

**Study on Knowledge, Perception and  
Practice towards the Climacteric Changes  
among the Wives of Military Personnel in  
Kathmandu, Nepal.**



By

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## Abstract

Descriptive and exploratory study was conducted to assess the knowledge, perception and practice towards the menopausal state and develop educational package with essential information on menopausal state and its managements.

Data for the study were collected by using semi structured questionnaires from 102 samples who were wives of Royal Nepalese Army personnel living in family quarters and residence in Kathmandu.

Questionnaires consisted of demographic characteristic, knowledge, perception and practice regarding climateric changes. The obtained data has been analyzed by using frequencies, percentage, mean value, standard deviation and calculation of P value and Chi square test. For detail and in-depth information, focus groups and in-depth interview were done. Among the Participants from the 102 samples, which were included in the interview.

**The study revealed that, majority 89.2% had knowledge about menopausal state. There is significant association between the knowledge about menopause and educational level as well as rank of respondents (chi squared 20.51, P-value 0.000).**

**Among the respondents 54% perceived menopausal changes in positively, 36% negatively. There is significant association between perception and educational level as well as age of respondents (chi squared 9.82, P-value 0.0073).**

**As per existing practices to relief the problems of menopause 54% practicing modern methods and 46%, practicing advice of traditional healers and home remedies. There is significance association between existing practices and the rank as well as education level of respondents (chi squared 38.43, P-value 0.000).**

**In conclusion,** education was main influencing factor in knowledge, perception and practices. Consulting with friends and families were also found in high percentage. It is felt that, beside respondents, families and community need to be aware on climacteric changes and management and it is essential to improve the education level of women.

The investigator has developed an educational package on menopausal changes, its management and distributed it to the respondents.

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# Chapter 1

## 1.1 Introduction:

"Menopause or climateric changes can be wonderful thing to look forward to. But it is all a matter of luck. But you can oversee your odds. Just give up smoking, take up exercise, eat well, keep informed and don't let useless myths get you down"  
(1)

Alternative name of menopause is climacteric or change of life .Climaterium is a transition period in a women's life when the ovaries stop producing eggs, menstrual activity decrease eventually ceases and the body decreases the production of female hormones, estrogens and progestrone. Many things change in women's lives around the time of menopause. The physical changes of menopause are only one part of a woman's experience at this time. While these changes may be for better or worse, they almost always require some adjustment.

Menopause is a natural event in women's life. Age at which menopause occurs is genetically predetermined, unlike the age of menarche which is related to body mass. The age of menopause is not related to age of menarche or age at last pregnancy, number of pregnancy and lactation, oral pill, socio-economic status or body structure. But cigarette smoking and sever malnutrition may have early menopause. The age of menopause is between 45 to 55 years, average age is 50 years  
(2)

Age of menopause occurrence differ in different individuals. Age of natural menopause in American women 25% at age by 47 years, 50% age by 50 years, 75% by the age of 52 years and 80% by the age of 55 years. There are many reasons for these variations in the age of menopause. Some factors that influences age of menopause are race, living standard, age of puberty, hereditary, etc. It is hard to know when the menopause is approaching since many women experience only mild or few symptoms. In fact menopause happens in two broadly defined stages, perimenopause and postmenopausal. (3)

Changes that accompany aging especially with the climecterium, can be a source of anxiety. Climecterium refers to woman's life when she passes from the reproductive to non-reproductive stage with regression of ovarian function. It takes 5 to 10 years including pre-menopause, peri-menopause, menopause and postmenopausal. Menopause is an unmistakable biologic marker for the end of reproductive function in other words it is a change of life. During this life changing



period various physical and mental problems appear. Many women find major changes taking place in their family lives at about this time. For instance, as their children grow up and leave home, some mother feel bite lonely especially if they have devoted most of their time and energy to rearing. Often, this is also the time when a woman become a caregiver to her aging parents. This can be a demanding, difficult and stressful job. Other changes may be happening as well: changes in career or lifestyle, perhaps the retirement of husband or significant other. All of these changes can cause stress, and stress can make menopause and its symptoms hard to take, It is important to recognize when you are under stress and find ways to ease the burden. Having good friends and close family is very helpful, but women must ask for their help and supports when she needs it. There is also help available elsewhere.

Ageing is not a new phenomenon. History abounds with stories of individuals who lived to a great age. The average expectation of life at birth was only 30 in the days of Romans and around 40 at the beginning of the 20<sup>th</sup> century, to reach the present world average of 65. The life expectancy of women is longer than that of men. According to WHO estimates for 1998, at the global level the life expectancy at birth for women is 67.7 and for men 63.4. This gender gap is wider in developed countries than in developing countries. A large proportion of women also live longer than 85 years, especially in developed countries. For example, in Japan there are 8.51 million males and 11.98 females aged 65 years and above, i.e. 41.53% males and 58.47% females.(4) According to *ASIaweek, Volume 24, Number 49, 1998*, life expectancy of South Asian Countries (SAARC) are Bangladesh 58 yrs, Bhutan 66 yrs, India 62yrs, Maldives 64 yrs, Sri Lanka 73 yrs and in Nepal 56 yrs for female and 57 yrs for male.

Menopause problem in women is all over the world. Out of total population of 23453019 female are 11738070 (50.09%) and male are 11714949 (49.91%) in Nepal. Women of middle age (40 to 60 years) consist of 2,001805 which is 8.54% from total population and 17.05% from female population. (5) The number of women between 45-49 years is expected to grow in Nepal from 880,648 in 1991 to 1,388,542 in 2006. The number of women above 60 years will grow from 537,392 in 1991 to 728,246 in 2006.

The literacy rate is quite low among the women in Nepal. Due to the lack of knowledge regarding Menopause women in Nepal have a different view. Some feel it as a normal phenomenon where as some say it is due to some evil act, very few percentage of women really know the real cause of Menopause.

The average age of women for menopause is 51 years. But menopause starting at the age of 40 is also considered as normal. If there is mood swings, irregular menstruation and irritability before the age, may be pre-menopause symptoms. Perimenopause is defined as the transition period from normal menstrual periods to no periods at all. The transition can and usually does take up to ten years. During the

perimenopause transition women may experience a combination of PMS and menopausal symptoms or no symptoms. (6)

The frequent symptoms that women may experience are vasomotor instability, emotional disturbance, physiological changes. But approximately 20% of women never experience symptoms. Most women experience mild or moderate symptoms and rarely require medical attention and few women have severe symptoms (3)

## **1.2 Significance of the Study:**

- Evidence and experience show that climacteric problems exist and increasing day by day similarly.
- It is observed that climacteric problems among military personnel's wives are also increasing and they are in search of remedial measures.
- Because of the lack of information and knowledge about climacteric problems, women in developing countries are misled and facing physical, mental and social problems.
- While reviewing the literature, the investigator found that in Nepal, few study has been conducted on Hormone Replacement Therapy, postmenopausal perceptions and age of menopause in Nepal.
- Identifying the knowledge, perception and practices on climacteric state may help to develop and appropriate educational package which will be helpful to all middle age women who are in problem.
- Conceptualising all these factors and demand of some educational matters the investigator motivated and thought that this is the high time to conduct research study.
- Nurses are the appropriate and ideal health personnel who can help such type of client easily by providing counselling and educational package to the community.
- Climacterium is a hidden and neglected reproductive health problem among the middle age group women. Therefore, study on this problem has become necessity.

### **1.3 Statement of problems**

The purpose of this research is to assess knowledge, perception and practice towards the menopausal state among the wives of military personnel who are residing in Kathmandu Valley and develop need based of educational package.

### **1.4 General Objectives:**

To find out the knowledge, perception and practice about menopausal state among the wives of military personnel and develop an educational package on the related knowledge, perception and practice on the basis of pretest.

### **1.5 Specific Objectives:**

The specific objectives are:

- i. To assess the knowledge, perception and practice towards the climacteric state.
- ii. To identify the factors associated with their knowledge, perception and practice.
- iii. To develop and distribute an educational package about climacteric changes and its management.
- iv. To reduce the reproductive health (climacteric) morbidity rate among the middle aged group of women.

### **1.6 Operational definitions:**

- Climacterium: It is a period in women's life during which there is regression of the ovarian function. This covers a wide period ranging five to ten years. The term menopause and climactic are used interchangeably.
- Menopause: Permanent cessation of menstruation at the end of the reproductive life due to ovarian follicular inactivity.
- Pre-menopause: First phase of menopause when fertility decreased and menses become irregular which may last few months or a year.

- Peri-menopause: Perimenopause is defined as the transitional period from the normal menstrual periods to no period at all. The transition can and usually do, take up to ten years.
- Post-menopause: Once the menopause has taken place, a woman is considered to be "postmenopausal". It begins officially the ovaries can no longer produce ova. In other words, natural ovulation is no longer possible.
- Officer level: It includes ranks of 2<sup>nd</sup> Lieutenant and above.
- Other ranks: It means all ranks below officer level in Army.
- Military Personnel: Officers and other ranks of Royal Nepalese Army.
- Military Personnel's wife: Wives of the officers and other ranks of the Royal Nepalese Army.
- Perception: Verbal information provided by pre menopause and menopause women of their mental registration towards the menopausal problems.
- Problems: Pre menopausal and Menopausal women facing physical, mental, social and biological difficulties.
- Practice: Looking forward with health seeking behavior for treatment of pre menopausal and menopausal problems by either traditional methods or medical methods.
- Artificial Menopause: Menopause resulting from other than the natural physiological alteration. It means cessation of menstruation produced by some artificial means.
- Premature Menopause: Menopause occurring before the age of 40.
- Knowledge: Awareness, understanding and familiar about menopa

## 1.7 Study Variables

### Independent variables

- Socio-demographic characteristic
- Information and knowledge about menopause
- Awareness of menopausal state

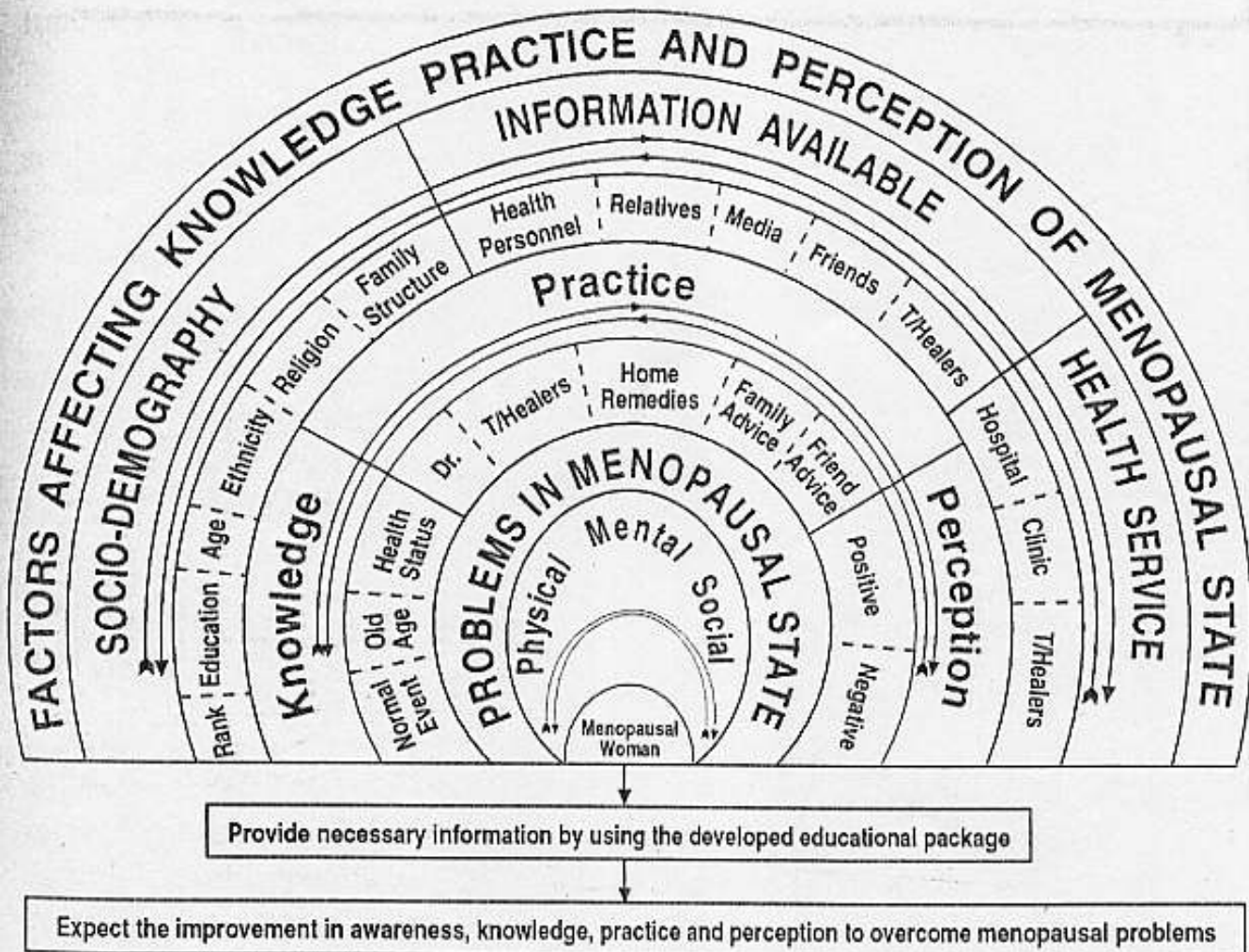
### Dependant variables

- Perception, practice and problem faced towards climacterium women among the study sample

# CONCEPTUAL FRAMEWORK

Conceptual framework is network of concepts and relationship within which research questions are asked and data are integrated (Wood and Colonzare, 1998).

