CHAPTER V
DISCUSSION

This lesson presents the discussion of the findings with regard to the study objective and hypotheses formulated. This study was aimed to assess Bio-Psycho-Social problems, coping strategies and life quality of post-menopausal women of selected rural community in Dharawad District, Karnataka.

1.1 Section 1: Selected Personal Variables.

The personal variable of subjects were presented in detail in the analysis and result chapter and related facts and previous studies results related to socio demographic variables is discussed as following.

Matching facts had been observed in a research conducted by Priya Bansal et al (2013) to determine menopausal problem in women who reside in rural area and they were in middle age and belonged to Punjab. In this study sample size was 180 women with the age group 40 - 60 years and sampling technique used was proportionate sampling. In 135 subjects, 21 subjects belonged 40 – 45 years, 47 subjects belonged to 46 – 50 years, 42 subjects belonged to 51 – 55 years and 25 subjects belonged to 50 – 60 years. 90% of subjects were married and 10% of subjects were widow. Illiterate subjects were 57 and education up to primary level was 33 subjects 27 subjects completed middle school and 18 subjects completed their high school education. Among participants majority of the participants were house wives i.e. 93.3% they involved in house work. 4.4% were in unskilled occupation and 2.2% had skilled occupation. 47.4% of subjects were in low middle socio economic group and 44.4% in high middle and 5.2% of subjects from high socio economic group. When type of family was considered 51.9% of subjects belonged to extended family and remaining 45.2% belonged to nuclear family and 3% of subjects belonged to extended nuclear family. The menopausal mean age for the subjects was 45.9 and 46 years was age of median.

Study results can be compared with the other study conducted by Vijayalakshmi S et al (2013) to find out the transition of menopause among rural women who were at selected rural community of Punjab state from July 2012 to December 2012. By using purposive sampling method 30 rural
women of age ranges 40-45 years were selected in the under taken research and menopause rating scale was administered to collect data.

Although our study result slightly similar to study conducted by R Marahatta (2012) to assess symptoms of menopause in peri menopausal and post menopausal females who are visiting Nepal Medical College and Teaching Hospital. In this study women included were 500 with mean age being 50.5 years and 45 years as minimum age and 60 years as maximum age of participants. This age group was chosen because menopausal symptoms start appearing as early as 2-8 years prior to onset of menopause and continued for few years after established menopause. Majority of women were married accounting 97.5%. Regarding educational level 44.6% said that they About 47.2% of women were perimenopausal characterized by age 45 years and above with having regular or irregular menstruation but not having complete stopping of menstruation for one year (established menopause) and 52.8% were in menopause phase. Mean age of menopause was 49.9 years.

The findings obtained is seems to same with facts established in other study carried out by al-Oley at nor (2010).the study was cross sectional comprises the samples size of 233 females of age a ranges from 45 to 55 years living in saudi. it also find similar findings in study done from Ghad and Galila (2010) about 46.35 years as mean age of menopause in Egypt and 49.9 years as mean age in Saudi Arabia

In addition to these all studies the other study done by Elsabagh and Abdullah (2012) indicated that 40-70 years was the women age which was present in their study. However, comparing our findings with previous researcher, ours findings related to age still fall between the normal ranges of menopausal age.

As many literatures describe the age of menopause is 45 years with 5 years range for each side. This is a physiological natural process and usually occurs at this age. The findings in our study also suggest the same that most of the women were having natural menopause at the age 40 to 50 years.

The study results also matched with the study done by Oppermann K et al. (2012) which was conducted to find out the occurrence rate of biological, mental and other menopausal concerning symptoms and how these are associated with minor psychiatric and behavioral disorders among women of
premenopause, perimenopause, and post menopause period at Brazil in 2012. The Self reporting questionnaire with 20 items was used to collect the information regarding minor psychiatric disorders among 324 Brazilian women of 36 to 62 years of age.

5.2 Section 2: Bio-Psycho-Social problems among post menopausal women of rural community.

Regarding biological problems majority 350(70%) of women had a problems related to joint and muscular discomfort and least 58(11.6%) of women had a problem related to sexual problems.

Item wise analysis of biological problems showed, 23% of subjects experienced hot flushes and sweating i.e. sweating episodes, 34% of subjects experienced discomfort in heart i.e. awareness regarding heart beat unusually, skipping of heart, increased heart rage, chest tightness, 45.6% of subjects experienced Problems with sleep i.e. experiencing difficulty in getting sleep, difficulty in sound sleep, early waking up, 11.6% of subjects experienced problems related to Sexual problems i.e. sexual desire changes and activity and satisfaction with sexual act, 20% of subjects experienced problems related to Problems of urinary bladder i.e. urinating difficulty, increased frequency of urination, incontinence of urine, 13% of subjects experienced Vaginal dryness i.e. burning and dryness sensation in vagina, difficulty in sexual intercourse and 70% of subjects experienced Muscle and Joint discomfort i.e. joint pain, rheumatoid symptoms etc. With regard to psychosocial problems majority 52.6% of subjects had a problems related to mental and physical exhaustion i.e. decreased ability of general performance, memory impairment, altered concentration, forgetfulness and least 6.2% of participants had a problems of feeling of wanting to be alone.

Item wise analysis of psychosocial problems showed 16.8% of subjects experienced Depressive mood i.e. feeling sad and down, lack of drive in any activity, swings in mood etc, 41.6% of subjects experienced Irritable mood i.e. nervousness, aggressive feeling and inner tension, 177(35.4%) of subjects experienced Anxiety i.e. feeling panic and inner restlessness, 263(52.6%) of subjects experienced Mental and physical exhaustion i.e. decrease in performance in general, memory impairment, forgetfulness and decreased concentration36(7.2%) of subjects experienced Being irritable and impatient.
with other people, 31(6.2%) of subjects experienced Wanting to be alone like feeling and 47(9.4%) subjects experienced Lack of interest in any social activity.

The facts analyzed found matched with to the findings of the research under taken by Priya Bansal et al (2013) to determine problems of menopause in women of middle age and who resides in rural area of Punjab. The frequently reported symptoms were headache, spells of dizziness, lack of libido, disturbances in sleep and in most of the things loss of interest. Hot flushes, concentration problems, changes in mood and sweating during night were the other reported symptoms by participants. Other symptoms like loss of hair, increase in facial hair, infections of urinary tract, incontinence of urine, uterine prolapsed and dyspareunia were other less reported symptoms.

The proportion of females who reports about the hot flushes, there is huge difference in different countries. All estimates between various countries also vary widely, like Asian population’s reports lowest rates and other countries like Thailand and Japan reports 6% and 12% of this symptom respectively. African countries reported 30% to 80% rates of symptoms.

The most common biological problems reported in present study is related to joint and muscular discomfort 350(70%). Findings obtained contradict the results of the research conducted by Shah, et al, where it is found Muscle and joint pains (37.4%). Other study conducted by Jahanfar et al. (2006) In Malaysia. They analyzed that, muscle and joint discomforts about 84.3%, anxiety 71.4%, discomfort in both somatic and psychological dimensions 67.2%, sweating and vaginal hot flushes 67.1% were the most common symptoms found in the study. These differences in frequencies of symptoms may be associated to differences of life style, race, genetics, culture and diet.

In the other research study conducted by Waidya sekera et al. In the year 2009 reported that the discomfort in muscles and joint, mental and bodily fatigueless and vaginal hot flushes were the complaints of menopause which were more prevalent.

This similar with Gharaiibeh et al. (2010) they found that vasomotor symptoms were found to have the more frequent and highest scores as hot flushes and sweating during night. In addition Ashrafi et al. (2010) showed
that sweating during night, joint and muscular pain and hot flashes are the most frequent and common symptoms among Iranian women associated with menopause.

Sagdeo and Arora in a their comparative study between rural and urban women showed that most common problem was joint and muscular symptoms (60.4%) followed by sweating during night and hot flushes (36.7%). In the current study, feeling of nervousness and anxiety were most prevalent symptoms reported (94%) and feeling tired, decrease stamina (93%). The prevalence of vasomotor symptoms in average of 60%, out of them reporting hot flushes and 47% complaints about sweating Madhukumar et al. in rural Bengaluru and Nayak et al. in coastal areas of Karnataka, India observed that somatic and psychosocial features were seen large (56.92% of the menopausal women felt firmly that they were affected by menopause in negative manner) than vasomotor and sexual symptoms which is similar with this current study. In this under title, women of vaginal flushes were hot about 34% subjects.

Zollner YF research concept carried out in Germany in the year 2005 on features of menopause found that the most periodically seen symptoms reported was discomfort in articular bones and muscles 80.1%, mental and physical tiredness 67.1%, and problems with sleep 52.2 percent. Accompanied by complaints of sweating and hot flushes 41.6%, irritability 37.9%, vaginal dryness 37.9%, anxiety disorders 36.5%, mood which is depressive 32.6%. Miscellaneous problems noted in the study were fertile dysfunctions were around 30.9%, voiding complications were about 13.8% and discomfort in heart 18.3%. This contrast existed due to cultural & geographical differences in two countries.

A research title carried out by cross sectional method in 2007 among postmenopausal women in Malaysia. Women the explored the similar symptoms were: discomfort in arthritis and muscles, bodily and psychological over tiredness and complications with sleep. They accompanied by symptoms of warm sweating and flush, irritable mood, vaginal dryness, fearfulness, depressive affect, libido problem, bladder complications and cardiac apprehension and palpitation. The research title is coherent with other studies.
The occurrence of vaginal flushes of hot, in various different projects conducted at different places as presented by WHO TRS in the year 1996 ranged from 0% to 80%. Among the may an women there was nil prevalence of symptoms, among women of Hong Kong 10 to 22%, among women of Japan 17%, in Thai women 17%, North American women reported 45% and among Dutch women reported up to 80% of symptoms.

