

# Evaluation of Knowledge of Perception And Coping Strategies of Perimenopausal Women Through Self Instructional Module (SIM)

Aisha Parveen, Paras wani, Mohammad Junnaid Siddiqui

**Abstract**— According to women's 2007 about one in five women residing in India are likely to experience menopause by age of 41. An exploratory, descriptive and quasi experiential study was conducted on 100 subjects to evaluate knowledge of perception and coping strategies of perimenopausal women through self instructional module (SIM). A questionnaire was made and after informed consent data was collected and it was found that there was a significant difference in the perception scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ). The study showed that educational level was strongly associated with perception and coping strategies. Results revealed that a literate woman had better perception and coping strategies in comparison to an illiterate women.

**Index Terms**— Knowledge, Menopause, SIM

## INTRODUCTION

Menopause is defined in Webster's new world dictionary (1966) as the permanent cessation of menstruation, normally between the ages of 45 and 55 years, or the period during which this occurs, female climacteric, or change of life. In the western world the most typical age range for menopause (last period from natural causes) is between the ages of 40 and 61<sup>1</sup> and the average age for last period is 51 years.<sup>2</sup> The average age of natural menopause (in Australia) is 51.7 years,<sup>3</sup> although this varies considerably from one individual to another. In some countries however, such as India the median age of natural menopause is considerably earlier, at 44 years.<sup>4</sup> Today, women live at least one third of their lives post menopause. In fact, the National Institute on Aging identifies people aged 100 or older as the largest growing segment of the United States population. By the year 2020, the United States will achieve a demographic milestone, for the first time there will be as many post menopausal women as there are women of childbearing years<sup>5</sup>. Women usually perceive themselves to be healthy even if they are not healthy. They are usually involved in taking care of family and given second priority to them. Hence, it is required to determine their right perception of health during this phase. Since perimenopause has lots of problem of physical and mental nature, the demand of life is much more. They need how to cope up with problems and demands. Many changes both physiological and psychological take place in women's body at this time. It is important that such woman receive help, advice and freely available information which can contribute towards making the years following menopause as rewarding, fulfilling and purposeful. Naturally woman will experience an emotional reaction towards these physical and psychological changes. To provide alternative solution to the problems related to menopause to large group of menopausal women, the first step is to find out the right perceptions related to menopause so that these women can lead health life. With this preview this exploratory, descriptive and quasi experimental study was conducted to evaluate of knowledge of perception and coping strategies of perimenopausal women through self instructional module (S.I.M.). The study was carried out in outpatient department approach to assess the perception and coping strategies of perimenopausal women between the age of 35-50 years from Gynae and family planning OPD at Majeedia

Hospital, Jamia Hamderd, New Delhi – 62 during the month of month of July to November, 2007. Perimenopausal women between the age of 35-50 years, who could read and understand Hindi and English from Gynae and family planning OPD at Majeedia Hospital, Jamia Hamderd, New Delhi on 100 subjects. Purposive Sample technique was carried out because of availability and feasibility. Interview schedule was developed, based on demographic data, detailed gynae and obstetrical history, sexual history, menopausal symptoms and questions related to perception and coping strategies. Self-instructional module (S.I.M.) was developed specially based on knowledge available from literature about menopause and related problems. SIM was developed particularly based on general knowledge about menopause, estrogen, symptoms of menopause, health related risk of menopause, role of natural supplements, diet for perimenopausal women, role of exercise to minimize symptoms of menopause including exercise that may reduce osteoporosis. Focus group discussions were done. They were further asked if they had properly understood and followed the instructions given in self-instructional module (S.I.M.). Validation of self-instructional module was followed with the help of the expert in the field of Gynae, nursing, diet therapy, physiotherapy and orthopedic. Focused group discussion was held and audio recording of the procedure was done. Eligible subjects fulfilling the inclusion criteria were briefed this study. Upon their volition, written consent was taken from each of the subjects. For the collection of the data permission was taking from the Medical Superintendent Majeedia Hospital. Interview was carried out in the OPD to elicit their personal history gynae & obstetrical history, symptoms, perception and coping strategies of these subjects. During the interview, the structured interview schedule was filled up and the self-instructional module was supplied at the end of the interview to each of the subjects. After fifteen days focus group discussion was held. Second intervention was made through focus group discussion. After the interview the subjects were called up, in the groups, each containing 4-5 and discussed the SIM. They assured that they properly understood and followed the instruction given in the self-instructional module (S.I.M.). After one month again interviewed the subjects through interview schedule based on perception and coping strategies to assess their level of

perception and coping strategies. Collected data and information were analyzed and presented in the statistical form with accurate interpretation. Bar diagram and Pie charts were used for diagrammatic and graphical representation data was interoperated appropriately by descriptive and inferential statistics method. Precaution was taken to safe guard, right and welfare of the study subjects. To conduct this study the researcher introduced her to the subjects and established the rapport with them. Role of women in the study was discussed to obtain free and frank response. They were assured of confidentiality of their identity and response.

