majority(74%)of subjects belonged to nuclear family,19% belonged to extended family and7% belonged to joint family.

**Table4: Frequency and percentage distribution of perimenopausal women according to co-morbidities .n=84**

CO-MORBIDITIES	FREQUENCY	PERCENTAGE
YES	37	44%
NO	47	56%

Table 4 shows that majority(56%) of subjects had past medical history, and 44% do not have co-morbidities.

**SECTIONB–DISTRIBUTION OF PERIMEN-  
OPAUSAL WOMEN ACCORDING TO  
MENSTRUAL, OBSTETRICAL PROFILE .**

**Menstrual Profile**

This section describes menstrual profile of the subject

including age of menarche, frequency and duration of menstruation, regularity of menstrual cycle, obstetrical conditions, complication during pregnancy and number of children.

**Figure5: Frequency and percentage distribution of perimenopausal women according to age at menarche. n=84**

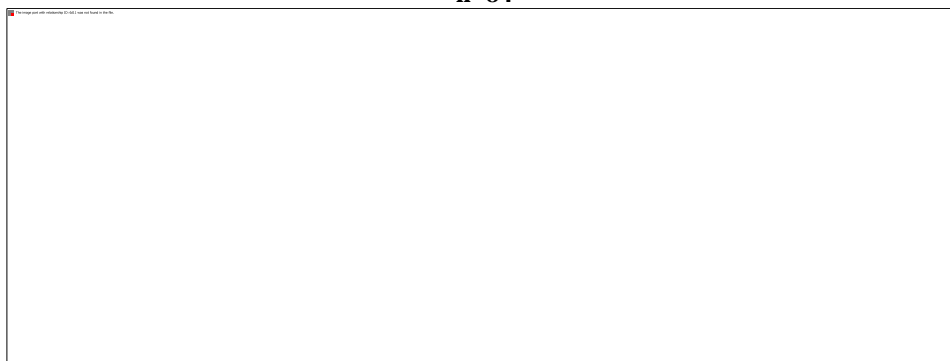


Figure 5 shows majority (76%) of subjects attained menarche at the age group of 11 to 14 years , 22% attained at 14years and2%attained at <11years

**Table 5: Frequency and percentage distribution of perimenopausal women according to regularity of menstrual cycle. n=84**

MENSTRUALCYCLE	FREQUENCY	PERCENTAGE
REGULAR	74	88%
IRREGULAR	10	12%

Table 5 shows majority (88%) of subjects had regular menstrual cycle and12% had irregular menstrual cycle.

**Figure6: Frequency and percentage distribution of perimenopausal women according to duration of menstruation. n=84**

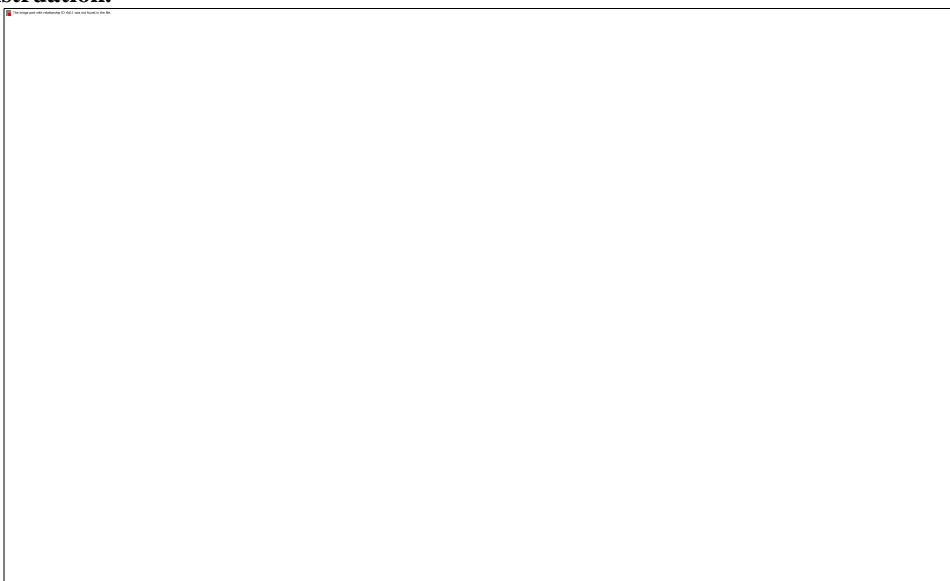


Figure6 shows majority (79%) of subjects had 3 to 5days menstruation,20% had menstruation greater than5days and1% had 1 to 2 days duration of menstruation.

