Menopause is a tough phase in a woman’s life, but she can make life as happy and productive as before, by adjusting to the changes in her body.

-Angela Gnanadurai

Women are the vital setup and heart of the family. When women have been tired, family function would be altered. Women are facing lot more problems through their life. One of the most common problem they are facing is menopause and hormonal changes during their middle adulthood. The menopausal problems of women always make them so tired. So they need treatment and health education regarding menopausal care and prevention of problems.

Pre menopause is the physiological termination of normal menstrual cycles. Pre menopause is generally caused more early than the normal age which is associated with the cessation of the menstrual cycles. Pre menopause occurs when the ovaries virtually stops producing the estrogen which generally leads the fertility aspect of the women to shut down.

Because pre menopause is a very important period in women’s life; informed knowledge of what to expect will go a long way to prepare a woman for what is to come during menopause proper, especially because each woman’s transition from pre menopause to menopause may differ drastically due to the difference in the amount of the male hormone androgens that may be produced, which accounts for the devastating secondary male characteristics often exhibited by menopausal women.

Menopause is a natural process just as puberty is natural. Puberty prepares a girl to be able to conceive and bear children and menopause prepares women to cease to be able to conceive. Both cause sudden changes in one’s body, puberty by introducing hormones and menopause by withdrawing them. The term menopause is derived from two Greek words ‘meno’ and ‘pause’ meaning “month” and “stop”. Thus it is permanent cessation of menstruation.

According to Magent 2013 Indian Menopause Society research there are about 65 million Indian women over the age of 45. Average age of menopause in around 48 years but it strikes Indian women as fond as 38 to 43. So, menopausal health demands even higher priority in Indian scenario.

The percentage of women affected by Pre menopause symptoms vary widely. According to the American College of Obstetricians and Gynecologists, at least 85 percent of menstruating women have at least one Pre menopause symptom as part of their monthly cycle. Most of these women have symptoms that are fairly mild and do not need treatment. Some women (about three to eight percent of menstruating women) have a more severe form of PMS, called Premenstrual Dysphoric Disorder (PMDD).

Anitha (2005) study shows that majority of women (55.5%) had knowledge about the meaning of menopause and 36% had correct knowledge about the cause of menopause, which need to improve the overall knowledge of menopause. Mazhar. SB (2003) concluded 74.3% of women felt a need for health education on menopause.

Velasco-Murillo (2000) revealed that the most frequent climacteric symptoms were hot flushes (70.9%), depression (60.2%), insomnia (53.5%) and menstrual disturbances (37.8%). The women sought medical care (51.1%) due to climatic symptoms but only (12.1%) received treatment, majority (81.6%) had taken hormones. In this survey (83.8%) of women had some knowledge about main symptoms of climacteric and (90.1%) knew about osteoporosis, but only (37.2%) had some knowledge about cardiovascular risk after menopause.

However, most remain unaware of the short and long term implications of the morbid conditions

Impact of intervention on signs, symptoms and management of Pre Menopause and menopause women.
associated with middle and old age due to lack of availability and increasing cost of medical and social system. Considering that Indian women now live between 10-20% of their lives in the post-menopausal state and postmenopausal women are known to have several health problems including osteoporosis, it is imperative that the public health care system gears itself to meet the challenges posed by their health needs, first as people live longer, the years after the menopause represent significant part of a woman’s life that she has every right to enjoy to the full. A woman’s state of health during those years depends a lot on her health before the menopause.

With the rising life expectancy world wide, significant proportion of women in the menopausal and post menopausal period will require special advice on women health strategies that will not only improve their quality of life, but will also allow them to objectively balance the benefits versus the risks of such strategies.

Though studies exist on menopausal women, only a few focused on the health of these women. Midlife is thus a time to focus on oneself and to seek resources from within the family and community to maintain and enjoy equilibrium. Women need knowledge about what to expect and how to cope with changes during menopause.

Hence the investigator has planned to conduct a study on impact of intervention in relation to signs, symptoms and management of Pre Menopause and menopause women.

STATEMENT OF THE PROBLEM: Impact of intervention on signs, symptoms and management of Pre Menopause and menopause women.

OBJECTIVES OF THE STUDY

- To assess the knowledge and practices of urban women on signs and symptoms of pre menopause and menopause in pre test and post test.
- To assess the knowledge and practices of rural women on signs and symptoms of pre menopause and menopause in pre test and post test.
- To evaluate the effectiveness of Intervention on knowledge and practices of urban women regarding signs and symptoms of pre menopause & menopause.
- To evaluate the effectiveness of Intervention on knowledge and practices of rural women regarding signs and symptoms of pre menopause and menopause.
- To compare the knowledge and practices of rural and urban women regarding signs and symptoms of pre menopause and menopause.
- To find out the association between the pre test and post test knowledge of urban women with their demographic variables.
- To see the association between the pre test and post test knowledge of rural women with their demographic variables.