In the present study 228 of subjects experienced sleep problems like facing difficulty in falling asleep, problem in sound sleep, early waking up 84 of subjects experienced depressive mood like down feeling, sadness, lack of drive and swing in mood and 208 of subjects experienced Irritability like nervousness, inward tension and aggressive feeling, these illustration were match able with results of Anderson et al (2004) who have done study, on women of Japan, Australia reported, sleep disturbance was reported by Australian women was 65.1%, changes in mood was reported by 55.6% of women and concentration difficulty was reported by 59.1% of women. But among women of Japan sleep disturbance was reported by 46.9% of women, mood change was reported by 52.2% of women and concentration difficulty was reported by 72.2% of women.

Present study showed that 100 of subjects experienced problems of bladders like urinating difficulty, frequency of urination, incontinence of urine, 65 of subjects experienced vaginal dryness, like dryness or burning sensation in the vagina, hardness with sexual intercourse. One of the studies conducted in slum area of Thialand among post menopausal women. Reports show that genital symptoms were found in 87.4%. This difference may be because the women of this The female who are in initial phase of post menopause will not suffer with urogenital complication, reported in under taken study, 40 – 60 years age group women commonly face sexual problems. This problem may be more in women when her reproductive disturbance in the areas of anatomy and physiology was disturbed in any way. This is because changes which occurs physiologically naturally during the menopause, this may bring so many psychosexual problems. In 53(11.6%) subjects sexual problems were noted in this undertaken research title.

Facts analyzed correlated the results of the study under taken by carried out women habitation in Australia and Japan, he observed that 71.5%
Japanese and 70.4% Australian females’ complaints of inactiveness in sexual activity

Another study by Shah et al (2004) on symptoms of menopause among Indian urban women in Mumbai showed that, 58.6 percent female were sexually active, 20.6 percent females had complaints about loss of libido and 5.2 percent of women had painful amenorrhea. The possibly it can be explained as decreasing degree of estrogen which is responsible for lubrication of vagina. Other reason may be that among post menopausal women of rural community of India are sexually less active because they will engage in rearing of grandchildren and carrying out practices of religion.

The psychosocial symptom in the present study which was most prevalent was; bodily and psychological over tiredness (global decline in outcome, memory disturbance, poor concentration, forgetfulness) 263 (52.6%) of subjects had experience this problems.

Facts of under taken research coincide with the findings of the research title done by Kalahroudi MA et al. (2012) they presented that the most frequent psychosocial feature was fulfilling less than I used to, but the most severe symptom was feeling nervous or anxious is contradicted with results of our study.

5.3 Section 3: Coping strategies inculcated by post menopausal women of rural community.

Item wise analysis of coping strategies inculcated by post menopausal women showed-

Coping strategies scores obtained by the subjects, the mean score of coping strategies scale was 11.36 with Standard deviation of ±1.44, median of 12 and a range was 0 to 16.

Least 158(31.6%) of subjects said ‘they go for morning walk to keep themselves healthy. Quality of life gets better when exercises done in the domain of vasomotor, psychosocial and physical. These analyzed illustrations coincide with research title done by Williams et al. and Lorenzi et al. observed that, exercise was related with higher life quality. Beneficial effects of exercises were found for women’s mood which were good, general well being was found and sleep disturbances were reduced. Cognitive functions
impaired, poor mental and physical health was found in the women who did not do exercise.

In present study, Least 95(19%) of subjects said ‘they take alcohol or drug because it helps them to come out of the problem. Williams et al has done a research title in that result showed; smoking affected psychosocial, physical and vasomotor aspects of women and smoking women were not having better score than smoking women. In another study also the result concluded that smoking women were having low life quality.

Findings enumerated by Cohen et al. (2007) on treatment from restorative yoga for hot flushes in post-menopausal women. For all women who have attended 8 weeks yoga program instructed to exercise yoga at their respective residential for 3 times in a week for one hour. All participants in an average 170 minutes in a week practiced yoga at home. After the 3 months 75% of participants continued yoga practice and this suggest they have learned the intervention and 44% went on to know and learn new poses. In an average about 31% decline in pervasiveness of hot vaginal flushes and 34% in extreme hot flush from the baseline week as noted by results of the study.

Another study conducted by Mohile (2003) support the findings of our study, it indicated that women reported problems like pain at the back, increase of head ache, sleep disturbances and hot flushes, lack of patience, presence of sadness, disturbance in concentration, nervousness and problems with memory. The spouses, family friends, mother in law were the supportive source the female during climacteric phase. Maximum women avail the support form health professional for their physiological complaints during menopause.

Findings can be compared other exploratory study to find out problems related to behavior and coping strategies used by women of post menopausal phase in selected communities of Mangalore. By using purposive sampling technique 100 women of post menopause phase was selected in the study. The results revealed that, mild level of psychological problem was found among 27% of women, moderate level of psychological problems was found among 65% of women remaining 8% of women’s psychological problems were severe in nature inadequate coping strategies was used by majority of women and adequate coping strategies was used by less number of
participants. Between coping strategies and psychosocial problems low negative relation was found which was statistically significant. Rational profound relatedness (association) was established among educational status and psychosocial problems, also with member of social group and coping score a significant association was found.

The findings can be compared with the exploratory study to assess the experienced bio psychological complications and coping method used by 100 post-menopausal women showed the result that 38% of women in post menopause had lower degree of mental burden, moderate degree of mental burden is prevalent about 52 per cent about 80 percentage of females use insufficient coping methods which is highest, where 20 per cent female implement healthy coping strategy. Majority of females in climacteric phase complaints mild to moderate complications and adopted coping strategies \[ r (98) = -212 \text{ at } , P \text{ value less than } 0.005 \] strong association was established among coping strategies and socioeconomic condition \[ \chi^2(2)= 5.991, \text{ at p value less than } 0.005 \].

5.4 Section 4: Life quality in post-menopausal women living in rural community

Findings related to life quality of women in post-menopause phase showed, majority 419(83.3%) of samples were having quite well quality of life, 41(8.2%) of samples were having good quality of life and remaining 40(08%) were having poor quality of life.

These findings contradict the findings of the other studies, Fallahzadeh’s study shows lowest score in vasomotor domain in the study which was conducted among 60 to 65 years of age, and this is similar to results of this under taken study. But study under taken Blumel et al,by in Chile didn’t analyzed a profound association relation in process of aging and life quality. But few other studies have illustrated, the age as indicator of declining life quality

A study of women in post menopause phase in United States between 40 years to 65 years of age showed that symptoms of vasomotor was one of the important factor which was reducing the life quality in women of post menopause phase. These vasomotor symptoms are likely to disturb sleeping quality, sexual life and associations with erotic function leading to decreased
quality of life. Because of undesirable effects of vasomotor system features on the sexuality of an individual, seems to be an element for declining their life quality due an impact on reproductive process after menopause period with their life partner.

The study conducted by Hoda A. E showed that, the total sum ratings of life quality of menopause women for each dimensions are denoted the peak average rating in sexual dimension 3.19 and psychosocial 2.94.

These finding can by compared with the study conducted by Abedzadeh Kalarhoudi M to assess life quality and related factors among menopausal women at Kashan city in Iran. It revealed that, The total sum of average ratings calculated for each dimension was, the vasomotor aspect about 2.84, psychosocial is 2.71 physical aspect is 2.46 and sexual domain is about 2.89. Working condition, senile process of a women, physical functioning, educational status, duration of menopause, marital satisfaction and number of children in those family the menopausal women lives has strong impact on life quality of women in postmenopausal phase.

5.5 Section 5: Relationship between Bio-Psycho-Social problems and life quality of women in post-menopausal in rural community

Finding related to relationship between bio-psycho-social feature and quality of life among women in post menopause indicated that, correlation coefficient value between bio-psycho-social problems and quality of life scores of samples of rural community is found significant at p<0.05 levels. Thus the null hypothesis $H_{01}$ is not supported inferring that, there is correlation between bio-psycho-social problems and quality of life.

The result observed for factor related with life quality of postmenopausal female devised on PRECEDE phenomena of behavioural assessment is found contradictory with these obtained facts. Positive correlation is seen in life quality and perception towards menopause of women, assumed self-worth, available supportive factor calculated by Pearson’s correlation. Whereas no profound association is seen among life quality and knowledge regarding menopausal process. Quality of life during post-menopausal women has strong relation with age, educational status of marriage, family type, member of any social groups and status of employment.
5.6 Section 6: Association between the life quality of women during post menopause phase in selected rural community with their selected baseline variables

In this study the computed Chi-square value for association between their quality of life of samples of rural community is found to be statistically significant at 0.05 levels for socio demographic variables like suffering with any chronic disorders, type of family and type of menopause where as it is not found significant for socio demographic variables such age, education, religion, marital status, occupation, dietary pattern family income and years after menopause at 0.05 levels. Therefore, the findings partially support the null hypothesis $H_0$, inferring that post menopausal women quality of life is significantly associated with suffering with any chronic disorders, type of family and type of menopause.

These findings contradict the facts of research done by Karmakar N et al. it indicate that vasomotor symptoms was significantly associated with age-adjusted odds ratio (95% CI = 10.33 (3.54–30.17), type of family 0.06 (0.02–0.19), and menopause 7.03 (2.15–23.05). Psychological symptoms were significantly associated with age 4.06 (1.67–9.83). Physical symptoms were associated with caste 0.20 (0.08–0.53), education 0.38 (0.16–0.91), and marital status 4.74 (1.27–17.65). Sexual symptoms were associated with the number of children 2.97 (1.25–7.04).