**Figure7: Frequency and percentage distribution of perimenopausal women according to obstetrical conditions.**  
n=84

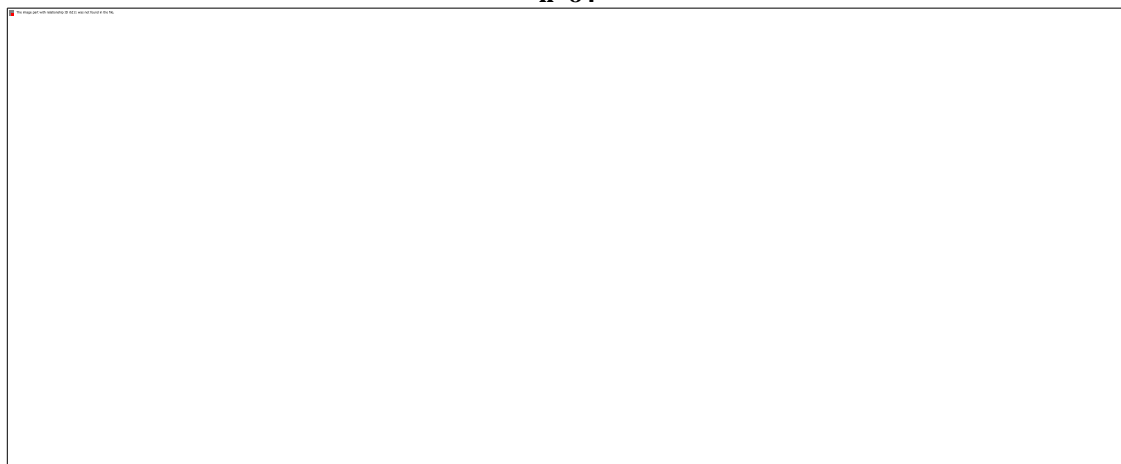


Figure 7 shows majority 94% of subjects had no obstetrical conditions and 6% had obstetrical conditions.

**Table6: Frequency and percentage distribution of perimenopausal women according to complications during pregnancy.**  
n=84

COMPLICATIONSDURING PREGNANCY	FREQUENCY	PERCENTAGE
YES	8	10%
NO	76	90%

Table 6 shows majority (90%) of subjects had no complications during pregnancy and 10% had complications during pregnancy.

**Table7: Frequency and percentage distribution of perimenopausal women according to number of children.**  
n=84

NUMBEROFCHILDREN	FREQUENCY	PERCENTAGE
0	1	1%
1	9	11%
2	50	60%
3	23	27%
Above3	1	1%

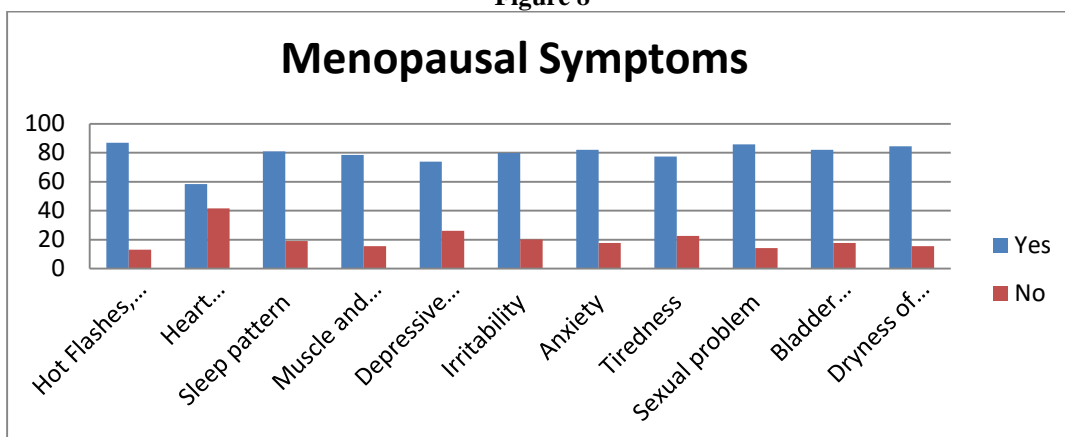
Table 7 shows majority (60%) of subjects had 2 children, 27% had 3 children, 11% had 1 child and 1% had no children