## RESULT AND DISCUSSION

Distribution of sample subjects by their Perception Scores before & after intervention was done. Twenty four percent 24 (24%) of the sample subjects had a perception score of zero before intervention; none of them had a zero perception score after intervention. Forty nine percent (49%) of the subjects had a perception score between 0 to 5 before intervention; after intervention only six percent (6%) had a perception score between 0 to 5. The perception scores of all the 24 subjects with 'no perception' before intervention increased after intervention. In most of them 62.5 (62.5%) the perception score increased to 'poor perception' after intervention. In one 4 (4%) of the 25 subjects with 'very poor perception' before intervention, the perception remained the same after intervention. In most of them however, the perception scores increased after intervention; eight (32%), nine (36%) and seven (28%) of them had a 'poor', 'average' and 'good' perception after intervention, respectively. Nine (69.2%) of the thirteen subjects with a 'poor perception score' before intervention increased their perception scores to 'good perception' after intervention. Most 81.3 (81.3%) of those with a 'average perception' before intervention, a total of 16 subjects, had a 'good perception' after intervention. After intervention, the perception scores did not improve in any of the 22 subjects with a 'good perception' before intervention (Table 1). Comparison of Perception Scores of sample subjects before & after intervention was done using Wilcoxon Signed Ranks test. There was a significant difference in the perception scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ) (Table 2). Distribution of sample subjects by their Coping Strategy Scores before & after intervention was done. Most of the subjects had lower coping strategy scores before intervention, while after intervention most of them scored higher. Before intervention the coping strategy score was zero in 35% subjects compared to only 2% after intervention. Only 3% had a coping strategy score of 'average' and above before intervention compared to 56% after intervention (Table 3). Comparison of coping strategy scores of sample subjects before & after intervention was done using Wilcoxon Signed Ranks test. There was a significant difference in the coping strategy scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ) (Table 4).

Summarizing the results of the study following inference was drawn :-

1. Comparison of Perception Scores of sample subjects before & after intervention was done using Wilcoxon Signed Ranks test. There was a significant difference in the perception scores of the subjects before and after

intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ) (table 2).

2. The study showed that educational level was strongly associated with perception and coping strategies.
3. Comparison of coping strategy scores of sample subjects before & after intervention was done using Wilcoxon Signed Ranks test. There was a significant difference in the coping strategy scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ) (table 4,5)
4. Self instructional module was found very effective in changing the perception of perimenopausal women and management of menopausal syndrome. By Proper counselling and education material like self instructional module (SIM), the perception of women regarding perimenopausal phase improved and the coping strategies of women became better which resulted in minimizing the perimenopausal symptoms.
5. In other studies evaluating perimenopausal symptoms Kravitz, Ganz *et al* found difficulty in sleeping was 38% which was comparable with our study (49%). Joffe *et al* (2000) compared the relation ship between vasomotor symptoms and depression in perimenopausal women. It was found that hot flushes and night sweats are associated with depression in perimenopausal women. Same results were found in our study<sup>6,7</sup>.
6. A study conducted by clinical nursing research Taiwan found that only educational level was significantly associated with perimenopause knowledge level ( $P < 0.001$ ) same results were found in our study also ( $P < 0.001$ ).

## CONCLUSION

Comparison of Perception Scores of sample subjects before & after intervention was done using Wilcoxon Signed Ranks test. There was a significant difference in the perception scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ). The study showed that educational level was strongly associated with perception and coping strategies. Results revealed that a literate woman had better perception and coping strategies in comparison to an illiterate women. Comparison of coping strategy scores of sample subjects before & after intervention was done using Wilcoxon Signed Ranks test. There was a significant difference in the coping strategy scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ). Self instructional module was found to be very effective in changing the perception of perimenopausal women and management of menopausal syndrome.

## RECOMMENDATIONS

On the basis of observation, discussion and conclusion the following recommendations are made:-

- i. A larger sample size study may be conducted to reach conclusions that can be extrapolated to the larger population.
- ii. Co-relation studies can be done to compare the perception and coping capabilities among urban and rural women.
- iii. Further experimental studies can be conducted on diet, iron, calcium supplements could be given and

their efficacy in reducing perimenopausal symptoms may be evaluated.