This conceptual framework was developed to get an insight into the information about knowledge, perception and practices of menopausal state.



The investigator has selected Madeleine Leiniger's cultural care theory for conceptual framework. Because in her theory she focuses on health care practices by taking consideration of client's cultural value and health illness contest, to provide meaningful and effective health care.

The investigator developed educational package after assessing the knowledge, perception and practice of women towards menopausal state, after pre-testing and implementing the package.

# Chapter II

## Literature Review

### 2.1 Introduction

This chapter deals all the literature related for literature review. For this, journals, reports, research papers, magazines, articles, books and some abstracts from Internet. Very few literatures on the menopausal state in Nepal were found.

The aim of this literature review was to confirm and find data related to the study. The available literature helped to gain deeper insight on the subject matter.

The literature reviewed included:

- 2.2 Literature related to general information about menopause.
- 2.3 The current global state and problems on menopause.
- 2.4 Menopausal related state and problems in Asia and Nepal.
- 2.5 Literature related to Hormone replacement therapy.
- 2.6 Summary of literature review

### 2.2 Literature related to general information about Menopause:

In 1816 de Gardanne defended the menopause as a syndrome as "menopause". It took 73 years to defend menopause syndrome in an English article by Cloustan under the title of "Historical madness". In 20th century the term menopause appeared in medical literature. Scientist agreed that the climacterium was the physical and psychological imbalance. This is not based on sound research but on prejudices. The critical phase was to name menopause. It was considered a disease that must be treated. (7)

Artificial (Surgical) Menopause may result from other than the natural physiologic alternate of the climacteric. The term's 'artificial menopause' describes the cessation of menstruation by some artificial means such as radiation of the ovaries or surgical operation of the removal of the ovaries or the uterus. Premature menopause is menopause occurring before age of 40. Possible causes include a genetic predisposition and auto immune disorder, in which anti bodies are produced that can damage a number of glands, including the ovaries. Smoking also cause premature menopause . (8)

Estrogen level decrease during perimenopause. The level gradually decline until a woman stops menstruating. Until then, a woman is in perimenopause. Perimenopause is also called premenopause. Egg production by the ovaries is falling, and estrogen is also diminishing. The production of progesterone also lessens, especially if women ovaries are no longer ovulating. These hormonal fluctuations vary from woman. The symptoms vary from woman to woman. Only 30% of women see a healthcare provider about symptoms of perimenopause. The other 70% either do not have severe symptoms, or they get used to them. About 90% of women have changes in menstruation. Some women have severe some mild or no symptoms. Fertility decrease but women can still get pregnant. A woman who does not wish to get pregnant needs to use birth control devices. (9)

Susun S Weed in Journal of Nurse-Midwifery writes that, the women's mystery stories indicate that menopause is a health promoting and life extending event, not a deficiency state. Some authors suggest that premenopausal women are suffering from estrogen poisoning. Menopause may be a prime factor in women's greater longevity. Perhaps the foregoing the risk of childbearing improves a woman's chances of living into her 80s and 90s; or perhaps the cessation of estradiol production confers a direct benefit. Estradiol is highest when women is having menstrual cycle. Reduction of number of menstrual cycle in women's lifetime, such as pregnancy, lactation, late menarche, early menopause, significantly reduces her risk of breast cancer. Since the risk of all types of cancer, including breast cancer, increases with age-breast cancer risk is one in 50 at the age of 50 years, and one in 24 at the age of 60 years. Perhaps, it is in best interest of women that her production of cancer promoting estradiol ceases as her risk of age related cancer rises.(10).

### **2.3 The Current Global Problem on Menopause:**

In "The Health of Women" edited by Marge Kablinsky and Judith Jillgay writes that in western countries, midlife women with dysporic moods were often labeled as suffering from involuntal melancholia or an "empty nest syndrome". Psychoanalytic theory describe menopausal symptom is loss of femininity and castration of anxiety. Psychiatric symptoms during menopausal year now rearily attributed to menopause midlife women still receive more prescription for psychotropic drugs compare to women of other age group. Post menopausal women in some developing countries may expect to live another twenty years while western women may expect to live another thirty years. Physical and mental health, income, education, mental status, social integration, environmental stressors and support as well as attributes towards ageing and gender all affect the quality of life and ability to cope of older women. Improving their quality of lives should be an important component of primary care and healthy public policy. (11)

Dr. Robert Lindsay of Helen Hayes Hospital, NY, writes in "Long Term Effects of Menopause" that one of the most important health issues for middle-aged women is the threat of osteoporosis. It is a condition in which bones become thin, fragile, and highly prone to fracture. Numerous studies over the past 10 years have linked estrogen insufficiency to this gradual, yet debilitating disease. In fact, osteoporosis is more closely related to menopause than to a woman's chronological age. Each year about 500,000 American women will fracture vertebrae, the bones that make up the spine, and about 300,000 will fracture a hip. Nationwide, treatment for osteoporotic fracture costs up to \$10 billion per year, with hip fractures the most expensive. Vertebral fractures lead to curvature of the spine, loss of height, and pain. A severe hip fracture is painful and recovery may involve a long period of bed rest. Between 12 and 20% of those who suffer a hip fracture do not survive the 6 months after the fracture. At least half of those who do survive require help in performing daily living activities, and 15 to 25% will need to enter a long-term care facility. (12)

According to the book "The Menopause, Women's Body, An Owner's Manual" Meditterian and black women experience relatively early puberty and menopause. With such groups, however, women of some families begin and cease menstruating earlier or later than their ethnic norm. High living standard tends to prolong a woman's reproductive life, while poor living conditions shorten it. Heavy smoking is known to bring forward the date of the menopause by as much as 2 years. If a woman aged 40 has a child, menopause may be delayed. The menopause occurs at different ages in different individuals. A study conducted on American women shows that 25% women by the age of 47 reaches menopausal stage, similarly 50% women by the age of 50 years, 75% women by the age of 52 years and 100% women by the age of 55 years. It indicates that American women reach the menopausal stage from 47 years. (13)

A study was conducted by Department of Medicine, Michigan State University, USA, on Low income Perimenopausal African-American women to determine knowledge on menopause and HRT. The result shows that the lack of knowledge about menopause, HRT and lifetime risk of heart disease suggest that low income African- American women need better information for decision making about prevention. However this sample know the rank order of major health risks. Health information to the public and culturally relevant patient education are critical prerequisites to any preventive behavioral strategies in this population. (14)

According to the Peapack, Nursing Journal, of November 15, 2001, new research with Caucasian, African-American, Hispanic and Asian Women, in the United States suggest that cultural influence show women experience the emotional and physical changes brought on by menopause. One of the most striking observations, researcher say, is that women across all cultural groups want more



education about menopause. Despite education efforts over many years time, women still are not sure when menopause begins and ends, or what the symptoms or treatments are. Women of different ethnic groups experience the "classical" symptoms of menopause in varying degrees (hot flashes, fatigue, weight gain, moodiness and vaginal dryness) with Asian women experiencing the least symptoms and Caucasian women the most. "We found that each cultural group has it's own concerns and coping mechanisms to deal with menopause," says Dr. Baba. African-American are most optimistic, Caucasians most anxious, Asia most muted about symptoms, while Hispanics are most stoic. The majority of survey participants are optimistic about menopause; yet, four of the five most common feelings felt during menopause across all groups are negative; moody, old, depressed and unattractive. Additionally, fewer than one in four women surveyed still feels romantic, beautiful, energetic or youthful. (15)

According to "Menopause What To Expect" (16) Hot flashes, or flushes, are the most common symptom of menopause, affecting more than 60 % of menopausal women in the U.S. 80% of all women with hot flashes have them for 2 years or less, while a small percentage have them for more than 5 years. They can be mild or severe enough to wake you from a deep sleep. Others have experienced that caffeine; alcohol, hot drinks, spicy foods, and stressful or frightening events can sometimes trigger a hot flash. However, avoiding these triggers will not necessarily prevent all episodes. However, a study by psychologists at the University of Pittsburgh suggests that menopause does not cause unpredictable mood swings, depression, or even stress in most women. In fact, it may even improve mental health for some. This gives further support to the idea that menopause is not necessarily a negative experience. The Pittsburgh study looked at three different groups of women: menstruating, menopausal with no treatment, and menopausal on hormone therapy. The study showed that the menopausal women suffered no more anxiety, depression, anger, nervousness or feelings of stress than the group of menstruating women in the same age range. In addition, although more hot flashes were reported by the menopausal women not taking hormones, surprisingly they had better overall mental health than the other two groups. The women taking hormones worried more about their bodies and were somewhat more depressed. Pittsburgh findings are supported by a New England Research Institute study which found that menopausal women were no more depressed than the general population: about 10% are occasionally depressed and 5% are persistently depressed. The exception is women who undergo surgical menopause. Their depression rate is reportedly double that of women who have a natural menopause. Studies also have indicated that many cases of depression relate more to life stresses or "mid-life crises" than to menopause. (16)

## 2.4 Menopausal related state and problems in Asia and Nepal

According to Lack, pre and postmenopausal women in Japan has low response to symptoms related to menopause. Study report shows that indication of hot flushes is low among Japanese women. It is believed that Japanese diet which contain natural estrogen contribute for low rate. But feeling like sadness, uselessness are also expressed by Japanese women. 50 and above aged Japanese women mentioned that they live subordinated lives in which their fate were strongly linked to their husbands family. Other women regret for not having control over own reproduction, but they did not feel that their position was inferior to that of younger Japanese women. (17)

"The Menopause in Hmong Women" by Rice, P.L. in Journal of Reproductive and Infant Psychology writes a study among Hmong women from Laos suggest that "Hmong women see menopause as part of growing old. A woman becomes menopausal only when she has born all of her children." In the Hmong language there is no equivalent word for menopause. The concept of menopause is understood as "Tsis coj khaub Ncaws Lawm", which means no more menstruation. In general menopause is associated with "Pog laus" the terminology used for old lady. Once menstruation has ceased a woman becomes clean like a man and she is able to relax more. It appears that Hmong women perceive menopause as positive. Menopause is interpreted as the consequence of transition from fertility to infertility. Hmong women also believe that early menarche means early menopause. (18)

According to Dennis Coday in "The Culture of Healing" in Thailand they call menopause, "wai ngrm". The phrase really means "a particular kind of middle-aged woman who is strong, wise and attractive," says Dr Suwipa Punyahorta. It reflects the positive attitude Thai women have toward menopause-as a natural phase in life. This is not to say that menopause is always smooth transition. Some associated biological changes are less marked in Asian than in Caucasians-for instance, a lower incidence of hot flashes. (19)