**SECTION C: DISTRIBUTION OF SEVERITY OF MENOPAUSAL SYMPTOMS AMONG PERIMENOPAUSAL WOMEN ACCORDING TO MODIFIED MENOPAUSE RATING SCALE**

**Table:8 Severity of menopausal symptoms according to Menopause rating scale n=84**

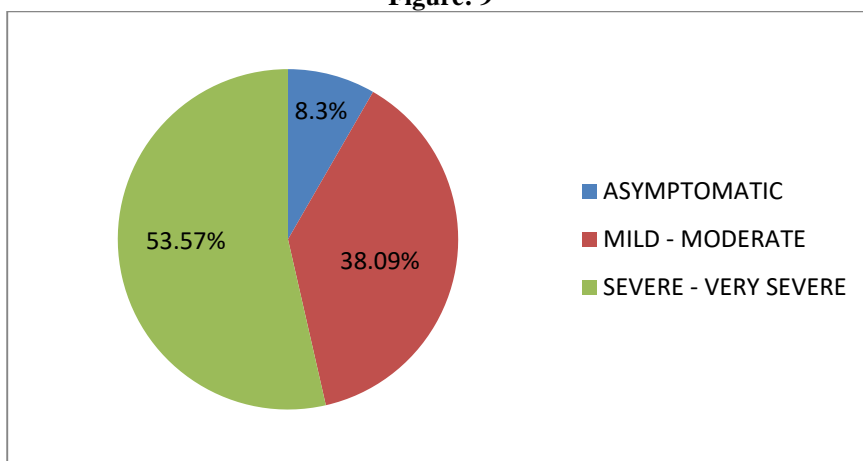
Symptoms	Menopausal symptoms	Perimenopausal women	
		Yes n(%)	No n(%)
Physical symptoms	Hot flashes, sweating	73(86.9%)	11(13.09%)
	Heart discomfort	49(58.33%)	35(41.66%)
	Sleep problem	68(80.9%)	16(19%)
	Muscle and joint pain	66(78.57%)	13(15.47%)
Psychological symptoms	Depressive mood	62(73.80%)	22(26.19%)
	Irritability	67(79.76%)	17(20.23%)
	Anxiety	69(82.14%)	15(17.85%)
	Tiredness	65(77.38%)	19(22.62%)
Uro-genital symptoms	Sexual problem	72(85.71%)	12(14.28%)
	Bladder problem	69(82.14%)	15(17.85%)
	Dryness of vagina	71(84.52%)	13(15.47%)

Figure 8



**SECTION C: DISTRIBUTION OF PERIMENOPAUSAL WOMEN ACCORDING TO MODIFIED MENOPAUSE RATING SCALE**

Figure: 9



**SECTION D: ANALYSIS OF ASSOCIATION BETWEEN MENOPAUSAL SYMPTOMS AND BASELINE VARIABLES AMONG PERIMENOPAUSAL WOMEN**

**Table 9: Association between menopausal symptoms and occupation among perimenopausal women. n=84**

Sl. No	Occupation	Asymptomatic	Mild- Moderate	Severe-Very Severe	Chi Square	p Value
1	Government Employee	1	8	1	15.6	0.04*
2	Private Employee	0	18	0		
3	House Wife	4	48	0		
4	Others	2	1	1		

Table 9 shows that chi square value is 15.6 and p value 0.04 (<0.05). So the association between menopausal symptoms among perimenopausal women and occupation is statistically significant.

**Table 10 : Association between menopausal symptoms and exercise among perimenopausal women. n=84**

Sl. No	Exercise	Asymptomatic	Mild-Moderate	Severe-Very Severe	Chi Square	P Value
1	Yes	0	12	7	11.314	0.01*
2	No	0	27	38		

Table 10 shows that chi square value is 11.314 and p value is 0.01 (<0.05). Hence association between menopausal symptoms among perimenopausal women and exercise is statistically significant.



## Recommendations

1. A similar study can be done in different setting with large sample size.
2. A similar study can be conducted to compare the severity of menopausal problems between perimenopausal and menopausal women.

## Conclusion

The psychological and emotional changes experienced by the perimenopausal women hold an immense significance due to their profound impact on well-being and quality of life. It marks a crucial juncture in a woman's life, and understanding the need to address the psychological and emotional changes during this period is of importance.

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