These finding can by compared with the study conducted by Abedzadeh Kalahrhoudi M to assess quality of life and related factors among menopausal women in Kashan city in Iran. It revealed that, Working condition, senile process of a women, physical functioning, educational status, duration of menopause, marital satisfaction and number of children in those family the menopausal women lives has strong impact on life quality of women in postmenopausal phase

Findings also compared with research title done by Fatemeh Shobeiri et al in 2016 among 300 women of post menopausal period in Hamadan, Iran to assess their Quality of Life in Postmenopausal Women. Study used the Specific quality of life questionnaire of Menopause for measuring postmenopausal women’s quality of life. The result shown that, the respondents average scores of life quality found in different areas were
vasomotor 11.65, psychosocial 19.36, physical 39.12 and sexual 11.02. Higher scores indicated worse quality of life among women. Using quality of life scores, study showed differences significantly in quality of life scores formulated on education status, age, economical condition, employment status, children number, and BMI. It concluded that, menopause leads to decrease in quality of life, it is foundation to financial status, aging, body mass index, employment and children number attributes. Therefore, it is important to formulate efficient knowledgeable modules to improve life quality in postmenopausal women.

A population based study conducted by Mirhaqhjou SN et al. (2016) to assess life quality and its domains among females of post-menopausal period of Iran using cluster sampling technique to draw the samples for the study. The samples consisted of 40-60 years old postmenopausal women and Specific quality of life Menopause-is implemented to explore the life quality. Findings of the study revealed that, compared with other domains such as physical had the detrimental score among selected menopausal women. One item of physical domain, joint pain and muscle had the more score compared to other scores. Regression by Logistic model implicated the assessed elements of normal quality of life in menopause condition were : husband’s education, senile, and score of Body mass index. Study concluded that, symptoms related to menopause had negative effect on life quality of postmenopausal women.

These findings also can be correlated with the findings of the study conducted by the Deeks AA and McCabe MP (2004) were carried out two descriptive surveys to assess menopause and well-being: an investigation life purposes, acceptance of self and pre menopausal social role among perimenopausal and postmenopausal women. In Study One, 304 women were included and data collected included background of demographic data and psychological Well being two subscales in second study a total 203 participants were included and data collected was concerning to goal of their life and role in society. Findings of both the studies reveal that 1) The impact of age in menopausal group might be similar and almost all women have desirable attitude about illustrated measures in future perspective than past and present life condition.
2) Both under taken research title observed that samples involved, women in Perimenopause and postmenopausal not have positive feeling about their part in life regardless of their age. These studies concluded that, the menopause may indicate to women that their role and purpose in life is changing.

A Correlational study carried out to match the life quality in the type of mental health among women of perimenopause and postmenopause period suffering with obesity by Pranita A et al (2013) Under taken study to explore the connect quality of life of women in the form psychological health in women passing through premenopausal and post menopausal women with obesity. 30 Perimenopause and 30 post-menopausal women were involved into the research. WHO 5 points well-being Index was adopted to assess the psychosocial health of menopausal women. The facts depicts that no analytical contrast in peri and post menopausal women for BMI and concerning to psychosocial health, premenopausal females were largely implicated than post menopausal females although the contrast was not apparent statistically. They conclude that productive activities are required to prevent occurrence of problems not only after the menopause but also during post menopause phase.

Results also can be compared with the study conducted by Poomalar GK et al. (2013) to find out the life quality during and after menopause phase in rural women, scheduled from January 2012 to April 2012 in Puducherry. Post menopausal female of age group from 40 to 65 years were considered for the research and 500 females were selected for data collection. Information gathers through specific life quality questionnaire related to menopause. The findings of the study shoes that, rating in the domain of vasomotor function was significantly more among the women of menopause transition group. In the domain of physical health the scores were significantly high in the women of late postmenopausal group. They draw their conclusion that, life quality of menopausal women is adversely impacted by complications associated with menopause in Perimenopause and postmenopausal females.

Finding also correlate with the other study findings conducted by Hoda AE et al. (2014) conducted a descriptive survey to determine symptoms related to menopause and effect of symptoms on the life quality of
menopausal women at Makkah Al Mukkarrmah. Study included 90 women selected by convenient sampling technique and data was collected by menopause specific life quality questionnaire. Findings of the survey shows that, poor memory 48.3%, hot flushes 29%, Low backache 41.9%, dissatisfaction with their personal life 44.8%, and changes in sexual desire 36.8% were the huge extreme vasomotor symptoms, psycho-social, physical and fertile dimensions. The menopause quality life overall scores for every dimension is showed that the peak average ratings in aspect of sexual life 3.19, followed by psychosocial wellbeing 2.94. It concluded that, decline of life quality of women due to complications of menopause as shown by each domain mean scores suggest that menopausal symptoms

5.7 Section 7: Association between the levels of coping among post menopausal women of selected rural community with their selected demographic variables

Chi-square value computed for association between levels of coping subjects of rural community is found not found to be statistically significant at 0.05 levels for socio demographic variables like religion, dietary pattern and type of menopause at 0.05 levels and is found to be significant at 0.05 levels for the so baseline elements such as age of women, occupation, educational level, marital condition, years after menopause, type of family, family income and suffering with any chronic disorders Therefore, the findings partially support the null hypothesis H₀, indicating that post menopausal women levels of coping is significantly associated with educational status, age of women, occupation, marital status, years after menopause, type of family, family income and suffering with any chronic disorders. These findings can be compared with the other studies as following-

Siji VM et al. (2011) to identity the bio psycho social problems those are experience by women of post menopause phase and coping strategies used by these women to come out of these problems an exploratory research study was conducted. Interview method was found suitable to collect the data for under taken research project. Participants, preform related to demographic variables, socio economic status scale, perceived bio psycho social problems rating scale and rate on coping methods was adopted for gather the data. The facts revealed that, maximum number of females observe menopausal
problems ranges from mild to moderate degree and adopted both negative as well as positive strategies to cope with the problems. Between coping strategies and perceived bio psycho social problems low negative significant relationship was found by the study participants. The study results can also be compared with the findings of. These finding can be also compared with the study conducted by the other studies.

A study conducted by Mohile (2003), shows that, a positive correlation between the psychosocial and physiological problems associated with their menopause. The results of the study indicated that women reported problems like backache, hot flushes, increased headache and disturbances in sleep, impatience, sadness, concentration problem, memory disturbances and nervousness. Most of the women perceived that, their spouses, friends and mother-in-law are as supports during situations of stress due to menopause. Majority of the post menopausal women got help from professionals for physiological problems associated with menopause.

Field (2010) to find out the yoga practice for ten weeks among 11 menopausal women and its effect on the menopausal symptoms, Interview which was conducted to collect qualitative information from participants provided necessary data regarding yoga intervention and suggestions to improve the studies protocol. After the practice of yoga relaxation and physical feeling of wellness was reported by the participants. To manage the symptoms related to menopause the skill of yoga can be incorporated in to daily life for reduction of stress and manage the symptoms. To instruct individually, interaction with other peers and planned time for taking care of self was provided by the class setting. Others responsibilities and limitation of time, lack of available space and decreased level of energy were the other elements that create the life more struggling for yoga exercise at home. Participants of the study suggested that need of more flexible schedule of class, more peer group support and need of more instruction on developing practices at home environment.

These findings can be also compared with the study conducted by Hayden Bbosworth, et al conducted the study, to assess how styles of coping and factors related to personality correlate with stress associated with phase of menopause. Participants in the study were 170 women of age 45 to 54.
years and they have completed an questionnaire which was mailed to them and interview was done telephonically to assess stress due to menopause, style of coping, personality factors, symptoms of menopause, psychological symptoms and making use of hormonal replacement therapy. With factors like high level of neuroticism, social support seeking and avoidance was associated with rated menopause. A variance of 21% in rating menopause as stressful was found in multivariate model and factors accounted are symptoms of menopause, social support seeking and neuroticism. Provider of health care facilities and who are providing care to females who are passing through phase of menopause should have knowledge that the response of stress to the menopause transition is multi factorial and is associated with coping styles and individual personalities of women.

These findings can be also compared with the study conducted by Carolina Villada, etal; to determine the impact of coping mechanism and their behaviour on physiological response. Regarding day to day stress among menopause women. The part of menstrual cycle phase, age of women. The relationship was found between better autonomic regulation and active coping strategies among post menopausal women. In the other hand among women of pre menopause stage changes in the cortisol is seemed to be modulated by reactive and passive behaviours such as assertion and submission. These all findings gives importance to consideration of age and status of hormones in process of coping including reaction and recovery from stressful situation

A study conducted to assess differences in coping with menopausal symptoms in nurses and general workers in Japan by Kazuyo Matsuzaki, etal conducted among 397 health care providers and 217 common employee of age ranges from 40-60 years and have experience of post menopausal symptoms. Research was under taken to explore differences among health care providers and common employee regarding handling mechanism with the features of menopause in Japan. Systemic knowledge questionnaires were implemented to collect the data and it include questions from all the aspects of managing capacity of menopausal complications and understands regarding its causes and treatment of menopausal symptoms. It reveals that, about 50% of both general workers and nurses had sufficiently skilled in handling of menopausal complications. Both the group of participants had a
sufficient knowledge and understanding regarding symptoms of menopause. They were likely to visit hospitals to cope with the symptoms. More proportion of participants used nutritional supplements and diversion activities and this proportion was high among nurses than general workers. Hormonal replacement therapy was received by health care provider with a sufficient knowledge regarding features associated with menopause and other hand herbal medicine was received by general workers. There were similar proportion was found in nurses and common employees regarding handling the postmenopausal features even though nurses' had more knowledge of features of menopause. In the conclusion it was mentioned that, more work are required to give sufficient explanation and education related to medicines and coping strategies regarding menopause for both the groups of nurses and general workers.

**SUMMARY**

This chapter had dealt with the discussion of the research findings based on the objectives and Hypotheses of the study. The discussion of the findings were made according to following sections - description of Selected Personal Variables, description of findings related to Bio-Psycho-Social problems among post menopausal women of rural community, description of findings related to coping strategies adopted by post-menopausal women of rural community, description of findings related to life quality of post-menopausal women of rural community, description of findings related to relationship between Bio-Psycho-Social problems and quality of life among post menopausal women of rural community and description of findings related to association between the life quality of post menopausal women of selected rural community with their selected demographic variables.