In a study "Menopause-a part of ageing process" by Malini Karkal on Indian women says that menopausal changes are new phenomenon both in women history and medicine. Because it is natural part of ageing and the end of menstruation and proceeds cessation of ovarian function by several months. In India field investigation have shown that over 20% of the women experience no more than the cessation of menstruation. Studies have shown that mean age at menopause in India is around 44 years, and varies from 38 to 52 years. It was also observed that neither the number of children a woman had nor the rural/urban residence had any effect on the age at which a woman reaches menopause. Menopause can occur earlier due to hereditary factors, health condition, exposure to radiation and surgical removal of ovaries. However women belonging to higher socio-economic group, those who are better nourished and those living at lower altitude have a later age of menopause. Eating right, regular

exercise, etc, helps in maintaining a healthy life after menopause. On the positive side is the fact that many women feel relieved that they are free of menstruation and the fear of pregnancy. (20)

According to Prof. Kanti Giri and Dr. Archana Amatya the average age of menopausal women in Nepal is 49.2 years, which is 2 years less than of developed countries women. The most common symptoms were urinary symptoms, hot flushes, mood swing and depression. In the hospital 40% had come for gynecological symptoms other than menopause, 20% were prescribed HRT out of which 12% discontinued after 6 months. Hence HRT is not considered important. The extreme poverty together with high cost of HRT and lack of knowledge are responsible for not accepting HRT and is discontinued. (21)

According to Raj Kumari Gyawali, sent percent respondents were illiterate but they were familiar with term of menopause. Majority of respondents were of Hindu religion. She found 48% menopause age were between age of 46 to 50 years, 66% respondents have children age more than five years, sent percent respondent have not used family planning. 94% do not seek medical help during the menopausal problem, 24% had complained of menopausal problems, among them 91.6% have problem with hot flushes, vaginal dryness, 75% have itching of vagina, 50% dyspareunia and 41.7% have headache. She mentioned that they have normal intake of food patterns and involve in household activities. No any special treatment needed for them. (22)

## **2.5 Literature related to Hormone replacement therapy**

Hormone Replacement Therapy (HRT) consists of supplementary estrogen and progestogens in the forms of pills, injections, implants, skin patches or creams. HRT for menopausal women began in the US more than 30 years ago; to day more than 10 million American women are estimated to be receiving it. Women who do not experience uncomfortable menopausal symptoms may not need it, but many have claimed that it has transformed their lives. HRT especially benefits women who have an early menopause, have their ovaries removed, take corticosteroids for asthma and have a high risk of osteoporosis. Many of the most uncomfortable symptoms of the menopause, especially hot flushes and genital itching and dryness, clear up with HRT. Most important, it is proved to be effecting in treating osteoporosis; it stops further deterioration of the bone mass, even restoring it in some cases. HRT may have minor side effects, such as blotting and nausea, but these are normally temporary. On the contrary, when taken properly under the care of a knowledgeable health care provider, the combination of estrogen and progestogens virtually eliminates the risk of cancer. There is a clear evidence that HRT may reduce the risk of heart disease. Only women with condition such as breast cancer, a history of pulmonary embolism (a blood clot in the lungs), or active liver disease should not receive HRT. (13)

Sophia Severance and Annette Galassi mention, estrogen replacement therapy (ERT) can almost immediately reverse many of the unpleasant symptoms of menopause. Not only the hot flashes, depression, insomnia and irritability eliminated but also the risk of osteoporosis and cardiovascular disease can be reduced. However its use is avoided in women with a history of breast or endometrial cancer, acute or chronic liver disease and thromboembolic disorders. The contra indications in patients with a history of breast cancer is currently being examined in light of many benefits of estrogen therapy. However, many women who have been treated for cancer may need to consider nonhormonal options. (23)

According to William B Abrahm, MD; the effect of menopause on sexuality may include vaginal dryness, leading irritation, less acidic vaginal secretion, with greater possibility of vaginal infection. Whereas approximately 40 million post menopausal women in USA, 4 million take estrogen for menopausal symptoms and is especially effective in controlling hot flushes and vaginal dryness. But in late 1970s however a higher rate of endometrial cancer was found to be associated with estrogen use, so many women discontinue it. Recently estrogen replacement therapy has regained, favor for the relief of menopausal symptoms, but at a lower dose and often in combination with progesteron. However many women still skeptical and often experience "estrogen anxiety" a new psychology issue of midlife sexuality. A woman should be help to understand and practices self-management of menopausal symptoms, for example; aerobic exercise, relaxation technique, meditation, massage and yoga. (25)

Professor Pradhan and Senior Cardiologist AV Upadhyaya had done study on coronary heart disease in postmenopausal women and role of hormone replacement therapy for its prevention. This study is mainly concentrated on coronary heart disease/MI in postmenopausal women. In Kathmandu valley including suburbs with approximate population of 700,000: the prevalence rate of CHD in adult population is at 0.07% and MI in postmenopausal women is at 0.01% as shown by this study. In most of the developed countries, the set standard was that barring any contradiction, all postmenopausal women with acute myocardial infraction should be prescribed hormone replacement therapy before being discharged from the hospital. However in this study HRT in postmenopausal women with myocardial infraction has not received much attention. Professional caring for women who have had MCI need to consider HRT as a secondary prophylaxis of MI. Gynecologist should laise with colleagues in other specialist to ensure that information of non-gynecological benefits of HRT is widely disseminated. (26)

Dr Meeta Sing. Dr. Rajshree Jha and Dr. Ashma mention that with high life expectancy women will spend more than 1/3 of life in postmenopausal state. This study mentioned various methods of Hormonal replacement therapy. The oral route

has been used for over three decades, main drawback of oral route is hepatic first pass metabolism. In recent year several non-oral route which avoid hepatic pass metabolism have been used in Hormone replacement therapy. But recently transdermal patches known as Estradermal, and system, which represent a recent advance in Hormone replacement therapy. (27)

## **2.6 Summary of literature review.**

Menopause is a natural change in life of women. According to the literature review it is found that, women from western countries are more aware of this problems than of least developed countries. Many studies have been done in western countries about menopause. Majority of women from western countries and in southeast Asia are found practicing medical treatment and home remedies. They are also practicing HRT as well as, by trying to change their life style.

Literature focus that the climacterium time starts in middle age-about the average age of 51. Some women can begin menopause about 40-others no sooner than 55 years. Literature shows that there is no single factor which start menopause. Preexisting like genetic (familiar predisposition), stress, high activities at work, drugs, cigarettes may influence the time of climax. In contrast, factors like age of first menstrual bleeding, number of children do not actually count in the time of menopause appearance.

During the transitional period of menopausal state, different symptoms occur. According to the literature, majority of women do not perceive symptoms at all. Whereas minority of the women perceive it very severely. Some of the reason of feeling severely could be the lack of awareness, lack of knowledge, non-availability of medical facilities and also by the culture and traditions of the countries. According to the medical practicers from western country, menopausal problems could be treated by Hormone Replacement Therapy, counseling, change of the life style, etc. It is said to be very effective, according to the report.

Literature focused that, perception towards the menopausal state by developed countries women are positive. For example; free from the pregnancy, no obligation for monthly period, free from socio-cultural restrictions, etc. But in the least developed countries, women have misconcepts about menopause. For example; loss of feminity, loosing physical and mental strength, etc.

## Chapter III

### Research Methodology

#### 3.1 Introduction

This chapter deals with the study methodology of this research. It consist of brief description of research design, selection of population, sample size and instrument for data collection measurement and analysis and interpretation of study findings.

#### 3.2 Study design

This research study was based on descriptive and exploratory research design to find out the knowledge, perception and practice about the menopausal state in the women. This study incorporate both descriptive information (quantitative) and qualitative information (focus group discussion and in-depth information).

#### 3.3 Study location

The study was conducted in all the family quarters and residence in Kathmandu Valley of military personnel. As they are part of Royal Nepalese Army, they can be considered, as part of a homogeneous group and their place of residence is concentrated in a few important locations. The study locations covered during research were: Lagankhel Family quarter; Dallu Family quarter; Basbari Family quarters; Airport Family quarter; Suryabinayak Family quarter, Tokha Family quarter and Bijeswari Family quarter.

#### 3.4 Study population

The respondents included for the research were wives of military personnel of Royal Nepalese Army. Wives of military personnel who are now living in official family quarters and in their own houses were included. All wives were of age between 40 to 60 years . For indepth interview and focus group discussion same interviewed women were included.

Two focus groups were formed for the discussion. One group consisted of eight officer's wives and another group consisted of eight other rank's wives. All the participants of focus group discussion were selected from 102 respondents.

For in-depth interview, four participants were selected from 102 respondents, who were not in focus group discussion.

### 3.5 Estimation of sample size

Formula used: Population proportions for one sample.

$$n = Z^2 \alpha / 2 P(1-P) / d^2$$

Where  $Z\alpha/2$  = is the normal deviate (if alpha equals 0.05 for 95% confidence interval  $Z^2\alpha/2$  is 1.96)

p = expected prevalence of outcome 35%

d = precision of estimate 10%

$$n = Z^2 \alpha / 2 P(1-P) / d^2$$

$$n = (1.96)^2 \times 0.35 (1-0.35) / (0.10)^2$$

$$n = 3.8416 \times 0.2275 / 0.01$$

n = 87, Total sample required for study was 87.

Beginning of the proposal, sample size was calculated, which based on 10% error though, estimated sample was 87, investigator included 102 samples which may increase power of study or reduce the error.

### 3.6 Sampling technique

Probability sampling technique was used. All the probable and eligible subjects were included in the study. During the study all the subjects had equal chance for being selected to the study. All those in 40 to 60 years of aged women were contacted for sampling. The 102 subjects were selected for sampling who fulfilled inclusive criteria. An interview conducted with wives of military personnel in different day to day situation at family quarters and residences, 3 to 8 wives in average.

### **3.7 Following criteria were also put for the selection:**

#### **Inclusive criteria**

- Women between the age of 40 to 60 years.
- Wives of military personnel
- Living in family quarters or residence of Kathmandu Valley

#### **Exclusion criteria**

- Who are not willing to participate
- Women with history of hysterectomy and chronic illness.
- Divorce, separated family
- Using family planning method at present

### **13.8 Data collection instrument**

Structured and semi-structured questionnaire were prepared for interview for quantitative and qualitative data collection.

The development and selection of the tool was based on the objective and variables under study.

The instrument was prepared for data collection after extensive related literature reviewed.

Instrument were prepared in english, it was filled by investigator herself after asked in simple language.

The developed educational package in english and translated it in simple Nepali.

### **3.9 Validity and reliability**

For the validity and reliability of instrument the following techniques were applied:

- Extensively related literature were reviewed for validity and reliability.
- Consultation with Gynecologist, Obstetrician w for review of the questionnaire and feedback was obtained
- Consultation with research guide, expertise, statistician and colleagues were also concerned for the questionnaire and feedback was incorporated.
- Pre-testing done in ten percent of population in similar situation at family quarter and residence of military personnel some questions were modified.
- The questionnaire was guided by objective simple and understandable language.



## **Validity and Reliability:**

Pre-testing the prepared questionnaire among the 10% respondents in similar setting, to determine clarity, consistency and adequacy of measuring the instrument. After analysis, modify the instrument by added and deducted some questions, after the consulted with research guides and expert.

The modified questionnaire were tested among same subject, twice in the interval of 10 to 15 days based on test retest method.

After achieve consistent result from the instrument assuming that the relevant characteristic of subjects are stable, before actual data collection.

### **3.10 Ethical Consideration**

- Approval from thesis advisory committee of the Nursing Campus was obtained.
- Informed written approval from authority and verbal consent from the study subjects was obtained.
- Routine activities of the respondents were not disturbed.
- Respected norms and values of the respondents.
- The data collection was done with the help of research instrument.
- The confidentiality of the study was maintained.
- To correct the misunderstanding toward menopausal state necessary information was given.

### **3.11 Data collection procedure**

- After granting permission and receiving the list of respondent's data collection was started.
- The total duration of data collection was four weeks.
- Interview was conducted in a separate room in family quarter and in the residence also. During the interview, strict privacy was maintained.
- All interviews were conducted by investigator herself in simple language.
- Each day 5 to 10 interview were conducted.
- After the interview all the forms were checked for completion and correction of error, in the same day.
- From 102 respondents, eight wives from both ranks, were selected for focus group discussion. Date and time for discussion was fixed with them. Duration for each focus group discussion was 2 to 3 hours. It was conducted only one time for each group, utilising the tape recorder and note taken. At the end of discussion all the note and recorded comments were checked. Those incomplete and confusing information were rechecked with respondents.