### Limitations of the study

Limitations of this study were-

- The sample size for the study was small, so the study observations may not be a representative of a large population and may not be generalized.
- There were certain time limitations as the study was to be completed within the stipulated time while such studies need more time.

**Table 1**

Perception score	Before intervention		After intervention	
	Frequency	Percentage	Frequency	Percentage
No perception (0)	24	24.0	0	0.0
Very poor perception (1-5)	25	25.0	6	6.0
Poor perception (6-10)	13	13.0	23	23.0
Average perception (11-15)	16	16.0	18	18.0
Good perception (16-20)	22	22.0	52	52.0
Excellent perception (> 20)	0	0.0	1	1.0
<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>

While 24% of the sample subjects had a perception score of zero before intervention, none of them had a zero perception score after intervention. Forty nine percent of the subjects had a perception score between 0 and 5 before intervention; after intervention only six percent had a perception score between 0 and 5.

**Table 2:** Comparison of Perception Scores of sample subjects before & after intervention

	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	p value *
Perception Scores before intervention	1.00	6.00	15.00	<0.001
Perception Scores after intervention	10.00	16.00	24.00	

### Wilcoxon Signed Ranks test

There was a significant difference in the perception scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ).

Coping Strategy Score	Before Intervention		After Intervention	
	Frequency	Percentage	Frequency	Percentage
No Coping Strategies (0)	35	35.0	2	2.0
Negligible (1-10)	23	23.0	10	10.0
Very Little (11-20)	39	39.0	32	32.0
Average (21-30)	2	2.0	14	14.0
Good (31-40)	1	1.0	15	15.0
Very Good (41-50)	0	0.0	15	15.0
Excellent (51-60)	0	0.0	12	12.0

**Table 3:**

Most of the subjects had lower coping strategy scores before intervention, while after intervention most of them scored higher. Before intervention the coping strategy score was zero in 35 (35%) subjects compared to only 2 (2%) after intervention. Only 3 (3%) had a coping strategy score of 'average' and above before intervention compared to 56 (56%) after intervention.

**Table 4:** Comparison of Perception Scores of sample subjects before & after intervention

	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile	p value *
Perception Scores before intervention	1.00	6.00	15.00	<0.001
Perception Scores after intervention	10.00	16.00	24.00	

### Wilcoxon Signed Ranks test

There was a significant difference in the perception scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ).

**Table 5** Comparison of Coping Strategy Scores of sample subjects before & after intervention

	<b>n= 100</b>			
	<b>25<sup>th</sup> Percentile</b>	<b>Median</b>	<b>75<sup>th</sup> Percentile</b>	<b>p value *</b>
<b>Coping Strategy Scores before intervention</b>	0.00	8.00	14.00	<b>&lt;0.001</b>
<b>Coping Strategy Scores after intervention</b>	17.00	23.00	43.75	

**Wilcoxon Signed Ranks test**

There was a significant difference in the Coping Strategy scores of the subjects before and after intervention as revealed by the Wilcoxon Signed Ranks test ( $p < 0.001$ ).

**REFERENCES**

- [1] Minkin, Mary Jane; et al. (1997). What Every Woman Needs to Know about Menopause. Yale University Press. ISBN 0-300-07261-9.
- [2] Kato I, Toniolo P, Akhmedkhanov A, Koenig KL, Shore R, Zeleniuch-Jacquotte A (1998). "Prospective study of factors influencing the onset of natural menopause". J Clin Epidemiol **51** (12): 1271–1276. DOI:10.1016/S0895-4356(98)00119-X. PMID 10086819.
- [3] Do KA, Treloar SA, Pandeya N et al. (1998). "Predictive factors of age at menopause in a large Australian twin study". Hum Biol **70** (6): 1073–91. PMID 9825597.
- [4] Ringa, V. (2000). "Menopause and treatments". Quality of Life Research **9** (6): 695–707. DOI:10.1023/A:1008913605129. JSTOR 4036942.
- [5] Walter, C.A.; (2000). The Psychosocial Meaning of Menopause: Women's Experiences. Journal of Women & Aging. 12(3/4), 117-131.)
- [6] Kravitz, Ganz.Hamilton, J.C; et al. (2003). The Measure of Quality of Life: The Clinical Use of the Utian Quality of Life Scale. Menopause Management. 12(2), 12-16.
- [7] Joffe, H.. Hall;J, E. Soares; Hennen, J. Reilly; Carlson, K. Cohen; (2002). Vasomotor Symptoms Are Associated With Depression in Perimenopausal Women Seeking Primary Care. Menopause. 9(6), 392-398.