VARIABLES

Independent variable: Intervention on premenopausal and menopausal signs and symptoms.

Dependent variable: Knowledge scores of rural and urban women on signs and symptoms of pre menopause and menopause.

Extraneous variables: Age, locality, religion, education, occupation, annual income of the family, age of menarche, marital status, frequency of menstruation, duration of menstruation, number of children, history of abortion, use of contraceptives, history of breast feeding, age of menopause, history of menstrual abnormalities and history of hysterectomy of rural and urban women.

RESEARCH APPROACH

In the present study an evaluative research approach was considered as the best to determine the effectiveness of intervention on signs and symptoms of pre menopause and menopause.

RESEARCH DESIGN: One group pre test, post test design was adopted to assess the effectiveness of intervention on signs and symptoms of pre menopause and menopause among rural and urban women.

SAMPLE: Sample for the present study was women between the age group of 40-50 years residing in selected rural areas i.e. Chandragiri, Chittoor (Dt.) and urban areas i.e. Bommagunta, Balaji colony Tirupati, Chittoor(Dt.). The Sample consisted of 400 women between the age group of 40-50 years, of that 200 from rural area and 200 from urban area. Purposive sampling technique was used for selecting the subjects.
CRITERIA FOR SAMPLE SELECTION

**Inclusive criteria**
- Women who are residing in selected rural and urban areas.
- Women between the age group of 40-50 years
- Women who were willing to participate in study
- Women who were present at the time of data collection
- Women who can able to speak, read and write in Telugu.

**Exclusive criteria:**
- Women who are not residing in selected rural and urban areas.
- Women less than 40 years of age
- Women who are not willing to participate in study.

RESEARCH TOOLS
- The study was carried out by using the following tools.

**Questionnaire - I:** Socio demographic data. It consists of age, locality, religion, education, occupation, annual income of the family, age of menarche, marital status, frequency of menstruation, duration of menstruation, number of children, history of abortion, use of contraceptives, history of breast feeding, age of menopause, history of menstrual abnormalities and history of hysterectomy of rural and urban women.

**Questionnaire - II:** Questionnaire related to knowledge on signs and symptoms of pre menopause and menopause. This consists of six parts.

**Part - I:** This part includes the questions to assess the knowledge of women between the age of 40-50 years regarding anatomy and physiology of menstruation.

**Part - II:** It contains questions related to basic concepts of menopause and meaning of menopause.

**Part - III:** It has questions related to causes of menopause.

**Part - IV:** This part explore the knowledge of women on signs, symptoms and diagnosis of pre menopause and menopause.

**Part - V:** This part includes the questions related to assess the knowledge of women on prevention of complications during menopausal transition.

**Part - VI:** It is related to assess the knowledge and management of menopausal syndrome.

SECTION – I

**The demographic characteristics of urban and rural women.**

Out of 200 urban women 40 percent were between the age group of 40 - 45 years, 55 percent were living in non slum areas, 45 percent were residing in slum areas. Majority of the women were Hindus with regarding to the education of the women, 45 percent had education up to 10th standard, 17.5 percent had degree and only 5 percent were coolies.

Twenty percent has an annual income of less than Rs.12,000 and majority of women had an annual income of Rs.12,000 to Rs.24,000. Majority of women expressed that they attained menarche between 12-14 years of age. Sixty percent were married, 20 percent were divorced and widowers. Forty five percent of women had 28th day as menstrual cycle, 64 percent of women had two to four days of menstrual flow noted, 72.5 percent of women had one to two children. With regards to use of contraceptives, 84 percent of the women had not used any contraceptives, 24 percent of them were not given breast feeding. Majority of the women attained menopause between 40-45 years of age, only 5 percent were above the age of 50 years. Among the menopause women, 35.50 percent are having history of abortion. In menopause women, 47 percent were suffering with dysmenorrhoea, 15.50 percent were suffering with menorrhea and oligomenorrhea and 15 percent had hysterectomy. Out of 200 rural women, 30 percent were between the age group of 50-55 years, among them 60 percent are living in slum areas. Majority of women belongs to Hindus religion. Regarding education of women 70 percent were illiterate. Fifty percent of sample subjects were coolies getting annual income less than Rs 12,000 per year. Nineteen percent of women attained menarche above 40 years of age .The marital status of women indicates 65 percent are married, 30 were widowers and 5 percent were divorced. It is found that 25 percent had irregular menstrual cycle. Regarding the menstrual flow very less percentage of women had 7 days. 12.5 percent of women are not having children. Forty nine percent of women had two to four children, 28.5 percent of women have two to four children.
With regards to use of contraceptives, 90 percent of women had not used any contraceptive. Majority of women were given breast feeding and 47.50 percent attained menopause between age of 40-45 years, 33.50 percent women had abortion, 44 percent had history of menstrual abnormalities and 30 percent is having history of hysterectomy.