- In depth interview was conducted with two respondents who were more informative, cooperative and willing to participate with the permission from the family were included. Tape recording and note taking was used, time duration was 3 to 4 hours for each respondent. Similarly, all the confusing and incomplete information were rechecked and corrected.

### 3.12 Data generation and Storage

- At the end of the day, all completed questionnaires were checked for its completeness and accuracy, by the investigator.
- At the end of the data collection, all the data were rechecked and kept in order for editing and coding

### 3.13 Limitation of study

- Generalizability: the research study has covered only the wives of military personnel who are living in Kathmandu valley. It is a small scale study, because of the time and area limitation.
- This study could not generalise to the population in the community.

### 3.14 Data processing and analysis

- Reviewed and checked all the collected data for accuracy and completion.
- The data were edited and coded by the coding instructor.
- To describe the data structure, descriptive statistic such as frequency distribution, proportion, percentage, mean and standard deviation (SD) were calculated.
- Chi-squared test used to determine the association between the variables of interest and the level of significance was set at 0.05.
- The data was entered, processed and analysed by computer statistical software EPI-INFO version-6.
- According to different variables data was presented in tables, gra and charts.

## Analysis and interpretation of data

This chapter deals on the descriptive analysis and interpretation of responses given by the respondents to the research questions. In the total of 102 respondent's 51 officer's wives and 51 other rank's wives were interviewed and included in analysis. No one refused for the interview. Among the 102 respondents 16 were included in focus group and 4 in in-depth interview.

The research questions were arranged in following parts:

- 4.1 Socio-demographic characteristic of respondents
- 4.2 Information related to family relation during menopausal problems
- 4.3 Information related to help seeking practices during menopausal problems
- 4.4 Information related to the Knowledge about menopausal changes.
- 4.5 Information related to perception towards the menopausal state
- 4.6 Information related to existing practices to overcome menopausal problems

### 4.1. Socio -Demographic Information of Respondents:

The first part of the questionnaire deals with age, education level, ethnicity, religion, occupation, family structure and number of children of wives of officers and other ranks of the Royal Nepalese Army.

**Table-4.1.1**

Distribution of women according to socio-demographic characteristics and husbands rank  
N total 102 (officer= 51, non-officer=51).

Variables	Rank				Chi2 P-value
	Officers No (%)	Non-officers N (%)	Total N (%)		
<b>Age in year</b>					0.454
40 - 44	18 (35.3)	13 (25.5)	31 (30.4)		
45 - 49	16 (31.4)	21 (41.2)	37 (36.3)		
50 - 54	14 (27.5)	16 (31.4)	30 (29.4)		
55 and above	3 (5.9)	1 (2.0)	4 (3.9)		
Mean age (SD4.67)	47.33	46.94 (SD 4.12)			

Among the 102 respondents, majority of respondents 36.33 % belong to age group of 45-49 yrs. Standard deviation is 4.67 in officers rank followed by 4.12 in other rank. The mean age of officer is 47.3 and for other rank is 46.9 .

**Table- 4.1.2**

Distribution of women according to socio-demographic Education level.  
 N total 102 ( officer= 51, non-officer=51).

Variables	Rank				Chi2 P-value
	Officers		Non-officers		
Education level	No	(%)	N	(%)	N (%)
Illiterate	0	(0.0)	32	(62.7)	32 (31.4)
Primary	5	(9.8)	16	(31.4)	21 (20.6)
Secondary	6	(11.8)	2	(3.9)	8 (7.8)
Higher secondary	12	(23.5)	1	(2.0)	13 (12.7)
Graduate and above	28	(54.9)	0	(0.0)	28 (27.5)

Above table shows that among the 102 respondents, higher percentage 31.4% of respondents were illiterate followed by 27.5% found graduate. There are significant association between the education level and rank of the respondents (P- value=0.000).

**Table - 4.1.3**

Distribution of women according to socio-demographic Occupation level.  
 N total 102 ( officer= 51, non-officer=51).

Variables	Rank				Chi2 P-value
	Officers		Non-Officers		
Occupation	No	(%)	N	(%)	N (%)
Housewife	28	(54.9)	26	(51.0)	54 (52.9)
On job	23	(45.1)	25	(49.0)	48 (47.1)

More than 50% of the respondents from both groups were housewives. There is no significant association between the rank and occupation of the respondents (P-value=0.692).

**Table - 4.1.4**

Distribution of women according to socio-demographic Religion level.  
N total 102 ( officer= 51, non-officer=51).

Variables	Rank						
	Officers		Non-Officers		Total		Chi2 P-value
Religion	No	(%)	N	(%)	N	(%)	
Hindu	49	(96.1)	49	(96.1)	98	(96.1)	1.000
Buddhist	2	(3.9)	2	(3.9)	4	(3.9)	

Above table shows that, among the 102 respondents , majority of the respondents 96.1% belongs to Hindu religion. Regarding rank mjority from both rank are Hindu.Only 3.9% are Buddhist.

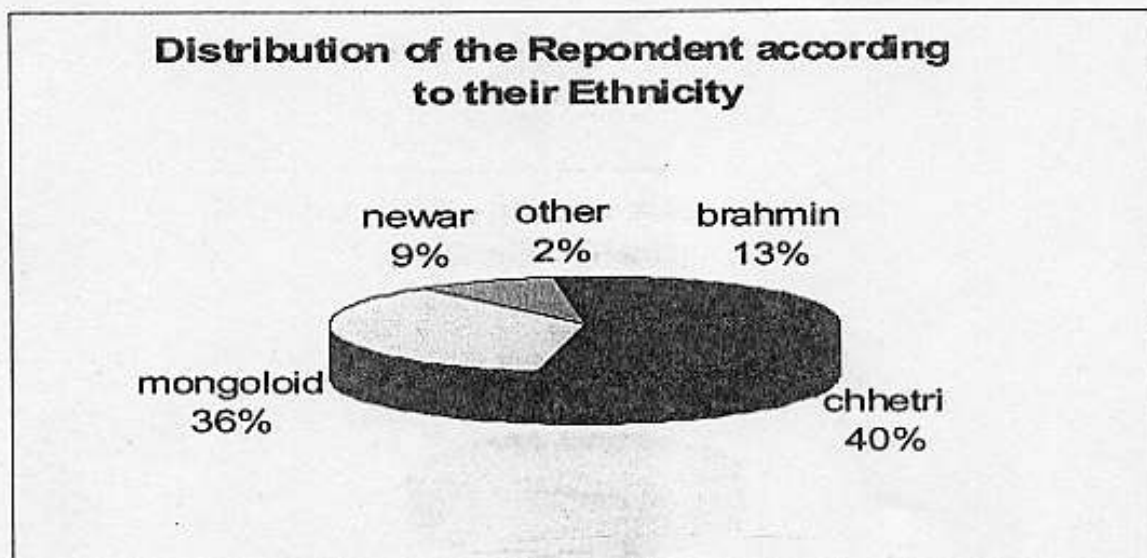


Fig-1

*Note: Mongoloids include Rai, Limbu, Gurung, Magar and Tamang  
Other indicates Tharu and Maji.*

Above chart shows that higher proportion (40%) respondent were from chhetri ethnicity whereas 36% from mongoloid ethnicity.

### Distribution of the respondent according to their Family Structure

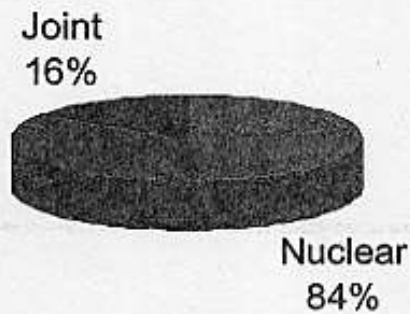


Fig-2

The higher percentage of respondent, 84% were living in a nuclear family whereas only 16% were living in a joint family. That may be due to facility of family quarters for the respondents.

### Distribution of Respondent according to their Smoking Habits

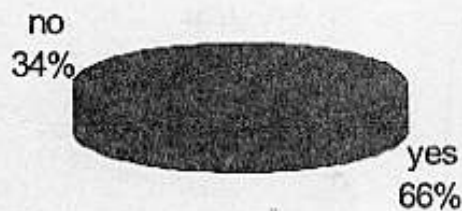


Fig 3

The higher percentage of respondents 66% smoke. Whereas 34% are nonsmokers. According to the literature women who smoke get menopause two years early than nonsmokers.

## 4.2 Information related to family relation during menopausal problems

This is the second part of the chapter, which deals with information on family relation during the menopausal problems. This information is analyzed and interpreted in terms of percentage which are as follows:

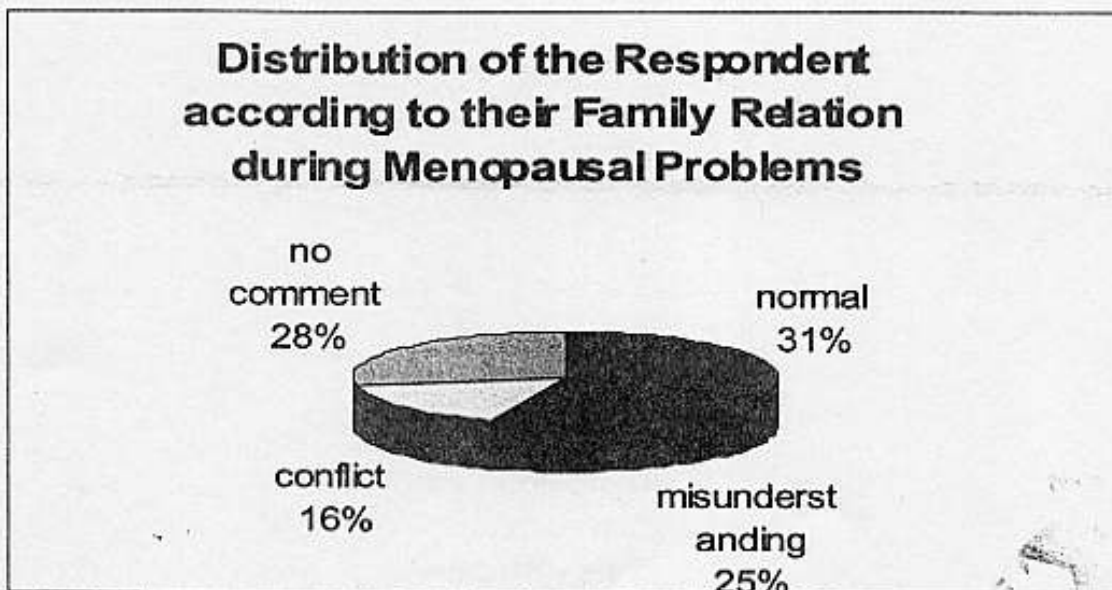


Fig 4

From the above chart investigator found that higher proportion respondents 31% having normal relation with family where as 28% had no comment in matter of family relation.

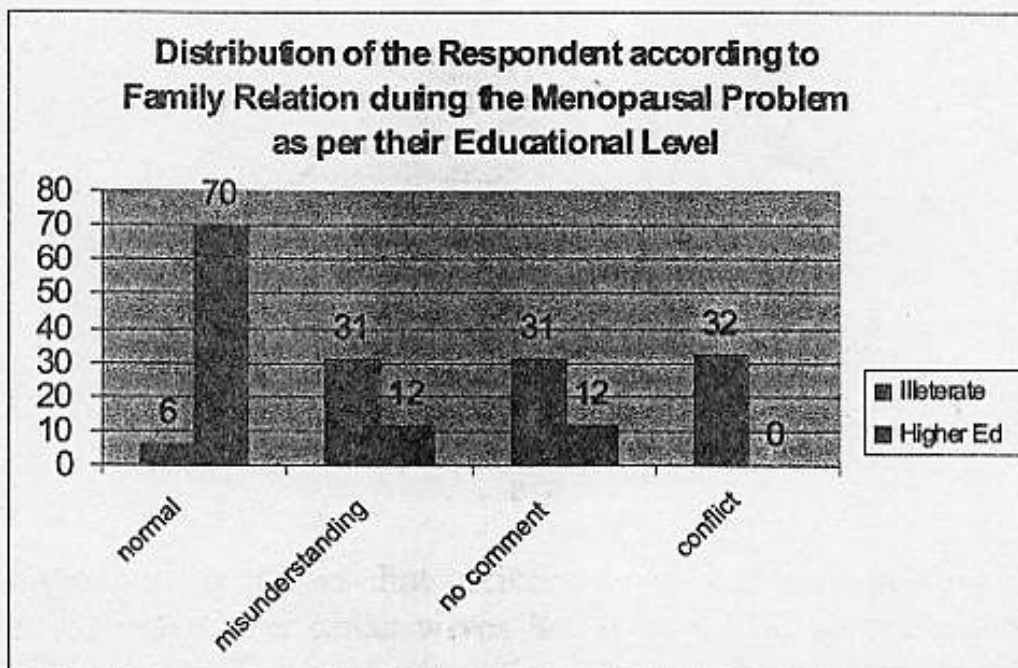


Fig 5

Above chart shows that higher percentage of higher educated respondent 70% having normal family relation followed by 32% of illiterate respondent having conflict

relation. There are equal percentage 31% illiterate respondent having misunderstanding and remain no comment on the matter of family relation.

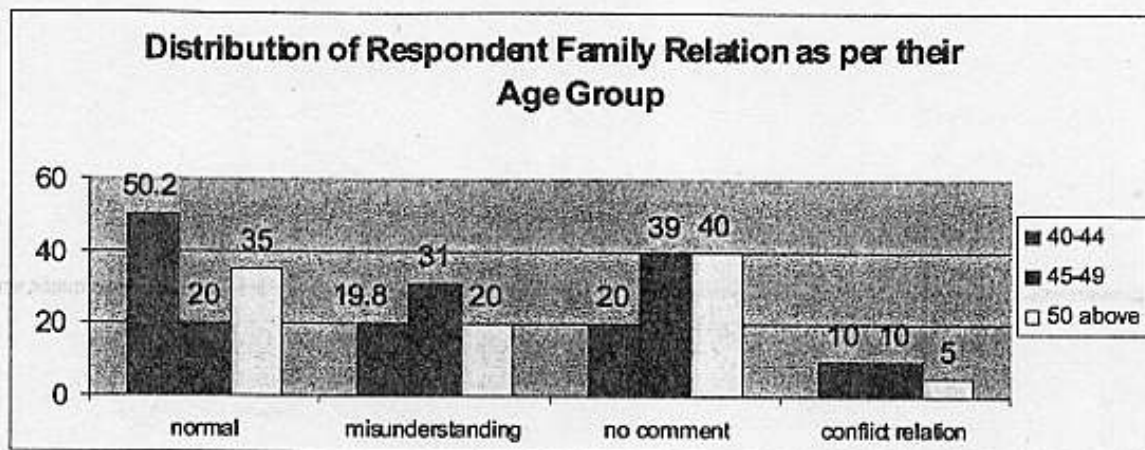


Fig: 6

This chart shows that the majority of respondent, 50.2% among the age group 40-44 have normal relation. Misunderstanding is highest 31% among the age group of 45-49. Conflict relation is highest 10% among the age group of 40-44 and 45-49.



Fig 7

The above chart shows that officers wives has high percentage (56.8%) of normal life whereas Other ranks wives has least (10%) percentage of normal life. Equal percentage (25%) from both ranks wives said no comment. In other ranks wives highest percentage (33%) is on misunderstanding followed by 32% in conflict relation. It indicates that living stander influences on family relation during menopausal problems.



### 4.3 Information Related to Help Seeking Practices during Menopausal Problem

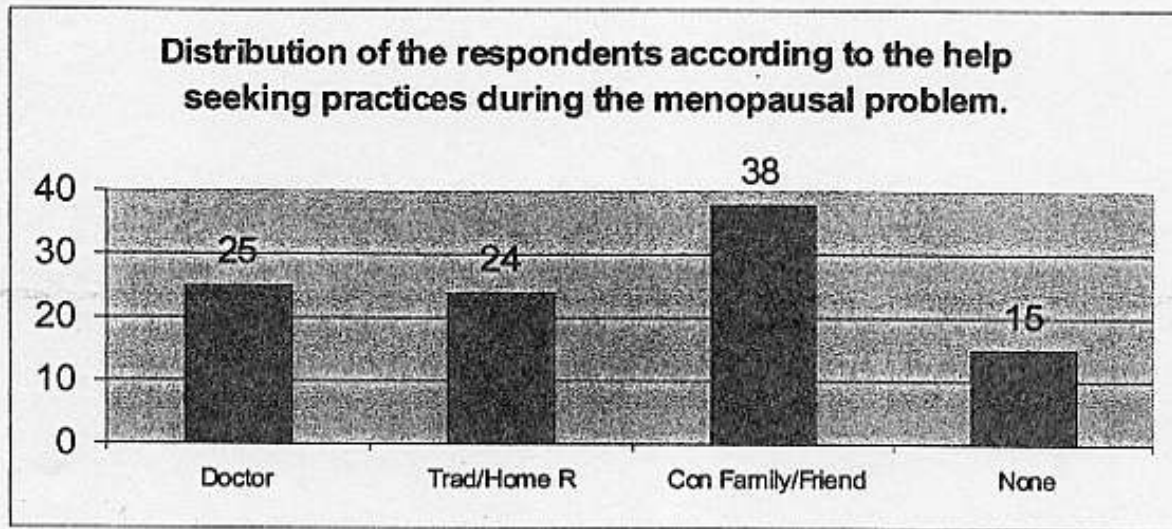


Fig 8

Above chart shows that among the total study population the higher percentage 38% were consulting family and friends during their menopausal problem. consulting with the doctors and the traditional healers were almost equal, 25% and 24%. As the majority of respondents consult family and friends it can be said that family and friends also play a vital role in solving the menopausal problem.

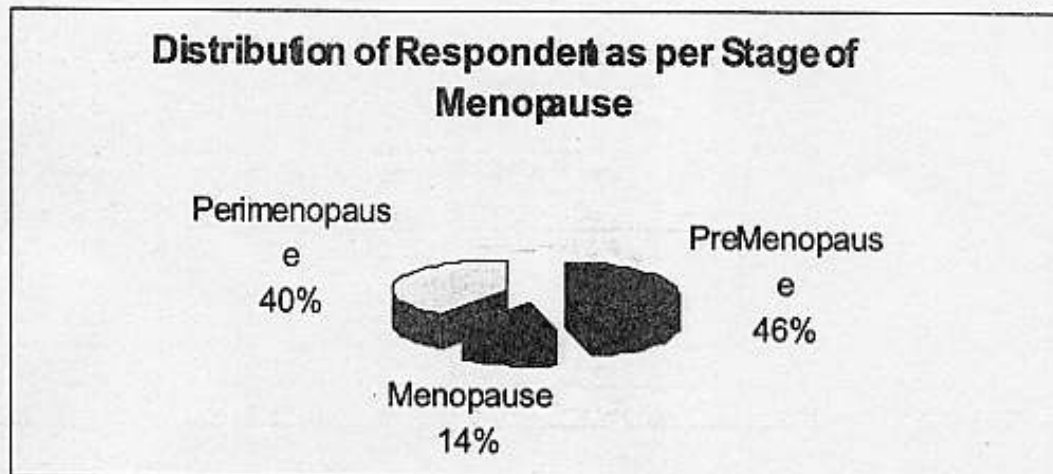


Fig 9

Above chart shows that majority of respondent are in pre and perimenopausal state. Similarly, majority age group of respondents were 40 to 44 and 45 to 49 years.

#### 4.4 Information Related to Menopausal Knowledge

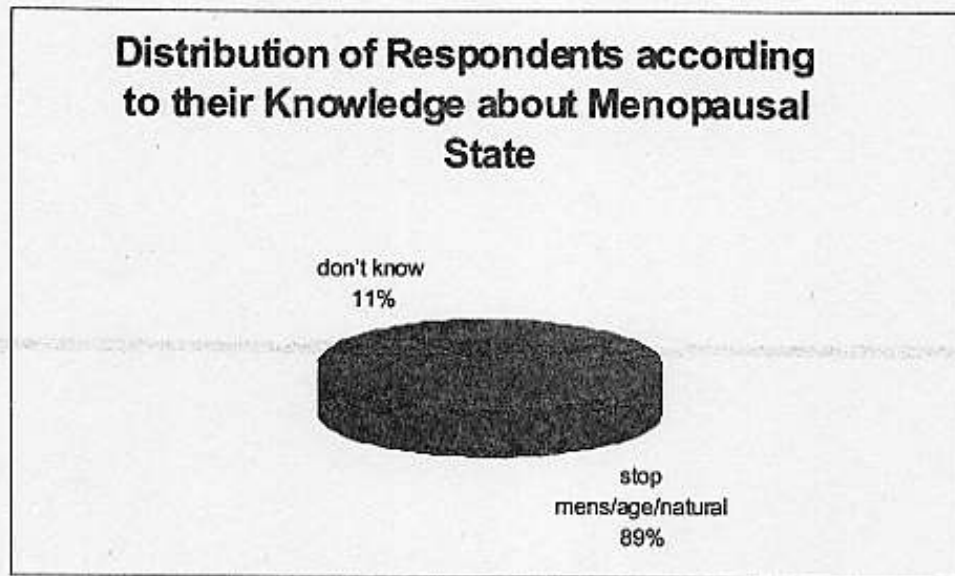


Fig 10

Higher percentage of respondent 89% have knowledge about menopausal state. Whereas 11% commented that they do not have knowledge of menopause. The above figure shows that majority of the respondent have a general idea about menopause.

#### Distribution of respondents as per Age group on the knowledge about Menopause

Table- 4.4.1

Knowledge	40-44 yrs		45-49 yrs		50 & above		Total		X <sup>2</sup>	p value
	No	%	No	%	No	%	No	%		
Stop menstruation due to age and natural events	25	80.6	36	97.3	30	88.2	91	89.2	4.91	0.085
Don't know	6	19.4	1	2.7	4	11.8	11	10.8		
Total	31	100	37	100	34	100	102	100		

Among the 37 respondents from age group 45 to 49 yrs, 97.3%, had knowledge about menopause. Whereas, among the 34 respondents of age group 50 yrs and above 88.3% also have knowledge about menopause. There is no significant association between age group and menopausal knowledge. (Chi square-4.91, P-Value-0.085)

## Distribution of respondents as per Education level on the knowledge about Menopause

Table- 4.4.2

Knowledge	High/Grad		Pri/Secon.		Illiterate		Total		X <sup>2</sup> p value
	N	%	N	%	N	%	No	%	
Stop menstruation due to age and natural events	41	100	28	96.6	22	68.8	91	89.2	20.51 0.000
Don't know	0	0	1	3.4	10	31.2	11	10.8	
Total	41	100	29	100	32	100	102	100	

Among the 41 respondent from higher educated wives had 100% knowledge about menopause. Followed by 96.6% among the 29 respondents from primary and secondary educated. There is significant association between the education level and knowledge about menopause. (Chisquare- 20.51, P-value-0.000)

## Distribution of respondents as per Knowledge of Menopause according to Rank

Table- 4.4.3

Knowledge	Officers wives		Other ranks		Total		X <sup>2</sup> p value
	N	%	N	%	N	%	
Stop menstruation due to age and natural event	51	100.0	40	78.4	91	89.2	12.21 0.000
Don't know	0	00.0	11	21.6	11	10.8	
Total	51	100	51	100	102	100	

The hundred percent of respondents from officers wives had knowledge about menopause followed by 78.4% of respondents from other ranks wives had knowledge about menopause. There is significant association between the standard of living and knowledge about menopause.(chi square- 12.21, p-value- 0.000)



#### 4.5 Information Related to Perception towards the Menopausal State

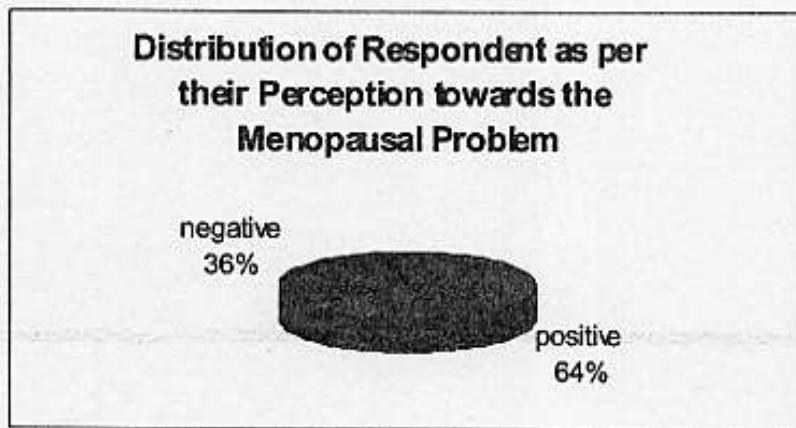


Fig 11

This chart shows that majority of the respondents perceive menopause positively which indicates that they are perceiving the symptoms of menopause as a part of age and being a natural phenomenon of life.

#### **Distribution of the respondent according to the Perception towards the menopausal state as per their rank**

Table- 4.5.1

Perception	Officers		Other ranks		Total		ChiSq	P-Val
	N	%	N	%	N	%		
Positive	35	69	30	59	65	64	1.05	0.3031
Negative	16	31	21	41	37	36		
Total	51	100	51	100	102	100		

Higher proportion of respondents (69%) from the officer's wives perceived menopausal problems positively followed by 59% of other ranks wives perceived positively. There is no significant association between stander of living and perception of the problems (Chi Sq 1.05 and p value 0.3031).

**Distribution of the respondent according to the Perception towards the menopausal state as per their Age**

**Table- 4.5.2**

Perception	40-44		45-49		50 above		Total		Chi Sq	P-val
	N	%	N	%	N	%	N	%		
Positive	12	38.7	12	32.5	23	67.5	47	46	9.82	0.0073
Negative	19	61.3	25	67.5	11	23.5	55	54		
Total	31	100	37	100	34	100	102	100		

The majority of respondents from 45 to 49 yrs group perceived negatively followed by equal percentage (67.5%) from age group of 50 and above perceived menopausal changes as positively. There is significance association between age and perception of problems (Chi Sq 9.82 and p value 0.0073).

**Distribution of respondents according to the perception towards the menopausal state as per their education level**

**Table- 4.5.3**

Perception	Higher/Grad.		Pri/Sec level		Illiterate		Total		Chi Sq	P val.
	N	%	N	%	N	%	N	%		
Positive	35	85.4	21	72.4	8	25.0	65	63.7	16.32	0.000
Negative	6	14.6	8	27.6	24	75.0	37	36.3		
Total	41	100	29	100	32	100	102	100		

The majority of respondents 85.4% from higher educated group used to perceive menopausal changes positively followed by 75% of illiterate wives perceived as negatively. There are significant association with education level and perception of the problems.

#### 4.6 Information related to Existing Practices to overcome Menopausal Problems

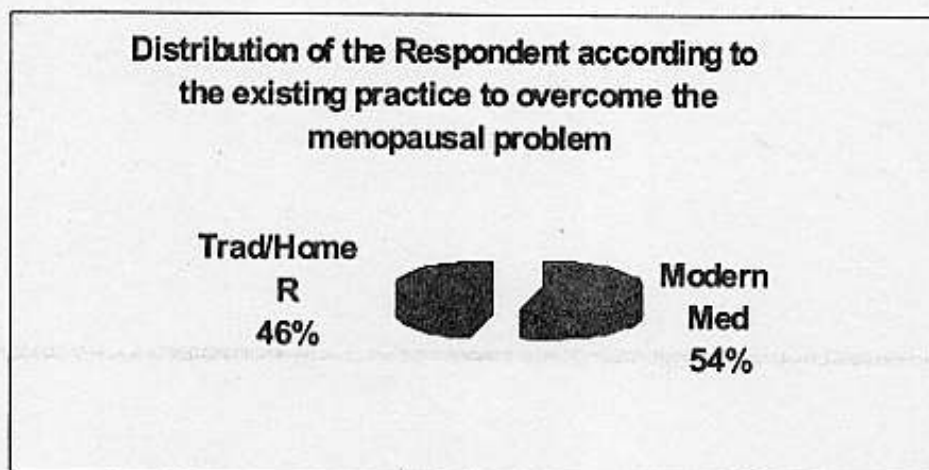


Fig 12

**Modern method:** *Physical fitness, Yoga, regular excercises, modify diet ,lifestyleand health habits.*

**Traditional methods:** *practiceing the advices of traditional healers, herbal and home remedies*

This chart shows that majority of respondents 54%were practicecing modern method where as46% were in traditional/ home remedies, it indicate women become aware menopausal state.

#### **Distribution of the Respondent according to the existing practices to overcome the menopausal problems as per their age group**

Table- 4.6.1

Variables	40-44		45-49		50 above		Total		Chi Sq	P-Val
	N	%	N	%	N	%	N	%		
Modern Medicine	21	67.8	19	51.4	15	44.1	55	54	1.99	0.3694
Traditional Methods	10	32.2	18	48.6	19	55.9	47	46		
Total	31	100	37	100	34	100	102	100		

Among the 31 respondent from the age group 40-44 years 67.8% were practicing modern medicine, which is higher than in other age groups. The highest percentage of respondents practicing traditional methods were from the age group of 50 above. There is no significant association between the age group and practice for the menopausal problems(chi square 1.99, P-value-0.3694).

**Distribution of the Respondent according to the existing practices to overcome the menopausal problems as per their Education level**

**Table- 4.6.2**

Variables	Higher/Grad		Primary/Sec		Illiterate		Total		Chi Sq	P-V
	N	%	N	%	N	%	N	%		
Modern Medicine	35	85.3	16	55.1	4	12.5	55	54	38.43	0.000
Traditional Methods	6	14.7	13	44.9	28	87.5	47	46		
Total	41	100	29	100	32	100	102	100		

Higher proportion 87.5% of the respondent practicing traditional methods from illiterate respondents. While higher proportion 85.3% of higher educated wives are practicing modern medicine. So there is significant association between the education and the practices for menopausal problems chi sq=38.43, p-val=0.000

**Distribution of the Respondent according to the Existing Practices to Overcome the Menopausal Problems as per their Rank**

Variables	Officers		Other Ranks		Total		Chi Sq	P-Val
	N	%	N	%	N	%		
Modern Medicine	45	88.2	10	19.6	55	54	47.86	0.000
Traditional Methods	6	11.8	41	80.4	47	46		
Total	51	100	51	100	102	100		

Higher proportion of respondent from the officer's rank(88.2%) are practicing modern treatment whereas higher proportion of respondent from other ranks (80.4%) practicing traditional methods. There is significant association between living standard and the practices to overcome the menopausal problem.( chi sq 47.86 P-Value0.000).

### Discussion, conclusion and recommendation

#### 5.1 Discussion of the findings

This chapter deals with the discussion focused on important findings presented and interpreted in earlier chapter.

#### Discussion related to socio demographic characteristic of menopausal state.

- Among the 102 respondents, 40.2% were chetri, 36.3% Mongoloid, 12.7% Brahmins, 8.8% Newars and 2% Others. (Fig No 1)
- In 102 respondents, majority 65.7% were from age group of 45 to 54. Women from this age were also in the state of perimenopause and menopause. According to text book the age for perimenopause and menopause is also 45 to 54. (Table No 4.1.1)
- Out of total respondents of 102, 31.4% were illiterate followed by 27.5% Graduate and above. According to Raj Kumari, illiterate women in Nepal are also familiar with menopause. In this study, it was found that education level influences on perception, practice and knowledge towards the menopausal state. (Table No 4.1.2)
- According to the research study, among the 102 respondents majority are Hindu in both group. Also majority of the respondents (52.9%) are housewives. (4.1.3 & 4.1.4)
- The study shows that among the total respondents 84% are living in nuclear family and 16% in joint family. (Fig No 2)



### Discussion related to menopausal symptoms

- Among total study population, higher proportion 46% are in the premenopausal state, 40% are in perimenopausal state and 14% are in menopause and postmenopause state. According to the book most premenopausal symptoms are change in menstruation, hot flush, depression, sleep problems, headache and body ache. (2). Perimenopause is phase before menopause actual takes place. It can last for as long as 5 to 15 years and refer to perimenopause as that period which is a 3 to 4 years expand just before menopause. According to Dr Joshep Collin, perimenopause literally means "around menopause" and like wise draws our attention to the changes that may take place around the time of true menopause. (Fig No 9)
- While considering the sensitiveness regarding climacteric changes in education level, it was found that higher educated and illiterate groups are more sensitive compare to primary educated women.
- Among the total respondents, the age group of 40 to 44 years and 50 and above aged women are more sensitive with climacteric changes compare to other age group.

### Discussion related to family relation during menopausal state

- Among the 102 respondents, 31.4% are having normal relationship and 24.5% are having misunderstanding in the family. The second highest 28.4% declined to reply (no comment) and 15.7% said they are having disturbed life. (Fig No 4)
- Among the 41 higher educated respondents 70% said they are having normal life. Also 18% said no comment and 12% said having misunderstanding in family. Among the 32 illiterate respondents, 31% said they are having misunderstanding, 32% having conflict life, 31% said no comment and 6% said normal life. (Fig No 5 )
- According to the age group, 31 respondents were from 40 to 44 years group. Among this 31 respondents, 50.2% are having normal life, 19.8% having misunderstanding, 10% have conflict life and 20% remained no comment. (Fig No 6)
- Among the 37 respondents of 45 to 49 years group 20% has normal family relation, 31% having misunderstanding, 10% has conflict relation followed by no comment from 39%. ( Fig No 6)

- From the 34 respondents of 50 and above age group, 40% remained no comment, 35% has normal relation, 20% having misunderstanding followed by 5% having conflict relation. ( Fig No 6)
- Among the 51 respondents of higher stander (Officers wives), 56.8% have normal relation, 18% having misunderstanding and 25.2% said no comment. (Fig No 7)
- Whereas in 51 Other ranks respondents, 33% having misunderstanding, 32% having conflict relation, 10% have normal life and 25% said no comment. (Fig No 7)

### **Discussion related to knowledge regarding menopausal state**

- Study report shows that among the total study population higher percentage 89.2% respondents have general knowledge about menopause and 10.8% said "don't know." ( Fig No 10)
- Among the 102 respondents, age group 45 to 49 has highest percentage 97.3% regarding knowledge about menopause, followed by 80.2% from 50 and above age group. From 40 to 44 years age group, 80.6% has knowledge about menopause. ( Table-4.4.1)
- The study shows that all 41 Higher and Graduate respondents (100%) has some knowledge about menopause. Among 29 Primary and Secondary educated respondents 96.6% said they have knowledge about menopause. Out of 32 illiterate respondents 68.8% has knowledge about menopause. (Table-4.4.2)
- According to the study 100% Officers and 78.4% Other ranks wives has knowledge about menopause. Among Other ranks wives 21.6% said don't know. ( Table-4.4.3 )

### **Discussion related to perception during menopausal state**

- Study report shows that among the total study population 64% perceived positively towards the menopausal changes and 36% perceived negatively. (Fig No 11)
- Among the total 102 respondents, 69% Officers and 59% Other ranks wives perceive menopausal problems positively and 31% Officers and 41% Other ranks wives perceive negatively. (Table-4.5.1 )
- According to the age group, 31 respondents were from 40 to 44 age group. In which, 38.7% perceived positively and 61.3% negatively. In the age group of 45 to 49 years, 32.5% positively and 67.5% perceive negatively. Similarly, in 50 and above age group, 67.5% perceive menopausal problem positively and 23.5% negatively. ( Table-4.5.2 )
- According to the study findings, highest percentage 85.4% from higher educated and Graduate perceives menopause positively. Among Primary and Secondary educated, 72.4% perceived positively and only 25% from illiterate group perceived positively. Maximum percentage of negative perception 75% is from illiterate. (Table- 4.5.3 )

### **Discussion related to help seeking practice during menopausal state**

- According to the study finding among the total respondents higher percentage 38% were found consulting family and friends for help seeking practices during menopausal problems. Practicing Dr's and Traditional Healers advice was found in equal percentage. Also 15% respondents said they are practicing nothing. ( Fig No 8)

### **Existing practices among respondents on menopausal problems**

- The study findings on existing practices to overcome menopausal problem shows, 54% are practicing modern medicine and 46% are practicing with Traditional Healers according to age group, education level and in ranks. (Figure No 12)
- According to age group, 31 respondents were from 40 to 44 years group, in which 67.8% are practicing modern medicine and 32.2% practicing traditional methods. Similarly, in 45 to 49 years group, 51.4% were practicing modern medicine and 48.6% practicing traditional methods. From the age group 50

and above 44.1% were practicing modern medicine and 55.9% practicing traditional methods. ( Table-4.6.1)

- Among 41 respondents from higher educated group, 85.3% practicing modern medicine and 14.7% practicing traditional method. Similarly, 29 respondents from Primary/Secondary educated group, 55.1% are practicing modern medicine and 44.9% practicing traditional methods. In the illiterate group, out of 32 respondents, 12.5% practicing modern medicine and 87.5% practicing traditional methods. ( Table- 4.6.2)
- According to rank, out of 51 respondents from Officers wives 88.2% are practicing modern medicine and 11.8% practicing traditional methods. From the Other ranks, out of 51 respondents 19.6% are practicing modern medicine and 80.4% are practicing traditional methods. ( Table- 4.6.3)

## 5.2 Conclusion

The following conclusions are drawn from the quantitative study.

- In the socio-demographic characteristic, maximum numbers of respondents were from age group of 45 to 49 years. In education level illiterate were in higher percentage 32 (31.4%) followed by graduate 28 (27.5%). Majority 54 (52%) were housewife and remaining on job. It is indicate that education level was influences by the standered of living, study shows that majority of officer's wives were higher educated .
- During the course of discussion, it was found that respondents from age group 40 to 44 were more sensitive toward the climacteric change impacted on their life style and health. Where as 50 above aged grouped women less bother it may be due to other family problems.
- The study shows that respondents from higher standered were more sensitive during the pre and perimenopausal symptoms. Whereas respondents from lower standered were more sensitive during menopause and postmenopausal state. It is also found that respondents from higher stander has better excess to medical facilities and are more concern about changes. Respondents from lower stander felt pre and perimenopausal symptoms as a normal phenomenon. They are more concern after the occurrence of menopausal state.
- It is found in the study that higher educated and 40 to 44 years group respondents were having normal life than age group of 45 to 49years. The

age group 40-44 represents the youngest group of respondents. During this age group the symptoms of menopause are not very severe but when the respondents enter into the age group of 45-49 the symptoms become severe. Further more their role in the family also changes which could have strained their relation with their family. The finding indicates that 45 to 49 aged group were more educated has less family problems compare to illiterate. Similarly higher standard respondents has normal relation compare to lower standard respondents. The influencing factors were found to be education, rank and age.

- The study finding indicates that education level and rank has significant role on knowledge about menopause. Whereas in age group all three age groups has approximately equal percentage of knowledge about menopause.
- According to the study finding, majority in both ranks and in age group has more negative perception than positive but only in age group of 50 and above has more positive than negative. Also the finding indicates that, higher educated has more positive perception than of illiterate.
- It is found that for the health seeking practices majority is consulting with Doctors followed by Traditional Healers, family members, home remedies and others.
- In the existing practices it is found that higher educated and officers ranks are practicing modern medicine. Illiterate and 50 and above aged group respondents are still believe on traditional methods. It indicated that may be due to sociocultural factors.
- Regarding perception towards menopause, educated and 50 and above age respondents are positive. It is felt that education has influence on perception towards menopause. Also reason for being positive in 50 and above age is that they are more matured and used to the symptoms of menopausal changes. Illiterate has still negative perception on menopause.

### **The following conclusions are drawn from qualitative study**

- While discussing about knowledge and opinion on climateric changes both groups referred about the age. Officer's wives also mentioned about hereditary and natural phenomena. Whereas, other ranks wives were influenced by care they received during postnatal period and of time of menarche.
- About menopausal symptoms and problems most of women from both groups remained passive. They were hesitant to talk about the symptoms and problems, mainly about psychological problems.
- Both groups confessed that they are confused with climateric changes and family problems.
- During the discussion it was found both groups do not have normal relationship with their family members. The degree of misunderstanding among other ranks wives with their family is high whereas in officers case it is a bit low.
- About the social life due to the change in life style and responsibilities they are not interested socialization.
- Wives of both groups support the idea that, they need an awareness programme before hand with the involvement of their family members. Officer's wives conscious for physical fitness health practices whereas other ranks wives focused in diet and rest only.
- Regarding the perception towards menopause, officer's wives perceived as natural event. Some of them have negative impression also. Among the other ranks wives, majority of them perceived it negatively. They seem to believe that menstruation is a sign of young and strong.

### **5.3 Recommendation**

- In order to bring awareness among women on menopausal problems and symptoms a program must be made. It must include family members, herbalists, traditional birth attendants, traditional healers and health care providers.
- Since many women are using home and herbal remedies, a detail study regarding its effect need to be conducted.

- The study on impact of educational package made by investigator should be done. It should compare the knowledge, practices and attitude towards the menopausal problems by pre and posttest.
- A plan for providing Information, Education and Communication (IEC) materials must be made. It will help for investigation, treatment, early awareness and management of menopausal problems from grass root to central level.
- A comparative study can be done between military personnel's wives and community people about the difference of physical, mental and social problems during menopausal state.

#### 5.4 Application of research study

- This study will provide some essential information as guide for further study.
- This study will help to bring some changes in family health care services and policies in Royal Nepalese Army.
- This study will be helpful for health personnel to bring changes in their practices. Especially on their medication, follow up, counseling etc.
- This study will support the other staffs working in the same department.
- This study will give some guidelines in the care of middle age people and understanding of their feelings and problems.
- Develop educational package will be helpful for the client to lead the normal life during the menopausal problems.
- This study will be useful for national Health policy maker to integrate menopausal health care programmes along with other health programmes.
- This study will give guidelines for development of further IEC materials.

## 5.5 Plan for dissemination of research paper

- First of all I will disseminate research report to Research Committee of Master of Nursing Faculty, Nursing Campus and two copies to research guides
- One copy each will be submitted to Library of Nursing Campus, Royal Nepal Army Officers Wives Association, National Health Research Council Head of Department of Gynea. Obs in TUTH.
- Some copies will be submitted to Reproductive Health Program, NUFU, Maharajganj, (Funding agency).
- The finding of the report will be published in medical journal in future and published abstract of the study will be introduce in health net.
- A seminar will be conducted in the premise of Royal Nepal Army Officers Wives Association to impart the knowledge regarding menopause and management mechanism to wives of Army personnel.



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## Appendices

<b>Appendix-- I</b>	<b>Educational package (Nepali)</b>
<b>Appendix-- II</b>	<b>Research Practicum Questionnaire</b>
<b>Appendix--III</b>	<b>Report and Analysis of Qualitative Study</b>
<b>Appendix--IV</b>	<b>A letter granting permission to conduct the study</b>
<b>Appendix--V</b>	<b>Map</b>

*Tribhuvan University  
Institute of Medicine  
Nursing Campus  
Maharajganj  
Kathmandu, Nepal*

**M.N. programme in Women's Health and Development**

**Research practicum questioner**

**Instruction about the interview:**

- The following questions will be asked with the 40 to 60 years old women who are wives of military personnel and residing in Kathmandu.
- Verbal consent will be taken from interviewers before asking the questions.
- Data and name will be kept confidential.
- Information obtained will be used only for the study purpose.

# Interview form for data collection

Serial No:

Interview Date:

Place:

## Part I Socio Demography Information

1. Name:

2. Age:

3. Address: Zone:

District:

VDC/Municipality:

4. Education level: Literate:

Illiterate:

If literate- Read and write

Primary level

Secondary level (6 to 10)

Higher secondary

Graduate and above

5. Ethenic group:

Brahmin

Chetri

Newar

Gurung

Magar

Rai

Limbu

Tamang

Other (Please specify)

6. Religion:

Hindu

Budhist

Others (Please specify)

7. Occupation: Housewife  
If working- Parttime Working  
Fulltime  
Government job  
Private job  
If other (Please specify)

8. Family structure: Nuclear Joint

9. Number of children: Son Daughter

Please mention the age of children-----

10. Source of income: Husband and wife  
Only husband  
Other (Please specify)

11. Husband's Rank: Age  
Education level

**Part II**  
**Health habits and activities**

1. How many hours do you sleep at night?

Less than 5 hours

5-7 hours

7-9 hours

9-12 hours

More than 12 hours



2. Do you sleep in the day time?

Yes

No

If yes, how long?

Less than 1 hour

1-3 hours

3-5 hours

More than 5 hours

3. What is your recreational activities?

Watching T.V.

Socializing

Listning radio

Reading

Nothing

If other (Please specify)

4. What type of food do you prefer?

Veg

Non Veg

5. Do you smoke?

Yes

No

If yes, please specify the number of sticks perday. \_\_\_\_\_

6. What type of drink do you take?

Tea

Coffee

Soft drink

Hard drink

If other (Please specify)

7. How much tea do you consume per day?

1-4 cups

5-9 cups

10 cups and more

8. How much coffee do you consume per day?

1-4 cups

5-9 cups

10 cups and more

9. Which type of hard drink do you take?

Home made

Distillary

If other, please specify

10. What is your alcohol consumption per day?

Less than 1/4 ltr

1/4 to 1/2 ltr

1/2 to 1 ltr

More than 1 ltr

11. What is your water intake per day?

Less than 1/4 ltr

1/4 to 1/2 ltr

1/2 to 1 ltr

More than 1 ltr

12. What is your routine for bathing?

Once or twice a week

3 or 4 times a week

Every day

13. What type of water do you use for bathing?

Warm

Cold

14. What is your bowel habits?

Regular

Irregular

If other, please specify

## Part III

### Questions related to climacteric changes

Answers can be more than one in some items. So please tick more than one alternative when required.

1. Do you have any of the following problems?

#### Set A

- a. Hot flushes
- b. Irritability
- c. Depression
- d. Night sweating
- e. Trouble in sleeping (Throughout the night)
- f. Headach
- g. Bodyach
- h. If other, please specify

#### Set B

- a. Irregular period
- b. Weight gain
- c. Loss of libido
- d. Feeling ill
- e. Anxiety
- f. Disturb memory
- g. Mood swin

**h. If other, please specify**

**Set C**

**a. Stop menstruation**

**b. Breast tenderness**

**c. Gastrointestinal distress**

**d. Incontinent urine (Specially on sneezing and laughing)**

**e. Hair loss or thinning**

**f. Disorientation**

**g. Difficulty in concentration**

**h. Disturb memory**

**i. Skin itching**

**j. Aching, sore joints, muscle tenderness**

**k. If other, please specify**

**2. Since when have you been suffering from above mentioned problems?**

**Less than one year**

**One year**

**Last 2-4 years**

**Last 5 years**

**More than 5 years**

## Part IV

### Questions related to family relation during climacteric state

Do you have problems with your family members during the period of climacteric changes?

Yes

No

If yes, please specify

## Part V

### Questions related to knowledge towards the climacteric changes

1. Do you know why these problems are occurring?

Yes

No

If yes, it is due to-

a. Age

b. Health condition

c. Menopause

d. Effect of personal habits (Smoking, alcohol)

e. Natural events

f. Family tension

g. If other, please specify

2. Do you know about Climacterium?

Yes

No

If Yes Please Specify \_\_\_\_\_

1. What do you know about the function of the body?

Don't Know                      Yes

If Yes please Specify \_\_\_\_\_

### Part VI

#### Questions related with perception towards climacteric state

1. What do you think is the cause of the climacteric change?

2. Do you believe that every gets menopause?

Yes                                      No

If yes please specify \_\_\_\_\_

3. How did you feel when these physical and psycological changes were occuring in your life?

2. Do you believe that these problems are related to the climacteric state?

Yes                                      No

If yes please Specify

3. Do you believe that these problems are related to getting older?

Yes                                      No

4. Is there any change in your social life?

Yes                                      No

No comment

Part VII

Questions related with practice to overcome the climacteric state

1. Do you want relief form the the climacteric problem?

Yes

No

Don't know

2. Have you done anything to overcome the problem?

Yes

No

If yes please specify

If No Why?

3. Whom did you consult first?

Doctor

Trad Healer

Family

Friend

Noone

Other specify

4. What were the advices given to you?

5. What do you think of the advice given to you?

6. Are you practicing any measures to overcome these problems?

Yes

No

If yes please specify

If No Why?

7. What measures are you practicing please discuss?

8. If anyone having climacteric problem came to you for advice what advice would you give them?

## Report and Analysis of Qualitative Study

### Focus Group Discussion

#### Introduction

After completion of data collection of 102 women, eight women were selected among them for further focus group discussion. The purpose of the discussion was to collect more information and problems related to menopause. They were more frank and open while discussing in small groups. All the participants in the discussion were selected from volunteered.

Basic criteria put for the selection were:

- a) All were from same background and their husband's rank and teenager children.
- b) All were from between Pre and Perimenopause stage with similar physical and psychological problems.
- c) Age group was between 44 to 48.

The discussion was held for more than two hours. All the participants were very eager and exited for discussion. Following procedure was held before and after discussion:

- a) Date was fixed for discussion with participant's one-week head.
- b) Before the discussion, instruction was given regarding discussion procedure and topics.
- c) Instruction to speak freely while answering the questions was told.
- d) Permission was taken from participants to take photograph and tape recording of their dialouges.

#### 1. Discussion point was on the opinion of menopause.

All the participants participated and discussed intensively that they are aware of menopause. There was difference in opinion in other points. While discussing relation of age with menopause different opinion was found.



- a) Majority (about one third) of participants agree that it occurs after the age of 40 years.
- b) Below the half of participants think that age of menopause is related with care received during postnatal period as well as parity.
- c) Below the fifty percent participants say that, if you have early menarche you will have early menopause.
- d) Also about the same number say that it is a hereditary.
- e) Below than half of the respondent agrees that it is a natural phenomenon or process.

While discussing about symptoms of menopause, most of the women remain passive. They were less interested to talk about symptoms openly. Some of the symptoms mentioned were as such:

- a) The physical problems occurring during menopause are not so serious as compared to mental problems.
- b) Most of the women hesitated to discuss their physical symptoms freely. They would mention about their mental problems.

While discussing about this symptoms (problems) of menopause all the participants of officers group wanted to explain it on the floor. Most of them are suffering from hot flush and depression. One of the participants said *"almost every mid-night suddenly I feel hot in my neck and face, then suddenly wake up and try to take deep breadth and open the window."* Another participant said *"nowadays I feel irritated with my family, I don't want to listen their talk, just like to be alone. My husband said are you going to be mad?"*

Most of the respondents explain that they are suffering from physical and psychological problems. They also mentioned that psychological problems are difficult to explain.

When asked about their opinion on menopause, following were the comments made:

- a) One woman said that, *"in a woman's life where there is menarche there must be menopause."*
- b) Almost half (50%) of the women believe that it is an act of god.

- c) Fifty percent of the women are of the opinion that ethnic background plays significant role on determining age of menopause. Mongoloid, non-Brahmin, non-Chettri casts can move freely even while they are in monthly period. They suffer no mental or physical discrimination, like not being allowed to touch, not allowed to eat together, sleep separately, etc. Whereas women from the casts other than mentioned above, have to suffer all these discrimination. Because of this suffering, women from Brahmin, Chettri, may have early menopause than other.
- d) Few women said that they are happy with menopause because of stoppage of menstruation. But most of the women were not happy because they may lose the respect in the family and also it is the sign of coming of old age.
- e) *"In our society people think menstruation is sign of being young"* said by officers wives.
- f) *"It is ok because there are so many restriction, problems of pregnancy, usage of family planning devices, abortion, miscarriages, etc, so menopause gives freedom from all those things"* said by other ranks wives.

Both focus groups made the conclusion that menopause is due to age, normal event, subsides after few years and try to take it easy.

## **2. Why do you think that these problems are happening?**

Most of the women (75%) think that it is because of old age, poor post delivery and hereditary. Also they are not confirmed about the exact cause of menopause. Some think that it is a chronic disease.

## **3. What is your self-opinion while these problems are occurring?**

Some (60%) say that this problem is related to family problems. They feel that their importance in the family is decreasing because they are getting old and cannot work as before. The problems mentioned were of various types. Such as:

- a) Ever increasing demand of children.
- b) Expensive children's education.
- c) Frequent posting of husband.
- d) Retirement of husband.
- e) Pressure from the in-law house.
- f) Health condition
- g) Not being able to continue or work in cottage industry, etc

Majority of women (90%) said, besides the menopausal problems above-mentioned problems adds extra burden in their life. Which makes their life measurable.

#### **4. Relationship with your family, during the menopausal state.**

Almost 50% of the women were not interested to talk about this problem. They did not want to disclose their problems. Only when one of the women started to talk about her problems then only other joined the discussion. Very few, about 10%, seem to have good relation in the family. Majority has very disturb life, not good healthy relation, lots of misunderstanding. It implied to husband, children's and in-laws of other ranks.

Officers wives said that all members of the family are confused with the symptoms. One participant said that *"some time I feel good and want to be very active but suddenly I feel depressed and irritable and don't feel like doing any thing, feel like being alone."* Another participant said that *"I become very forgetful. Because of this I am having misunderstanding and conflict in my family."* These comments were supported by all the focus group participants.

Both groups participants were confused regarding the problems mentioned above. They were not sure about the treatment and its solution.

#### **5. Discussion on social life during menopausal state.**

Almost all women said that their life cycle is changed. They would not enjoy their social life as before. Their relation with neighbor is said to be ok, but not as before. They feel irritated while seeing crowd. Relation with friends is good and helpful. They try to console and help to get compromise in the family. Every one said that the problems mentioned above are due to the menopausal symptoms or due to health and mental conditions.

#### **6. Discussion on to minimize these symptoms of menopausal problems.**

Almost all the women said that their husband and children's must try to understand their problems. If they do so, half of the problems will go away. Hospital service must be prompt, less expensive and continuity in service must be maintained. A teaching/counseling program must be conducted for women and awareness program to husbands and in-laws. Reading materials should be provided for educated wives who in turn may be able to guide other wives.

One of the participants from officers group said *"we must except the changes as a natural phenomena."* Another said *"we must ventilate feelings with whom we trust more."*

From the other rank one of the participant said *"making an effort to adjust with situation and condition."*

## 7. Discussion to reduce the problems with family relation.

All the participants from officers wives said *"family members must support our positive feelings, avoid unnecessary arguments about our physical and mental status. Ourselves must accept changes as a natural process or events. Seek more happiness at home and in family. Supportive attitude from both sides-wives and family. There must be clear communication with everybody in the family-needs, wants, like and dislike. There must be counseling before hand. Enough medical facilities and explanation about symptoms, treatment and follow up."*

Other ranks wives said *"family must understand our problems and take it in positive way. Self realisation is very important for us. Medical facilities must be affordable, available with proper explanation and facilities for the follow up. All the family members must be educated about the menopausal problems."*

### Conclusion

The aim of the focus group discussion was to find out the qualitative and in-depth information regarding menopausal problems. At the beginning participants were reluctant to talk about problems. But once it was raised every one was eager to put their problems. During the discussion it was found that, majority of them had only superficial knowledge about discussion. Because of lack of knowledge in participants and in family members misunderstanding, conflict and disturb life was found. Wives of other ranks was seen mostly suffering from the mentioned problems.

In the officers wives group also, they mentioned about problems related with family members. They being educated seem to adjust in their life. They mentioned for more education program and reading materials so that they could cope with the problems.

Officers wives are seen practicing to change their lifestyle, whereas other ranks wives are still believing in traditional healer.

After discussing with both groups of wives, it is felt that, an education package with good medical support is required. Good counseling for those suffering from menopausal problems, affordable medical service, good understanding by family members are required for the caring of this problem.

## IN-DEPTH STUDY

### Introduction

In-depth study is an unstructured and informal interview to get hidden feelings, desire and emotions regarding menopause. It is done in most informal manner. (33) For the in-depth interview, two each from officers and other ranks wives were selected. Those selected wives who were informative and who showed willingness were selected. These four selected respondents were from same 102 respondents who had filled the questioner.

Only one wife's interview was taken in one day. The time taken was two to three hours. Interview were taken in family quarters.

### Q1. Do you think that every women gets menopause?

Ans 1. *"Yes, if there is menarch there will be menopause. Early menarch means early menopause"* said officers wives. Other ranks wives said *"menopause is must in every women's life. But it depends upon the health condition and disease for early or late menopause."*

**Comment:** Educated wives have general idea about menopause, while lesser educated and illeterate wives seem to have very little idea about it with misconception.

### Q2. How will you feel when menstruation stop?

Ans 2. One said *"well I think it in two ways. First, no pregnancy, no socio-cultural restriction, will be free and feel good. Secondly, menstruation is a indicater which shows that women are young and still in their feminity, but when it stops family members will say you become old."*

Other wives said that *stoppage of menstruation means loss of feminity ans being physically and mentally weak.*

**Comment:** wives feel it as a freedom from all socio-cultural restriction and from pregnancy. Whereas, other ranks wives feel more sentiment because of stop of menstruation

### Q 3. Do you have any health problems at the momment?

Ans 3. Officers wives said *"so many; it is due to the menopause or health problems or age which I am just confused."* Their main complain was *"very disturb sleep at night,*

*irregular menstruation, not interested on sexual life, headach, bodyach, not interested in socialisation as before, etc."* Other ranks wives said "yes; burning sensation all over the body, feeling ill and weakness, vision disturbance, irregular bleeding, dipression, etc."

One of the repondent said "my forgetfulness, irritability, dipression impact my family relation. But it is not my fault. Sometimes I feel like attempting suicide. I try to control it but it is out of control. Oh god, help me".

**Comment:** Officers wives are confused because of menopausal problems and are complaining of physical problems. Other ranks wives complained about having physical and psychological problems. They are also suffering from family conflict due to the unawareness on both sides.

**Q 4. Do you have any idea why this problems are occuring?**

Ans 4. Officers wives said "actually I don't know. After reading books and magazines I reached to the conclusion that 65% of this problem is due to menopausal state, 35% is due to the family tension, health condition, but I am not very sure." Other ranks wives said "it is due to lack of health care during ante natal, natal and post natal period and may be due to age."

**Comment:** Educated wives are trying to study more about menopause and gain knowledge. Other ranks wives feel that it is the effect of previous health care.

**Q 5. Are there any change in your family relation?**

Ans 5. One of the respondent said her husband asked "every month you have two to three times menstrual period, what is this? I can't fulfill my sexual disire with you. I must think about it."

"Every body complained that I used to disturb them at night. Because I can't get sound sleep. So I get up two to three times at night due to feeling of burning sensation all over the body and heart palpitiation. Sometimes I used to take shower at night. So my husband said are you going to be mad" said one of the respondent.

Another respondent said "now a days, my husband after comming from office he does not bother me, his attitude towards me changing day by day. So now a days I also don't care to him. I do what ever I feel like doing and we are sleeping saperately.

One of the respondant said "my husband had very much changed behaviour towards me. Because he wants like same before. But since I am getting old I can not fulfill his biological need and other disire as before."

**Comment:** Both ranks wives are suffering from misunderstanding, conflict and disturbed life due to the lack of knowledge of menopausal symptoms on the part of their spouses. These problems have added additional stress to all the family members and respondents.

**Q 6. Are you getting any support from your family?**

Ans 6. Officers wives said *"sometimes supportive, sometimes non supportive."* The positive support mentioned were reassurance from husband, psychological support from in-laws and children. The negative part mentioned was respondent's husband said *"menopause is a natural phenomena in womens life, why are you only feeling so serious? There must be other problem too."*

Other ranks wives said their husband is very supportive. Because, husband took them to physician, psychologist, gynaecologist, traditional healer and provided home remedies. Besides being supportive, their husband and in-laws sometimes become irritated and complaining about financial involvement and my problems.

**Comment:** Every one is getting positive support from the family. But sometimes they seem to have some misunderstanding. Extra financial involvement seem to have major concern on other ranks.

**Q 7. Do you think you need any information before hand?**

Ans 7. Officers wives said they will prefer to have information about menopause before the occurrence of problem. Because of lack of knowledge regarding menopause, some of the symptoms hamper our physical, mental, social and family life.

Other ranks wives also mentioned about requirement of information. Besides that they suggested, information related to menopause should come in radio, television.

**Comment:** All the respondents asked for the beforehand information regarding menopause. Officers wives said that all the problems mentioned above are due to the lack of knowledge about menopause. Other ranks wives suggested that programme related to menopause should be broadcasted by radio and TV so that all family members can understand the problems.