The supporting and contradicting previous studies were included in this chapter to enlighten the findings.
CHAPTER VI
SUMMARY AND CONCLUSION

6.1 SUMMARY AND CONCLUSION

The present under research title was carried out to explore Bio-Psycho-Social problems, coping strategies and life quality of post-menopausal women of selected rural community in Dharawad District, Karnataka. with the following objectives:

1. To assess the Bio-Psycho-Social problems among post menopausal women of rural community.
2. To identify coping strategies adopted by post menopausal women of rural community.
3. To assess life quality of post menopausal women in rural community.
4. To determine the relationship between Bio-Psycho-Social problems and life quality of post menopausal women in rural community.
5. To find out an association between the life quality of post menopausal women in selected rural community with their selected demographic variables.
6. To find out an association between the levels of coping among post menopausal women of selected rural community with their selected demographic variables.

Hypotheses formulated in this study were,

\[ H_{01} \]: There will be no statistical relationship between Bio-psycho-social problems and life quality of post menopausal women in selected rural community at level of significance of 0.05.

\[ H_{02} \]: There will be no statistical association among the life quality among post menopausal women of selected rural community with their selected demographic variables level of significance of 0.05.

\[ H_{03} \]: There will be no statistical association among the levels of coping among post menopausal women of selected rural community with their selected demographic variables at 0.05 level of significance.

The conceptual framework adopted for under taken problem title was based on the Rosenstock’s Health Belief Model. the post menopausal woman should use adequate coping strategies to get rid of Bio-Psycho-Social problems developed as a result of menopause and also develop positive attitude towards life for the Good quality of life,. These coping strategies used
by women and quality of life of woman will be influenced by the **modifying factors** (occupation, family income education and dietary pattern), **non modifying factors** (religion, age, marital status, type of family, years after menopause and type of menopause) and some **cues to action** i.e, a precipitating force that makes the post menopausal woman feel the need to take action. These factors include previous knowledge regarding post menopausal problems, family history BioPsychoSocial problems after menopause and coping mechanism. The adequate positive attitude and coping strategies towards life will help the individual to perceive that they have good quality of life. Thus, once the woman **perceives the threat** of bio-psycho-social problems, she will most likely to weigh the perceived benefits of following good coping strategies to get rid of problems of post menopausal stage against perceived barriers viz; inconvenience, inadequate knowledge, costs, presence of chronic disorders and so on. When the perceived benefits outweigh the perceived barriers there is **likelihood of taking action** i.e, following good coping strategies and leading extremely well life quality by middle age females in postmenopausal phase.

This under taken problem title various literatures was reviewed which includes,

- Literature related to biopsychosocial complaints among middle age females in postmenopausal phase.
- Literature regarding to the coping strategies used by middle age females in postmenopausal phase.
- Literature related to the life quality of middle age females in postmenopausal phase.

The descriptive survey research design selected for this under taken research title to assess bio-psycho-social problems, coping strategies and life quality of middle age females in postmenopausal phase living in rural community in Dharwad district.

**Descriptive survey design** aims to examine define and record dimensions of a condition as it spontaneously occurs and on few occasions to use as a initiating point for formulation of hypothesis or theoretical frame work.
Some survey research studies are undersigned to explain the pervasiveness of prevalence of a behavior or conditions.

The sample of this study comprised of 500 post menopausal women of rural areas of Dharwad district. The probability cluster sampling (3 stage) technique was used in the present study. Cluster sampling technique comprises successive probable sampling of units; the first unit is large groupings or clusters. Selecting samples from general population is to sampling successively such administrative units as state, district, talukas, villages and so on. This approach is often called as multistage sampling.

The tool developed and used for the data collection was

- **Structured Menopause Rating scale,**
- **Coping Strategies scale related Menopause and**
- **Life quality Interview Schedule.**

Eight experts validated the content, validity of the study tool and the tool was found to be reliable and feasible. Reliability of the tools was tested by repeated testing method by using Karl Pearson’s Co-efficient of Correlation formula. The reliability of Menopause Rating scale, structured menopause coping strategies scale and structured quality of life scale were \( r = 0.81, 0.78 \) and \( 0.83 \) respectively.

A pilot study was conducted from 01st May 2017 to 15th May 2017 in selected rural areas of Dharwad district after taking administrative approval. The objective of feasibility trial was to pre test the data collection instrument, to find out the practicality for carrying the research title and to conclude upon the trap of statistical illustration. A total of 50 samples were considered through probability random sampling technique. The data was collected by investigator by interview method. The findings of feasible trial denoted tools and study design were found to be feasible.

Data collection was done from 1st June 2017 to 30th June 2017 by investigator and two research assistants. Samples were selected as per the sampling criteria. The ultimate objective was informed and co-operation required from the respondents was explained to them. Confidentiality was assured. Written agreement to involve into the research title was taken from
each sample. The data was collected by interview technique and it took 20-30 minutes to collect data by each sample.

The data gathered were analyzed and interpreted according to objectives. Descriptive statistics like mean, median, mode, range, standard deviation and inferential statistics like Karl Pearsons coefficient of correlation and $\chi^2$-test were included to test the hypothesis at 0.05 levels of significance and the data obtained are presented in the graphical form.

The major findings of undertaken research title are as follows:

6.1.1 Findings Related To Demographic Characteristics of the Subjects

- Majority 253 (50.6%) of subjects were of the age group of 45 - 50 years and remaining 247(49.4%) of subjects were in the age group of 51 – 55 years.
- Majority 452 (90.4%) of subjects were married and remaining 48(9.6%) were staying single.
- Majority 293(58.6%) of subjects were belonged to nuclear family, 193(38.6%) were belonged to joint family and remaining 14(2.8%) were belonged to extended family.
- Majority 402 (80.4%) of the subjects dietary pattern was vegetarian and remaining 98(19.6%) of samples dietary pattern was mixed diet.
- Majority 158(31.6%) of post subjects belonged to category of 3-4 years after menopause, 108(21.6%) belonged to 9-10 years after menopause, 80(16%) belonged to 5-6 years after menopause, 79(15.8%) belonged to 0-2 years after menopause and remaining 75(16%) were belonged to category of 7-8 years after menopause.
- Majority 314(62.4%) of subjects were had below Rs.5000 family income per month, 166(33%) had Rs.5001-10,000 family income per month, 16 (3.2%) were had Rs.10, 001 -15,000 income per month and remaining 04(0.8%) were had above Rs. 15000 income per month.
- Majority 417(83.4%) of subjects were not suffering with any chronic disorders and remaining 83(16.6%) were suffering with chronic disorders.
- With regard to type of menopause, majority 449 (89.8%) of subjects menopause was natural and remaining 51(10.2%) woman type of menopause was assisted.

6.1.2 Bio-psycho-social problems
Study result showed that women after the menopause experiences many problems such as hot flashes, discomfort, sleep problems, problems of sexual life, and other problems related to urinary system and reproductive system. Women also had psychological and social problems ranging from depression (16.8%), irritability(41%), anxiety(36%), etc. women felt in this time to be alone( 6.2%), and reduced interest in social role. These all problems are from mild to severe range.

6.1.3 Area wise and total Bio-psycho-social problems

A biological and psychological problem among the human beings are prevalent throughout the world in all the traditions, and is an understanding it is an important feature that distinguished human beings from other species existing on the earth. There is growing concern about biological and psychological problems among the human beings in India, because of the likelihood of further increase in biological and psychological problems and substitution of more other problems in future, due to unavoidable rapid growth, changes in life style, industrialization commercialization and urbanization. An epidemiological research study was carried out to estimate the presence of number and type of pattern of biological and psychological problems in urban population of Madhya Pradesh India in the year 1992-93. Total samples of 5326 were included in the research study and it was found that prevalence rate for problems were 368 per 1000 studied population. In the studied population people who responded were using tobacco, other psychoactive substances, cannabis, opioid drugs, sleeping pills, and painkillers for relieving their symptoms. Most commonly used drug was tobacco, followed by alcoholic beverages, cannabis, opium like drugs, sleeping tablets and painkillers.

A study was conducted by Jagjeet singh et al. to find out the prevalence of menopause related problems among the female population of more than 50 years of age group, in an urban and rural area of Punjab state. Total 851 subjects were included in the study; the result of the study shown that prevalence rate of menopause related problems was 27.51% in urban and 40% in rural area, of district Amritsar of Punjab. Regular occurrence of menopause related problems were of the order of 21.77% and 13.03% in urban and rural area respectively. Among these regular women of having
clinical complaints 34.8% in urban and 32.3% in rural area had their first problem in 46-48 years of age. 63.85% and 76.54% of the studied samples were married. More than three fourth of these in urban (78.5%) and rural (93.2%) area, were experiencing menopause related problems daily.

An epidemiological research study was conducted by the department of obstetrics and gynecology, Government Medical College and attached hospital, Chandigarh to estimate the pattern of menopause related problems and other substance dependence in rural and slum residing people of Chandigarh. In this research study 9.88% individuals of the total population research fulfilled inclusion criteria of the study. Menopause related problems was the primary health related issues for majority of urban slum area residents and rural area residents. Age at first experience of problems was 47 years among rural individuals and 46 years in urban slum residents. Majority of them were said that having health related complications and other problems followed by social problems due to climacteric period.

To find out the rate of presently existing and pattern of menopause related problems at Bandardewa of state Haryana, Hazarika NC and others interviewed a total of 3432 women’s aged 45 years and above. The study findings reveal that 49.8% of the respondents used to have one or other symptoms related to ageing and hormonal changes, with significant difference between different aged women’s. Among biological system related problems 58.2% were only had two to three problems, 56.3% were presented with more problems and 45% of them were having both the psychological and biological related problems. 54.4% among housewives were medicine users. Prevalence of menopause related problems was 43.4% among the respondents of the study. Menopause related problems among female of more than 55 years of age was (42.5%) was slightly higher than their younger ones (38.5%). A significant association of menopause related problems was notified with level of educational status. Among the study population 5.3% was found to be habituated with substance use disorder to relieve menopause related problems. Percentage of taking treatments was found to be 56.28%. A very small number was also found to be addicted to some of the medications.

The problem of biological and psychological related to ageing and change in the physiological system due to stoppage of menstruation whether
it exists in India or not exists has been a topic of great importance. In order to find out an answer a National Committee on who works of the aging people was constituted by the Government of India in 1976 and the committee in its report summarized that there is a lot of women are experiencing most common problems most frequently among these are menopause related problems, hormonal related problems, and age related problems. Further, the problem among the women is more complex and difficult problem most commonly found is muscular skeletal related problem and anxiety. The women used psycho tropics to a greater extent than general population but the use of drugs is markedly limited among them. On the whole, the presence of problem was more among old age women than amongst young age. There are, however, disturbing fact is that the biological and psychological problems may be on the increase in future time to come.

The abuse of medicines like pain killers, over the counter drugs and tranquilizers in the city of Bhopal is widespread. A research study was carried out among 463 families including a population of 3865 and the research study revealed 260 cases of biological and psychological problems and constituting a problems rate of 22.55 per 1000 population. Of the 200 cases, 49 abused over the counter medications to relieve menopause related problems, 2 cases of over the counter drug abuse were noted and 1 case of this being associated with over use of both the type of drugs for menopause related problems.

I. **Bio-psycho-social problem scores**

To determine the factors associated with the prevalence of biological and psychological problems among University in Delhi women, a total of 562 women working in eight colleges of Delhi University were examined. Systematic sampling technique was adopted in the selection of women and data was collected through predesigned self reporting questionnaire. Study revealed that the overall presence of case rate of biological and psychological problems was 45.6%. The most frequently reported problems were found to be menopause related problems and other age related problems, followed by other psychological problems in females and pain killers in are the most used medicines among females. Family income, place of residence, education, and respondent’s working pattern were highly significant factors related to
biological and psychological problems in female women. The initiation of treatment to biological and psychological problems was found to be most common after attaining menopause. Majority of the women were experimental medicine users.

To collect the available knowledge about prevalence and pattern of menopause related problems and medicine abuse a total of 2,865 subjects aged 40 years and above were studied on a schedule based on WHO menopausal rating questionnaire. The study revealed a prevalence rate of 23.78%. 36.98% of problems presents were in the age group of 45-55 years while 89% were literate. 35.98% among daily wage workers were presented with menopause related problems. In terms of age of onset of symptoms, 76.83% respondents had their first experience between the ages of 40-45 years. Most common type of menopause related problems had been psychological related problems. Majority of menopause related problems experienced women that they usually experience with hard work, only in the evening after hard work and night. In family history of 32.32% menopause related problems experienced women, mother was presenting with menopause related problems. 65.43% menopause related problems users seeking medical help. 34.98% also taking alternative therapies while 5.32 had the habit of taking multiple combinations of medicines. 4.34% of menopause related problems experience was taking a kind of drug soolfa also along with other treatments for menopause related problems while the frequency of over use of therapies was 2.1 and 14.3% respectively.

To investigate the type of character and pattern of symptoms and therapy use among long term menopausal experiencing women in an rural area of Australia a cross sectional research study was conducted. The study included 328 long term problem experiencing women who had regularly used therapy for at least 5 years. A structured interview schedule was used to collect information. Findings of study revealed that, mean age of the sample was 49 years. The median length of regular problem experiencing women was 43 years. Most used two or more therapies and some single therapy used daily, with a median of two joint paints day. The most common reasons for seeking treatment is for relaxation or relief of psychological tension and to feel good themselves. The majority experienced menopause related problems
and over two third were practicing some exercises. Most were current or and past having experiences. Overall, more than 75% believed that the benefits of therapies use outweighed the risks of complications, majority felt there was an even balance in life, and some of them said exercise had done them better than harm.

A cross sectional study was conducted on a sample consisting of 320 individuals in the age group of 40 years and above in a rural area of the Goa medical college and hospital. The main aim of the study was to find out the number and pattern of menopause related problems in rural Goa. The results of the study revealed that, prevalence of menopause related problems in the study population was 53%. In that 22.1% of them were experiencing serious problems, 10% mild problems and 8.5% were very mild problems. The proportion of menopause related problems in studies females was nearly 2 times higher as compared to other females. The number of menopause related problems in the old age population was 89%. The proportion of seriousness increased with age and reached peak level at about 60 years.

A research study was conducted in south part of the China to assess the psychological problems due to cessation of menstruation among old aged women and cluster sample was used from this part of nine districts. A total of 1321 were research studied using self report questionnaire. The findings revealed that the recent prevalence’s of regular psychological problems were, anxiety 8.3%, tension 23.4%, menopause related problems 4.2%, concentration problem 0.8%, sleeping disturbances 0.8% and all of the above is 5.3%. Study concluded that many of women were shown psychological problems. The most widely had symptoms were menopause related problems and tension. The rates of these all problems and menopause factors use among females were more among the more aged.

Studying prevalence of psycho social disturbances among Americans 46-60 yrs old, the authors found about 5 in 10 had a history of psychological and social problems, about 3 in 7 had a history of menopause related problems dependence, and about 2 in 15 had a history of overuse of drug. About one third of social problem experienced had developed drug dependence and about 25% of women had become treatment dependent. Among these populations of the other drugs, about 26% had become
treatment dependent.

II. Coping strategies adopted

A biological and psychological problem among the human beings are prevalent throughout the world in all the traditions, and is an understanding it is an important feature that distinguished human beings from other species existing on the earth. There is growing concern about biological and psychological problems among the human beings in India, because of the likelihood of further increase in biological and psychological problems and substitution of more other problems in future, due to unavoidable rapid growth, changes in life style, industrialization commercialization and urbanization. An epidemiological research study was carried out to estimate the presence of number and type of pattern of biological and psychological problems in urban population of Madhya Pradesh India in the year 1992-93. Total samples of 5326 were included in the research study and it was found that prevalence rate for problems were 368 per 1000 studied population. In the studied population people who responded were using tobacco, other psychoactive substances, cannabis, opioid drugs, sleeping pills, and painkillers for relieving their symptoms. Most commonly used drug was tobacco, followed by alcoholic beverages, cannabis, opium like drugs, sleeping tablets and painkillers.

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problem among the women is more complex and difficult problem most commonly found is muscular skeletal related problem and anxiety. The women used psychotropic to a greater extent than general population but the use of drugs is markedly limited among them. On the whole, the presence of problem was more among old age women than amongst young age. There are, however, disturbing fact is that the biological and psychological problems may be on the increase in future time to come.

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6.1.6 Coping strategies

The mean score of coping strategies scale was 11.36 with Standard deviation of ±1.44, median of 12 and a range was 09 as against range scores 0-16.

6.1.7 Level of coping

A general research population study which involved of more than 5,000 individuals from the state Kerala showed the effects of natural massage therapy and menopause related problems relief among the women who was having incidence of blood related disorder. The prevalence was most significantly more among use of regular therapies and occasional use of therapies than among non users. The numbers were more among muscle related problems in each age group and in each type of therapy used category it clearly shows menopause related problems and natural massage independent effect.

Used upon liver studies related to biopsies from 64 patients who were having menopause related problems from southern part of India, the researcher Shankar et al. reported a normal study of liver in only 23%, while other liver related diseases was present in 37.2%, liver cirrhosis and fat
deposited liver in 15.6%, and enlarged liver in 9.7%. Biochemical studies and analysis showed that menopause related problems had increased values of liver function tests and GGT as compared to other control non problem related population.

6.1.8 Illustrations Related To life quality of Subjects in Rural Community

Mean quality life grades of subjects were 63.37 with Standard deviation of ±9.51, median of 63 and a range of 38-82 as against possible range of 21-105.

1.1.9 Quality life scores

The data presented in shows that the calculated $\chi^2$ values are not significant at the 0.05 level for age, education, religion, occupation, marital status, type of family, history of problems in the family and previous exposure to educational programs where as it is significant for exposure to educational programs in media, indicating that the rural women differed with respect to exposure to educational programs in media.

The data presented shows that the mean knowledge score of Middle aged women related to menopause was 13.35 with Standard deviation of ±3.2, median of 13 and a range of 4-20 as against possible range of 0-30. The mean knowledge score of middle aged women was 13.72 with standard deviation of ±3.4, median of 14.5 and a range of 7-19 and the mean pre test knowledge score of control group was 14.36 with standard deviation of ±4.3, median of 14.5 and a range of 6 – 26 as against the possible range of 0-30.

With regard to attitude of life after menopause the other study shows that the mean pre test attitude score of Middle aged women was 120.94 with Standard deviation of ±19.6, median of 120.5 attitude score of middle aged women II was 124.41 with standard deviation of ±17.31, median of 129.5 and a range of 78-148 and the mean pre test attitude score of Control group was 128.61 with standard deviation of ±13.37, median of 128.5 and a range of 94–154 as against the possible range of 35-175.

In order to compare the pre test knowledge and attitude scores of the two middle aged womens and one Control group, the F ratio (ANOVA) was calculated. The data is presented in the table.

To correlate these findings, no related studies are available. The computed Chi-square value for association between pre-test level of
knowledge of rural people was found to be statistically significant at 0.05 levels for type of family where as it was not found significant for age, gender, education, occupation, marital status, history of substance use in the family, previous exposure to educational programmes and exposure to educational programmes in media at 0.05 levels. Hence it was inferred that rural peoples pretest level of knowledge regarding ill effects of biological and psychological problems was associated with type of family and it was independent with other personal variables. These findings were not consistent with findings of the other study which revealed that a personal variable of rural people seems to have association with coping with problems.

The computed Chi-square value for association between pre-test level of attitude of rural people regarding ill effects of biological and psychological problems was found significant for gender at 0.05 levels, where as it was found not significant for age, education, occupation, marital status, type of family, history of substance use in the family, previous exposure to educational programme and exposure to educational programmes in media. Hence, it inferred that rural peoples pretest level of attitude regarding ill effects of biological and psychological problems was associated with gender and it was independent with other personal variables.

6.1.10 Relationship between Bio Psycho Social Problems and Quality Life

Correlation coefficient value (-0.369) between bio-psycho-social problems and quality life scores of subjects in rural community is found significant at p<0.05 levels. It is inferred that, there is correlation between bio-psycho-social problems and quality of life.

6.1.11 Association between the Quality of Life With Their Selected Demographic Variables

For association between quality of life of subjects of rural community the computed chi square is found to be statistically significant at 0.05 levels for socio demographic variables like suffering with any chronic disorders, type of family and type of menopause where as it is not found significant for socio demographic variables such religion, education, age, occupation, dietary pattern, marital status, years after menopause and family income at 0.05 levels. Therefore, the findings partially support the null hypothesis.
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\(H_0\), indicating that post menopausal women quality of life is significantly associated with suffering with any chronic disorders, type of family and type of menopause.

### 6.1.12 Association between the levels of coping with their selected demographic variables

For the association between levels of coping subjects of rural community the computed chi square value not found to be statistically significant at 0.05 levels for socio demographic variables like dietary pattern, religion and type of menopause at 0.05 levels of significance and is found to be significant at 0.05 levels for the socio baseline elements like age of women, educational status, occupation, marital status, type of family, years after menopause, family income and suffering with any chronic disorders. Therefore, the findings of the chi square values partially support the null hypothesis \(H_0\), implicating that post menopausal women levels of coping is significantly associated with educational status, occupation, age of women, marital condition, family type, family income condition, years after menopause, and suffering with any chronic disorders.

Now a day there is welfare of public debate regarding the short term effects of different combination of therapies in minimizing the health related issues among the middle aged women. A study was undertaken to find out the middle aged women’s attitudes, value system and their willingness to take different therapies after experiencing the symptoms related to normal changes in health after middle age and their knowledge of the potential risks due to these therapies. A interview for focus group was organized among the women of middle age in their workplace where women of middle age were working to collect the information. Findings of the study were realized that middle aged women appear to be knowledgeable about the different therapies and its associated risks of following it, and hold a value according to their culture that such behavior is normal and may be followed. This is in women’s perception to their readiness to use therapies and have a comfort with poorly developed values and awareness about the danger involved in it.

A study conducted to assess the of co-morbidity prevalence rate in patients with use of different hormonal therapies on the medical disorder classification system developed by world health organization, and compare it
with other multi systems of medical treatments and menopause related problems having patient groups, on the areas like socio-demographic and clinical related variables and to find out the existing relationships between the different simultaneously occurring psychiatric and other health related disorders. A total of 234 subjects were taken for the study and semi structured interview Performa was used to collect sociological and demographic variables and history hormonal use of therapies. Results of the study revealed that prevalence of co existence of other health related disorders was 48.5% of the total people being studied, in that 53% of women were presented with menopause related problems and dependence on medical care and 38.2% in other mode of treatments. Two different types of diagnoses were available within 42.5% and more than two types in 33.5% of the total subjects being studied. The most usual co-morbid disorders on diagnostic manual were psychological disorders, other use of toxic substances, dysfunctions of sexual activity, psychotic and social disorders and anxiety related disorders. 35.8% with other types of disorders of women and 23.1% with menopause related problems had a disorders related to personality.

A prospective study was conducted in Jarkand state of Ranchi population, to assess the existing problems related to of menopause and hormonal changes and co-morbidity and its effect on psychopathology, health and pattern of symptoms and of remission in manic disorder. 300 admitted in-patients with presence of health related problems were included and studied for six months using structured and well developed clinical interview schedule. The present number of menopausal co-morbidity was estimated about 67%. Participants of health related issues were significantly middle aged, had very early age of onset of hormonal change related disorder, married and many of them were unemployed and had more symptomatic and problematic health related issues and all its related problems. Risk factor which were analyzed showed health related issues were present and as being consistently associated with poor outcome with different mode of treatment.

6.2 RECOMMENDATIONS

Based on findings of the study, the following recommendations have to be made:
• Similar study can be replicated on huge number of samples to disseminate the findings.
• For constructive correlation of the facts can be done through experimental research design
• Based on this study done, similar study can be carried out explore the long term efficacy of coping mechanism adopted by middle females in post menopause phase.
• A comparative study can be conducted on same topic by comparing urban and rural samples
• A comparative study can be conducted on multiple setting for better results

The illustrations of under taken study can be adopted in the following areas of nursing profession.

**Nursing Practice**

• The findings of the study revealed that post menopausal women had various Bio-psycho-social problems related to changes due to menopause and their aging factors. And also review of literature shown that prevalence of bio-psycho-social problems are more among post menopausal women.

• Nurses can play a pivotal role in organizing and executing creative awareness programs for all post menopausal women’s of the society especially for rural areas to improve their knowledge regarding the physiological changes and their effects after menopause and how to manage them and develop positive attitude towards their life.

• According to findings post menopausal women had used many coping strategies to cope with the situation after menopause. As a community health nurses it is our responsibility to support the women to use positive coping mechanisms and helping them to come out with negative coping mechanisms.

• As the nursing practice is based on thorough theoretical basis, various educational methods can be used to educate the post menopausal women in primary settings for prevention of menopause related problems, using positive coping mechanisms and promotion of health.

**Nursing Education**
• Nursing students should be provided with learning experiences in planning and organizing health education programs on prevention, causes and management Bio-psycho-social problems among post menopausal women.

• As nursing education gives more importance to preventive aspect of disease than curative aspect, each student will be trained thoroughly related to menopause and its impact on the women’s well being.

• Findings of the study can be used as a source for teaching material for the students of the nursing and other health professionals.

• Nursing students (basic as well as post graduate) should be provided with adequate community learning experience in planning, organizing and conducting health education as well as health camps in early detection of high risk groups in the community regarding the management of bio-psycho-social problems.

Nursing Administration:

• In this world of ever growing stress, the nurse administrators have a responsibility to provide nurses with staff development opportunities. This would enable the nurse to update their knowledge and apply the acquired skills for managing bio-psycho-social problems and develop a positive attitude and demonstrate holistic care in management of bio psychosocial problems of middle age women in menopause and improve their quality of life.

• Nurse administrator should take active role in organizing and providing adequate guidance and counselling program and arranging personnel for conducting teaching on bio-psycho-social problems reductions methods like yoga, meditation and emotional ventilation. In addition to that she/he can provide necessary suggestions to the higher officials regarding the need for such programs in community area.

Nursing Research

• This topic has great importance to the present days as prevalence of bio-psycho-social problems and its impact on health are high. This study helps to estimate the incidence of post menopausal problems in women of post menopause in rural community and their quality life.
• The findings of under taken research title points out the importance of further researches on post menopausal problems in all areas. Obviously the present study can support future research efforts to emerge with similar results.

6.3 FUTURE SCOPE

This research study is systematic enquiry in nursing discipline. By this research study results we can develop a solid part of knowledge. This research will help in getting knew knowledge related to problems of menopause that will help women in her daily lives. Nurses conduct research study that will benefit the society. Now a day’s nurses are very much engaged in research studies this will benefits the profession as well. Also this will help nursing profession to develop new knowledge regarding issues that are affecting the life of patients and people in the community.

The results of this study will be a proof for developing various strategies in taking care of post menopausal women. Further we can focus on educational methods by that we can prepare professional nurses. If the nursing profession to be grown research studies are very much needed. Now a days nursing is moving very fast and striving to go along with developments in other fields of health care services. There are multiple health problems according to changes in life style of people yet we can find out effectiveness of old methods and modern methods. Now nurses must be ready to face the present day challenges. This is possible only when nursing has new knowledge and refines the old knowledge and practices. Present research study will help nurses to practice in a better way.

By understanding problems of post menopausal women we can strengthen the nursing practices. There are many barriers in practicing but the time has come nurses to take a leadership role and make decisions to provide research based care. This is called evidence based practice which is taking a growing role in nursing. Present community (public) very smart. People will not readily accept what health care providers say but they check out with evidences. In this matter this research will be very much helpful for them. Using the research in nursing practice requires scientifically enquiring mind. In this matter nurse researchers, nurse administrators, will help the practicing
nurses. They make collaborations between nursing education, nursing practice and nursing research. This is combined effort.

6.4 LIMITATIONS OF RESEARCH WORK

- The assessment of bio-psycho-social problems, coping strategies and quality life in women during post menopause is only once.
- Research title included samples of only 500. Smaller number of subjects limits the generalization of the study.
- The tool used for the data collection was not a standardized tool. It was designed by the investigator herself for the purpose of the present study based on the objectives to be met.
- Study in conducted only among post menopausal women of rural community, so it limits the generalization of findings among all post menopausal women.

The focus of this study was assess Bio-Psycho-Social complications, coping mechanism and life quality of post menopausal women in selected rural community in Dharwad District, Karnataka. A descriptive survey design and quantitative approach was implemented for study. The data was collected from 500 samples through probability cluster sampling (3 stage) technique. All post menopausal women in selected rural areas were willingly participated in the study. They gave free and frank responses. The study was formulated on the Rosenstock’s Health Belief Model.

Further, the conclusion drawn on the depending upon the findings of the study includes:

Findings of this study it is depicts that post menopausal women had various Bio-psycho-social problems related to changes due to menopause and their factors related to age. And also review of literature clearly implicated that prevalence of bio-psycho-social problems are more among post menopausal women. Nurses can play a very important role in planning, organizing and executing creative awareness / educational programs for all post menopausal women’s of the society especially for rural areas to enhance their knowledge regarding the physiological changes and its effects after the period of menopause and how to handle them and develop positive attitude towards their life.
According to these findings women of post menopause period had used many coping strategies to come out of problems of menopause and cope with the situation at post menopause. As a community health nurses it is our one of vital responsibility to support the women to use positive coping mechanisms and helping them to come out with negative coping strategies. As the practice of nursing is based on thorough theoretical basis, many types of educational methods can be used to educate the post menopausal women in primary level of settings for prevention of menopause related problems, promotion of health and using positive coping mechanisms.

Nursing students should be made available with experiences of learning in planning, organizing and conducting health education programs for prevention, causes and treatment regarding Bio-psycho-social problems among women of post menopausal period. As nursing education give more emphasis to preventive aspect of disease than treatment aspect, every student will be trained and acquainted with thoroughly related to menopause and its problems on the women’s health. The findings of the study can be used as a teaching material for the students of the nursing and other health care professionals as a source materials. Nursing students (undergraduates as well as post graduate) should be equipped with adequate community learning experience in planning, organizing and conducting health education as well as health care related camps in detection of high risk groups in early stage in the community area regarding the management of bio-psycho-social problems.

In this world of ever growing stress and strain, the administrators of nursing profession have a great responsibility to provide and equip nurses with staff development opportunities in all areas. This would enable the professional nurse to update their knowledge and practice and use the acquired skills for treating and caring bio-psycho-social problems and develop a positive attitude, demonstrate holistic care in management of bio-psycho-social problems among women of post menopause period and improve their life’s quality. The nurse administrator can take active role in planning, organizing and providing adequate guidance and counseling program and arranging personnel for conducting teaching on bio-psycho-social problems minimizing methods like meditation, yoga and ventilation of emotions. In addition to that
she/he can provide all necessary suggestions to the top level officials regarding the need for such educational programs in community areas of urban and rural settings. This topic of research has more importance to the present days as incidence and prevalence of bio-psycho-social problems and its direct effects on health of post menopausal women’s are high. This study helps to find out the incidence of post menopausal problems among post menopausal women of rural community and their quality life as experience by them. The findings of under taken research title assist the importance of further researches by nursing professionals on post menopausal problems in all areas. Obviously the present study can support future research efforts to emerge with similar results.

**SUMMARY**

This chapter has dealt with a brief summary of the study. The first section of this chapter summarized the methodology with brief discussion on salient findings of the study. The next section discussed the implications for nursing practice, nursing education, nursing administration, nursing research, the limitations and the recommendations. In all these section it is explained that how these findings can be utilized in future by the nursing administrators, nursing students, nursing research scholars other people who are have their interest in the women’s obstetrical health and the problems arise due to obstetric changes in women during menstruation and menopause.

In the earlier section of this chapter briefly described about the nature of the problem, its significance, what is need for the study, methodology followed, conceptual framework and statistics used for the study.

This chapter through the light on the whole process of the research, researcher experience and other aspect of the study.
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WEBSITES:
1. www.google.co.in
2. www.pubmed.in
From,
Mrs. Meenaxi R. Devangmath
Professor,
KLE’s Institute of Nursing Sciences
Hubballi.

To,
The District Health Officer
Dharawad district,
Dharawad

Subject: Request for permission to conduct research study.

Respected Sir,

With respect to subject cited above I, Mrs. Meenaxi R. Devangmath, Professor, KLE’s Institute of nursing sciences, going to conduct a research project which is to be submitted to Shri Jagdish Prasad Jhabarmal Tibrewala university, Jhunjhunu, Rajasthan, for fulfillment of university requirement for the Doctor of Philosophy (Ph.D) in nursing.

The topic for study is "A study to assess Bio-Psycho-Social problems, coping strategies and quality of life among post menopausal women of rural community of Dharawad district."

As per my study plan, I need to conduct my study on post menopausal women residing in villages of Dharawad district. I shall be obliged to you if you could kindly grant the permission to me to carry on before said activity in the above mentioned areas.

Thanking you

Date: 25/12/17
Place: Dharawad

Yours Sincerely

(Mrs. Meenaxi R. Devangmath)
From,
District Health Officer,
Dharwad district,

Date : 25-02-2017

Sub : Grant of permission to conduct research study ...

With reference to the above subject, permission is granted to
Mrs. Meenaxi R. Devangmath, Professor, KLE Societies Institute of
Nursing Sciences, Vidyanagar, Hubli (JJTU Research Scholar) to
conduct research study in Rural Community of Dharwad district on
Post-Menopausal Women with following conditions, that the
investigator will not disclose the names of the clients and will not do
any procedure on clients.

Place : Dharwad

District Health Officer,
Dist. Health & Family Welfare Officer
DHRWAD
LETTER SEEKING EXPERT’S OUTLOOK FOR THE VALIDATION OF TOOL AND SELF INSTRUCTIONAL MODULE

From,

Mrs. Meenaxi R. Devangmath
(Research Scholar)
Professor & HOD
Community Health Nursing
KLES Institute of Nursing Sciences,
Vidyaganagar,
Hubli-31

To,

Sub: Requisition for expert opinion on content validity of the research tools.

Respected Sir/Madam,

I, Mrs. Meenaxi R. Devangmath, Professor & HOD, dept. of community health nursing request you to go through the tools which is to be used for data collection of my dissertation to be submitted to Shri Jagdishprasad Jhabarmal Tibrewala University Rajasthan for the degree of doctor of philosophy (Ph.D.) in Community Health Nursing.

Topic: “A study to assess Bio-Psycho-Social problems, coping strategies and life quality of post menopausal females in selected rural community in Dharawad District, Karnataka”

With regard to this, I kindly request you to validate my research tool for its appropriateness and relevancy.

Herewith I am enclosing a copy of

- Structured Menopause Rating scale,
- Menopause Coping Strategies scale and
- Quality Of Life Interview Schedule.
- Criteria checklist for evaluation
- Content validity certificate

I request you to give your valuable opinion and suggestions for the improvement of the tool for its appropriateness and relevancy, so that I will be able to conduct my study effectively and successfully. I also request you to kindly sign the certificate that the tool has been validated. Your expert opinion and kind co-operation will be highly appreciated and gratefully acknowledged.

Thanking You

Yours faithfully,

(Mrs. Meenaxi R. Devangmath)
# ANNEXURE – C

## EVALUATION CRITERIA CHECKLIST FOR VALIDATION OF TOOL

### Instructions

1. A research tool is developed. I request you to give your expert comments and suggestions.

2. There are 3 columns given for responses place a tick (✓) mark in the suitable elements and give your remarks in the suited place.

#### Interpretation of columns:

- Column I completely meets the criteria.
- Column II partially meets the criteria.
- Column III does not meet the criteria.
- Remarks.

Your expert opinion and kind co-operation will be highly appreciated and gratefully acknowledged.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Evaluation Criteria</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Part I: Demographic data.</strong> The items on socio-demographic information cover all aspects necessary for the study.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2.</td>
<td><strong>Part II</strong> Structured Menopause Rating scale</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td><strong>Part III</strong>: Menopause Coping Strategies scale</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.</td>
<td><strong>Part III</strong>: Quality Of Life Interview Schedule</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Place: Hubli

Date: ____________________

Signature of the Evaluator:
ANNEXURE – D

CONTENT VALIDITY CERTIFICATE

This is to certify that, the tool developed by Mrs. Meenaxi R. Devangmath, Professor & HOD, Dept. of community health nursing is validated by the undersigned and can proceed to conduct the main study for dissertation entitled “A study to assess Bio-Psycho-Social problems, coping strategies and quality life of post-menopausal women of selected rural community in Dharwad District, Karnataka”

Date: ___________________________  Signature and Seal of the Evaluator
Place: ___________________________  (Designation and Address)
LIST OF VALIDATORS

Dr. Sangmesh Nidagundi
Principal and Head of the Department
Shri Kalabyraveshwara Swamy college of Nursing,
Vijay Nagar,
Bangalore- 560040

Dr. Shashidhara Y.N
Associate Professor & Head of the Department
Community Health Nursing
Manipal College of Nursing,
Manipal

Dr. Precilla Thomas DGO, DNB
Laparoscopic Surgeon and Infertility specialist,
Moon Maternity Hospital,
Vidyanagar, Hubli- 560031

Sr. Renita Joseph
Professor,
St. Ann’s College of Nursing
Sacred Heart Hospital,
Tutikorin,
Tamilnadu-628002

Dr. (Mrs) Meharunnisa I Momin
Principal
Magdum College of Nursing
Kolhapur,
Maharastra

Dr. (Mrs) Jayshri Budhihalmath
Clinical Psychologist
Dept. of Psychiatry
SDM institute of Medical Sciences and Hospital, Sattur,
Dharwad-580009

Dr. Sudha Reddy
Principal,
KLE Universities College of Nursing
Belgavi,
Karnataka

Prof. Chandrashekhar NB
Prof. and principal
Department of Research and Statistics
Bethal Medical Mission (NG) group of institution.
Heggere, Bangalore- 58
CERTIFICATE OF CONSENT

I, hereby certify that I have signed this agreement freely and voluntarily, without any coercion and I am willing to participate in this study with a clear understanding of my participation. My signature also indicates that I have received a copy of the consent form. I also understand that in the event of not participating in this study withdrawal of consent at any time, my. I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. Data gathered during the course of this study will be retained after the study period and shall not be sold to a third party for further research. Results of the study shall be used exclusively for the purpose only. I ready to involved voluntarily in this study. I consent to voluntarily participate in this Study

Name of Participant :  ...........................................
Signature of Participant :  ...........................................
Date :

I have read out the information sheet to the participant/relative and the participant is allowed to ask questions about the study, and all queries have been responded understandably as per my level of understanding. I confirm that the participant have not been forced to giving consent, and the consent has been given freely and voluntarily.

Name of Researcher :  ....................................................
Signature consent :  ....................................................
Date :
Dear participant,
This questionnaire is related to the demographic variables. I am here with requesting you to answer all the questions. This information will be treated as confidential. Kindly give your appropriate response for each item.

1. **Age (in years)**
   a) 45 – 50 Years
   b) 51 – 55 years

2. **Religion**
   a) Hindu
   b) Muslim
   c) Christianity
   d) Any other specify

3. **Education**
   a) No formal education
   b) Primary school (1st - 7th std)
   c) High school (8th - 10th std)
   d) PUC and above

4. **Occupation**
   a) Agriculture
   b) Self employed
   c) Home maker / agriculture
   d) Any other, specify…….

5. **Marital status**
   a) Married
   b) Single (Widow / Divorce)
6. **Type of family**
   a) Nuclear
   b) Joint
   c) Extended

7. **Dietary Pattern**
   a) Vegetarian
   b) Mixed diet

8. **Years after menopause**
   a) 0 – 2 years
   b) 3 -4 years
   c) 5 – 6 years
   d) 7 – 8 years
   e) 9 – 10 years

9. **Family Income (Rs/Month)**
   a) Below 5000
   b) 5001 – 10000
   c) 10001 – 15000
   d) above 15000

10. **Are you suffering with any chronic disorders?**
    a) Yes
    b) No

   **If yes, specify**
   - Hypertension
   - Diabetes mellitus
   - Cancer
   - Heart diseases

11. **Type of menopause**
    a) Natural
    b) Assisted (Hysterectomy)
Dear Participants,

Which of the following symptoms apply to you at this time? Please, mark the appropriate box for each symptom. For symptoms that do not apply, please mark ‘none’.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Symptoms</th>
<th>Yes</th>
<th>No</th>
<th>If Yes, Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hot flushes, sweating (episodes of sweating)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>Heart discomfort (unusual awareness of heart beat, heart skipping, heart racing, tightness)</td>
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</tr>
<tr>
<td>3.</td>
<td>Sleep problems (difficulty in falling asleep, difficulty in sleeping through, waking up early)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.</td>
<td>Sexual problems (change in sexual desire, in sexual activity and satisfaction)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>5.</td>
<td>Bladder problems (difficulty in urinating, increased need to urinate, bladder incontinence)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>6.</td>
<td>Dryness of vagina (sensation of dryness or burning in the vagina, difficulty with sexual intercourse)</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>7.</td>
<td>Joint and muscular discomfort (pain in the joints, rheumatoid complaints)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8.</td>
<td>Depressive mood (feeling down, sad, on the verge of tears, lack of drive, mood swings)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9.</td>
<td>Irritability (feeling nervous, inner tension, feeling aggressive)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10.</td>
<td>Anxiety (inner restlessness, feeling panicky)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11.</td>
<td>Physical and mental exhaustion (general decrease in performance, impaired memory, decrease in)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scoring:

Menopause rating scale consists of 14 items divided into 2 domains i.e. biological symptoms and psychosocial symptoms. There are two alternative responses YES and NO, from which the participants have to say one best option to the investigator and each item again includes degree of severity i.e. mild, moderate and severe. The participant who say YES for any responses then they have to say degree of severity also.

Analysis is done for each response wise and domain wise for presence of symptoms and severity. i.e.in terms of frequency and percentage.
### Part – III

**MENOPAUSE COPING STRATEGIES SCALE**

Following statements are related your coping strategies adopted to cope with post menopausal problems. Kindly listen the statements carefully and give your true responses.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Statements</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I talk to someone to find out more about the situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I went on as if nothing had happened</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I tried to keep my feelings to myself</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I slept more than usual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I got professional help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I tried to get away from it for a while by resting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I generally tried to be with people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I refused to think too much about it</td>
<td></td>
<td></td>
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<tr>
<td>9.</td>
<td>I came up with different solutions to the problems of menopause (home remedy, ayurveda, traditional medicines etc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I accepted the situation, since nothing could be done.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I tried to keep my feelings about the problem by involving myself in other activities ( praying, exercise, diversional activities etc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I adjusted myself with changes of menopause</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I regularly consult health care workers for physical problems</td>
<td></td>
<td></td>
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<tr>
<td>14.</td>
<td>I use alcohol or drugs to help me get through it.</td>
<td></td>
<td></td>
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<tr>
<td>15.</td>
<td>I take Nutritious diet to meet needs of menopause</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I go for morning walk to keep myself healthy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scoring:

A Menopause coping strategies scale consists of 16 statements regarding coping strategies adopted by women to cope with post menopausal symptoms. There are two alternative response columns; YES and NO. Among 16 statements, 11 positive statements are scored as; 1 score Yes and 0 score for No. The remaining 5 statements are considered as negative and scored as; 0 score for Yes and 1 score for No. The total score range from 0 to 16. This is further divided arbitrarily as follows;

- **Poor coping: 0 – 05 score**
- **Moderate coping: 6 – 10 score**
- **Good coping: 11 and above**

**Positive Items:** 1, 5, 6, 7, 8, 9, 11, 12, 13, 15, 16

**Negative Items:** 2, 3, 4, 10, 14
Part – IV
QUALITY OF LIFE SCALE

Following items are related your quality of life, health, and other areas of your life. The following items ask about how much you have experienced certain things after menopause. Kindly listen statements carefully and feel free to express your opinion. There are five response columns in the scale and there is no right or wrong answers. Hence you are requested to be honest in expressing your opinions as strongly agree, agree, Uncertain, disagree and strongly disagree against each item.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Quality Of Life Items</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>General Health Domain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>I am unhappy with my appearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Most things that happen to me are out of my control</td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
<td>I feel physically well</td>
<td></td>
<td></td>
<td></td>
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<td>4.</td>
<td>I am feeling a lack of energy</td>
<td></td>
<td></td>
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<tr>
<td>5.</td>
<td>I am feeling tired or worn out</td>
<td></td>
<td></td>
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<tr>
<td>6.</td>
<td>I am satisfied with my health</td>
<td></td>
<td></td>
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<tr>
<td>7.</td>
<td>My stamina is decreased</td>
<td></td>
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<tr>
<td>II</td>
<td>Physiological Domain</td>
<td></td>
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<tr>
<td>8.</td>
<td>I am experiencing Hot flushes or flashes</td>
<td></td>
<td></td>
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<tr>
<td>9.</td>
<td>I am experiencing flatulence or gas pains</td>
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<tr>
<td>10.</td>
<td>I am experiencing aching in muscles, joints, neck and back</td>
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<tr>
<td>11.</td>
<td>I am experiencing difficulty in sleeping</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12.</td>
<td>My skin is drying</td>
<td></td>
<td></td>
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<tr>
<td>13.</td>
<td>My weight is increasing</td>
<td></td>
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<tr>
<td>14.</td>
<td>I am experiencing frequent urination</td>
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<tr>
<td>15.</td>
<td>I frequently experience anxiety</td>
<td></td>
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<tr>
<td>16.</td>
<td>My mood is generally depressed</td>
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<tr>
<td>17.</td>
<td>I am experiencing poor memory</td>
<td></td>
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<tr>
<td>18.</td>
<td>I am feeling of wanting to be alone</td>
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</tr>
<tr>
<td>19.</td>
<td>I lost control over my emotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I maintain normal interpersonal relationship with others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I am able to attend social gatherings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The score is further divided arbitrarily as follows:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor QOL</td>
<td>21 – 49</td>
</tr>
<tr>
<td>Quite well QOL</td>
<td>50 – 77</td>
</tr>
<tr>
<td>Good QOL</td>
<td>78 – 105</td>
</tr>
</tbody>
</table>

**Positive Items:** 3, 6, 20, 21  
**Negative Items:** 1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
ANNEXURE – H
EQUATION USED IN THE STUDY

1. Karl Pearson’s co-efficient of correlation:

\[ r = \frac{\sum x y - (\sum x)(\sum y)}{\sqrt{[\sum x^2 - (\sum x)^2] [\sum y^2 - (\sum y)^2]}} \]

2. Spearman’s brown prophecy formula:

\[ I = \frac{2m}{l + \frac{n}{2}} \]

3. Mean:

\[ \bar{X} = \frac{\sum X}{n} \]

4. Median:

\[ \text{Median} = \frac{4I + 9}{2} \]

5. Mode:

= frequently repeated item

6. Standard deviation:

\[ SD = \sqrt{\frac{\sum (X - \bar{X})^2}{n}} \]

7. Chi Square:

\[ \chi^2 = \sum \frac{(O - E)^2}{E} \]
CERTIFICATE

This is to certify that Mr/ Mrs. Lucy Gladies. E has the same research background as the research scholar and understand the process and procedure of data collection as per the requirement of conducting the research. The particulars are as below.

Name of the research assistant— Mrs. Lucy Gladies. Endigeri

Qualification— M Sc Nursing.

Designation— Lecturer

Institution— K. N. E Society’s Institute of Nursing Sciences-Hubballi, Karnataka.

Place of data collection— Selected rural areas of Dharwad district.

Sign of Research Assistant

[Mrs. Lucy Gladies. E]

[Signature]

Ph.D Scholar
JITU
Reg. No 28216065
CERTIFICATE

This is to certify that Mr/ Mrs **K·SHARON ROSE** has the same research background as the research scholar and understand the process and procedure of data collection as per the requirement of conducting the research. The particulars are as below.

**Name of the research assistant**— Mrs. K·SharonRose.

**Qualification**— M Sc Nursing.

**Designation**— Lecturer

**Institution**— K L E Society’s Institute of Nursing Sciences-Hubballi, Karnataka.

**Place of data collection**— Selected rural areas of Dharwad district.

\[Signature\]

**Sign of Research Assistant**

\[Signature\]

**Ph.D Scholar**

JITU

Reg. No 28216065