**SECTION II**

Knowledge of urban women regarding knowledge on signs and symptoms of pre-menopause and menopause in pre and post test

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Urban women (N=200)</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Inadequate (&lt;50%)</td>
<td>176</td>
<td>88</td>
<td>3</td>
</tr>
<tr>
<td>Moderately adequate</td>
<td>24</td>
<td>12</td>
<td>65</td>
</tr>
<tr>
<td>(50 - 75%)</td>
<td>0</td>
<td>0</td>
<td>132</td>
</tr>
<tr>
<td>Adequate (&gt;75%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Knowledge on practices and management of pre-menopausal syndrome among urban women in pre test and post test

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Urban women (N=200)</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Inadequate (&lt;50%)</td>
<td>157</td>
<td>78.5</td>
<td>0</td>
</tr>
<tr>
<td>Moderately adequate</td>
<td>43</td>
<td>21.5</td>
<td>45</td>
</tr>
<tr>
<td>(50 - 75%)</td>
<td>0</td>
<td>0</td>
<td>155</td>
</tr>
<tr>
<td>Adequate (&gt;75%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Knowledge of rural women on signs and symptoms of pre-menopause and menopause in pre and post test

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Rural women (N=200)</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Inadequate (&lt;50%)</td>
<td>181</td>
<td>90.5</td>
<td>4</td>
</tr>
<tr>
<td>Moderately adequate</td>
<td>19</td>
<td>9.5</td>
<td>80</td>
</tr>
<tr>
<td>(50 - 75%)</td>
<td>0</td>
<td>0</td>
<td>116</td>
</tr>
<tr>
<td>Adequate (&gt;75%)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Percentage showing the level of knowledge on practices and management of pre-menopausal syndrome among rural women in pre test and post test

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>Rural women (N=200)</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Inadequate (&lt;50%)</td>
<td>167</td>
<td>83.5</td>
<td>0</td>
</tr>
<tr>
<td>Moderately adequate</td>
<td>33</td>
<td>16.5</td>
<td>53</td>
</tr>
<tr>
<td>(50 - 75%)</td>
<td>0</td>
<td>0</td>
<td>147</td>
</tr>
</tbody>
</table>

**Section - IV**

Effectiveness of intervention among urban women on knowledge and practices regarding signs and symptoms of pre-menopause and menopause

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Pre test</th>
<th>Post test</th>
<th>t value</th>
<th>p value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>20.90</td>
<td>44.30</td>
<td>16.35</td>
<td>0.001</td>
<td>**</td>
</tr>
<tr>
<td>Knowledge on practices</td>
<td>2.80</td>
<td>9.19</td>
<td>6.90</td>
<td>0.001</td>
<td>**</td>
</tr>
</tbody>
</table>

**significant at 0.01 level**

**Section - V**

Effectiveness of intervention among rural women on knowledge and practices regarding signs and symptoms of pre-menopause and menopause

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>Pre test</th>
<th>Post test</th>
<th>t value</th>
<th>p value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>18.90</td>
<td>42.30</td>
<td>14.35</td>
<td>0.001</td>
<td>**</td>
</tr>
<tr>
<td>Knowledge on practices</td>
<td>3.20</td>
<td>8.90</td>
<td>7.90</td>
<td>0.001</td>
<td>**</td>
</tr>
</tbody>
</table>

**Section - VI**

Comparison of knowledge and practices on signs and symptoms of pre-menopause and menopause women in pre test by area.

<table>
<thead>
<tr>
<th>Urban women</th>
<th>Rural women</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>20.9</td>
<td>42.30</td>
<td>14.35</td>
</tr>
<tr>
<td>Knowledge on practices</td>
<td>2.8</td>
<td>8.90</td>
<td>7.90</td>
</tr>
</tbody>
</table>

**significant at 0.01 level**

Comparison of knowledge and practices regarding signs and symptoms of pre-menopause and menopause women in post test by area.

<table>
<thead>
<tr>
<th>Urban women</th>
<th>Rural women</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>44.30</td>
<td>42.30</td>
<td>13.05</td>
</tr>
<tr>
<td>Knowledge on practices</td>
<td>9.19</td>
<td>8.90</td>
<td>2.97</td>
</tr>
</tbody>
</table>

**significant at 0.01 level**

**Section - VII**

Association between pre test level of knowledge and demographic variables of urban women.

There is a significant association between the knowledge of urban women in pre test with religion, education of the women, annual income, age at menarche, marital status, duration of menstrual flow
of the women and history of breast feeding of the women and there is no significant association between the knowledge of urban women in pre test with age, locality, occupation of women, frequency of menstrual flow of women, number of children, use of contraceptives, age of menopause, history of abortion, history of menstrual abnormalities and history of hysterectomy of women.

SECTION VIII
Association between pre test knowledge and demographic variables of rural women.

It is found that there is a significant association between the knowledge of rural women in pre test with locality, religion of the women, annual income of the women, age of menopause and history of abortion of the women and there is no significant association between the knowledge of rural women in pre test with age, education, occupation of women, with age of menarche, marital status, frequency of menstrual flow, duration of menstrual flow of women, number of children, use of contraceptives, history of breast feeding, history of menstrual abnormalities and history of hysterectomy of women.

MAJOR FINDINGS OF THE STUDY
1. Majority of urban (88%) and rural (90.5%) women had inadequate knowledge in pretest and in post test 66% of urban and 58% of rural women had adequate knowledge after intervention on signs and symptoms of pre menopause and menopause.
2. In pre test 78.5% of urban and 83.5 % of rural women had inadequate knowledge on practices where as in post test 77.5% of Urban and 73.5% of rural women gained adequate knowledge on practices related to management of premenopausal syndrome.
3. Effectiveness of intervention on signs and symptoms of pre menopause and menopause was significant (P<0.001). As we know that health education will bring the changes in the behavior of the people. From the present study the results reveals that by giving awareness to the women regarding meaning, concepts, causes, signs and symptoms, complications, management and prevention of pre menopause and menopause the women can able to personalize the knowledge what they acquired and can change the life styles and do necessary modifications in their day to day life, so that they were free from the consequences of menopause and they will be going to maintain quality of life at their end stage.
4. The results of chi square test indicates in urban women religion, education, annual income, age of menarche, marital status, duration of menstruation, history of breast feeding were significant (P<0.05).
In pre test and in post test education, occupation, annual income, marital status, number of children, use of contraceptives, history of breast feeding and history of abortion were significant (P<0.05).
5. In rural women chi square test results shows that in pre test locality of women, religion, annual income, age of menopause, history of abortions were significant (P<0.05) and in post test locality, education, occupation, marital status, number of children, use of contraceptives, history of breast feeding, abortions and hysterectomy were significant (P<0.05).

IMPLICATIONS OF THE STUDY
Today trend and present concept in the field of Obstetrics and Gynecology is family centered care and collaborative women with family.
The teaching that was planned for the study group proved to have a definite impact on the knowledge of women on signs and symptoms of pre menopausal and menopause. Gynaecologist, Nurses, human development specialist, Reproductive health care professionals, Asha workers, Anganwadi workers must plan similar educational programmes based on the needs of the women between the age of 40-50 years.
The meaning of Education is bringing the change in the behavior of the people. The current study also reveals that after intervention the women’s knowledge level has been improved which was the positive outcome. Reinforcement always needed for
each and every group hence as a nurses we should inform the health personnel who were close contact with the women regarding conduct of similar education programmes periodically that will enhance the quality of life of the women.

In India, there is no current health programme that calculate the specific reproductive health needs of aging women. RCH -2 (Reproductive and Child Health) and NRHM (National Rural Health Mission) programmes that are mean to comprehensively cover health concepts of women and children. Health education regarding management of pre menopause and menopause will make the women residing in both urban and rural areas will improve their health and thereby make the women be happy in preceding days. Public health care system should mobilize resources and take necessary measures to improve the older women awareness and knowledge about menopause changes through educational training and guidance to maintain healthy life. Nursing administration should initiate community awareness programme with active support of available resources in the community. Nurse administrators should begin in-service education for the gross root level workers regarding assessing the needs of the elderly women and prevention and management of problems faced by them. The nurses must have liaison with community health workers.

RECOMMENDATIONS

1. As the health education programme was effective in rural and urban areas similar health education programs were recommended for other communities also.
2. Similar study may be conducted pharmacological and non pharmacological therapies for managing the women in pre menopause and menopause period.
3. Master health checkups are recommended by the urban and rural women those who are in pre menopausal and menopause.
4. Awareness programme on post menopausal complications and its prevention an extensive research can be recommended.
5. Problems of early hysterectomy i.e. surgical menopause and its prevention an extensive study can be recommended.
6. Studies on menopausal women’s awareness on pap smear testing and warning signs of cervical cancer are recommended.
7. Studies related to Pre menopausal and menopausal women obesity management with yoga, exercise etc are recommended.
8. A research can also be conducted on post menopausal women suffering with osteoporosis.

REFERENCES: