MENOPAUSAL ADJUSTMENT OF MARRIED WOMEN IN KERALA: A SOCIOLOGICAL ANALYSIS

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by

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Declaration

I hereby declare that the thesis entitled "**Menopausal Adjustment of Married Women in Kerala: A Sociological Analysis**", is the record of bona fide research carried out by me under the guidance and supervision of Prof. Dr. Shally Joseph, Research Guide, Department of Sociology and Centre for Research, St. Teresa's College, Ernakulam. I further declare that this thesis has not previously formed the basis for the award of any degree, diploma or associateship.

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I certify that the thesis entitled, **"Menopausal Adjustment of Married Women in Kerala– A Sociological Analysis"** is a bona fide research done by **Dora Dominic** for the award of the degree of Doctor of Philosophy in Sociology, under my supervision and guidance.

Shally Joseph

Dr. Shally Joseph

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Abstract

Menopause is a significant transition during mid-life which signals the end of reproductive cycle. The menopause is approached as bio-cultural paradigm because there are cross cultural variations in the experiences of menopausal women. Multi-dimensional factors in specific socio-cultural context make menopausal experience distinct. Based on this, menopausal adjustment of married women is analyzed in the context of Kerala culture. The life expectancy of women in Kerala is comparable to developed nations and women spends one third of her life in post-menopausal stage. But there are hardly any studies in Kerala to analyze the menopausal changes of women in Kerala especially from a sociological perspective. The quality of life of menopausal women depends on the physical and emotional well-being during the transitional phases, the study attempts to analyze the factors that are hindering the quality of life of Menopausal women and the adjustment strategies adopted by them.

The focus of the study is married women in Kerala of the age group between 40-60 years who are passing through the transitional phases of menopause. The sample size is 500 menopausal women from different phases. The data was collected from Thiruvananthapuram, Kozhikode and Ernakulam using questionnaire. The menopausal symptom severity, adjustment in social life and coping strategies adopted by menopausal women are analyzed through quantitative methods. The theoretical frame work of the study was drawn from Bourdieu's 'Habitus and Field', Goffman's concept of Stigma' and Emily Martin's theory on 'Women's Body'.

The analysis revealed that the women in Kerala are affected by urogenital issues and vasomotor symptoms than the psychological symptoms. It is found that menopausal symptom severity vary significantly based on life course factors as age, menstruation status, religion, educational status and socio economic factors. The evaluation of social life indicated that women in Kerala are socially involved at the same time they have home life and work life issues. Women are adopting coping strategies as bio-medical and socio-religious adjustment strategies. It is noticed that women in Kerala are more focused on socio-religious coping that shows the importance of social ties and spirituality in the life of menopausal women.

Keywords: Menopause, Symptom Severity, Quality of Life, Adjustment Strategies

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Introduction

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Health is the wellbeing of a person related with his body, mind and soul. In the preamble, World Health Organization defines health as "a state of complete physical, mental and social wellbeing and it is not the absence of disease" (WHO 1948). A healthy person is physically, emotionally and mentally integrated to his natural environment that includes his social environment too. The complete integration of an individual towards his natural and social environment happens only through uninterrupted functioning of social roles within family, work and community life. This is essential for the life-satisfaction and good quality of life of an individual.

The world nations have unequal distribution of health care facilities based on race, ethnicity, region and gender. Developed nations have lower infant mortality, higher life expectancy and low death rate. World Health Organization fostered the development of health promotion movement that is oriented in catalyzing change and promoting global interconnectedness in the context of health. It provides precedence in setting up global standards in equalizing disparities and coordinating global activities related to health. As a

result in the past 20 years, global inequalities in the health sector is declining (Gwatkin 2017).

In the measure of health, life expectancy is a crucial determinant that is used to describe world health status. In the global scenario, the life expectancy has continuously increased in most countries over the last century (Vaupel 2010). According to United Nations World Population Prospects 2015, life expectancy rate for both male and female was estimated to be 71.5 years during the period 2010-2015. In general it varies with an average of 11.7 percent shorter or larger. The increased life expectancy has attributed to declining mortality rates and increase in the aged population. The present society is challenged by multiple health issues and diseases that interrupt the functioning of an individual and society at large. Global Burden of Diseases, Injuries, and Risk Factors Study 2015 (GBD 2015) noted that major factors for loss of health among aged population are musculoskeletal, followed by mental health disorders, as depression and anxiety disorders. According to Global Burden of Disease Cancer Collaboration (2017) life style disorders and different cancers as prostate, uterus, kidney and congenital disorders are the most reported diseases. If proper care is given, additional years of life can be spent disability free and in this context, the concept of healthy aging is gaining importance. Healthy aging is developing and maintaining functional ability of an individual that enables well-being in old age. Also if the additional years of life are dominated by decline abilities the implications of aging can be negative (WHO 2015b). Studies shows that well-being at old age is determined by gender, race/ethnicity, and socioeconomic status (Crimmins 2005). Since the members of society share the common health delivery system, health is also a societal concern. So, to have an in-depth understanding health has to be analyzed from a sociological perspective.

1.1 Sociology of Health

Sociology of health is a branch of Sociology that deals with the social dimension of health and illness. It discusses the relation between health and illness in connection with different social institutions. The sociological perspective of health and illness analyses the influence of social factors on diseases and its variations based on gender, culture, religion and economy. The subject analyzes the sociological aspects of pathology and the patterns of medical help seeking and the impact of health determinants as socio-economic status, cultural factors and other belief system on individuals in society. For Williams (1996) field of Sociology of Health includes socio-psychological and socio-cultural aspects of health and diseases. It includes sociological aspects of public health programme and social factors related with coping behaviour of family with chronic diseases and stressful situations due to ill health. The notion of health is subjectively constructed from the interaction with social environment. In the study of health issues, the sociologist analyses the health and illness under the themes that person's wellness is an organic condition which is subjected to the interpretation of others in society (Anderson 2007). Social epidemiology links various diseases to the structure of social inequalities as class, status, gender and socioeconomic status. The belief about the health and well-being is shaped by our family and peers and others with whom we share our social and cultural environment (Nettleton 2007).

1.2 Health and Culture

Williams and Sternthal (2010) noted that definition of health varied based on the ethnic and cultural groups. Culture is core, fundamental and dynamic aspect which prescribes the way of living for groups or people that ensure the survival and well-being (Napier et al. 2014). It is a set of practices and behaviour defined by customs, habits, language, and geography that group

of individuals share. Culture links individual to the society and in the context of health it provides social and personal means to manage the health crisis. Culture enables the individual to maintain health and prevent diseases, and it provides strategies to manage uncontrollable and unpredictable events (Singer 1995).The perceptions about health, well-being, diseases, approaches to diseases and help-seeking behaviour nature are determined by culture. The approach towards diseases varies according to the cultural group and it is often reflected in belief system, life styles, and dietary patterns.

Thus, health has to be understood from the perspective of culture that interlinks factors as parental heritage, language, belief system, dietary patterns, family structure and social support system (Singer 1995). Health challenges in the present scenario affect both men and women, but the impact of some challenges are more on women than on men. The structural inequality that exists in society makes women vulnerable to various challenges in society. Macintyre (2001) noted that gender has been neglected in the studies that analyses health. The cultural belief system and normative structure results in gender inequality between male and female related to health services.

1.3 Understanding Women's Health

The women around the world are deprived of equal access to health care. The patriarchal values prevailing in society and gender based inequalities in education, income and employment restrict assess of opportunity to achieve optimal health services for women. The idea of subjugation of females, leads to gendered disparity and unequal access over resources (Pescosolido 2007).Due to these disparities, women's health is dependent on numerous social and cultural factors, but this is often ignored from the medical perspective.

The area of women's health discusses influence of sex, gender and social structure in the context of diseases or conditions. Etiology, occurrence, prevention and treatment of various diseases that affect women are explored. The issues as cancers, osteoporosis, life style diseases, heart diseases and other chronic illness are discussed in the studies related to women and health. The women's health is a comprehensive topic which encompasses physical, social and psychological health of women. It addresses health aspects of women at different life stages. It provides expanded vision about various health challenges faced by women during her life transformations.

According to Elder (1985) to understand the different issues faced by the individual related with the health a dynamic approach that relates the later's life experience with earlier ones has to be employed. He notes that "lives are socially organized in biological and historic time". So, to understand women's health the life course model can be applied.

An individual passes through various developmental phases such as infancy, childhood, adolescence, adulthood, and old age which involves multiple transitions. The terms 'life span' and 'life course' are two terms which is used to refer these developmental phases (Alwin 2012) A life span is the duration of life; life-span characteristics are closely related to age and largely invariant across time and place. The life course is intersection of socio-historic factors with person's biography which is varied across space and time (Elder 1985).The Sociology of Life Course is a recent development in the field of Sociology which deals mainly about transitions and trajectories in life course. It encompasses pathways of bio-psycho-social factors on various diseases during the individual life course. The individual life course consists of independent and interdependent life trajectories as personal, work and social life trajectories.

The functional capacity of our biological system is determined by external factors throughout the life course (WHO 2015b). Compared with men, women's lives are more structured by gender and this is reflected in health of women. Walters (2004)states that women's life is shaped by ethnic background, sexual orientation, age and their stage in life cycle. The diverse structure of inequalities prevalent in the social realm makes women more vulnerable to discrimination and power manifestations. The women born into societies that favour men are more likely to experience diseases in later life (WHO 2015b). Decline in female sex ratio in India is an indicator of giving low priority to female children. Thus to understand women's health, an interdisciplinary approach is necessary, for analyzing the bio-social factors affecting the social pattering of diseases. Life course approach explores the women's health in the context of bio-psycho-social factors that influence women from gestation, childhood, adolescence, adulthood, mid-life and old age.

a) Antenatal Stage

The life starts at womb of a mother and this stage is a crucial in determining the health of fetus. Biologically female fetus is healthier than male fetus. Woman's socio-cultural situations can act as a barrier to healthy development leading to poorer pregnancy outcomes and ill health in later stages of life. The social support for the mother in the cultural context is important for the healthy mental development of fetus. Culture influences the health of mother and child as there are numerous beliefs and practices which are oriented to ensure optimum nutrition intake. Traditional health care beliefs and practices help to overcome health challenges during pregnancy and childbirth (Gluckman 2014). Now for promotion of better health there are nutrition-specific programmes and policies which are implemented by WHO. Also Government of India has taken initiative to formulate community based programme as

Integrated Child Development Services (ICDS) to improve the health and nutrition of pregnant or lactating mothers.

b) Infancy

Infancy is an important life stage in which the developmental milestones of an individual takes place related to psycho-motor, social and emotional development. WHO recommends exclusive breastfeeding up to first six months and social support should be provided for women to provide exclusive breast feeding and adequate care for the newborn (Renfrew 2012). The nutritional intake during early childhood determines bone and skeletal development, psycho-motor skill development and social health of individual. Malnutrition can lead to severe anemia and other chronic diseases in future.

c) Childhood

The childhood health and nutrition is important factor in determining the general health and diseases in future. Gender identity is developed during this phase through gender specific socialization. The cultural appropriate sex-roles and role expectation within society as a female is identified by the child. According to Ministry of women and Child development, discrimination against girl children persists in many parts of country National Family Health Survey (NFHS-3) observed that mortality rate due to diseases is more among girls than boys. Also severe incidence of malnutrition is reported among girls. The adverse socio-economic position in family and unhealthy exposures results in poor health and diseases

d) Adolescence

The adolescence is often identified as a transitional stage as it is a shift from childhood dependency to the adulthood independence. Adolescence is a

phase in which rapid cognitive and biological development takes place. These processes are linked with physiological, psychological and social changes. There are significant changes in terms of identity, relations and social life. The biological marker of menstruation starts during adolescence period. The menarche is the age in which a female attains sexual maturity through the process of ovulation. The young girls face range of menstrual issues as severe pain, heavy bleeding, skipped periods and other emotional issues. Menstrual disorders and premenstrual syndrome are common problems among girls (Sharma 2008).

e) Adulthood

The functional capacity of an individual reaches its peak during adulthood. Women enter new roles and responsibilities during the adulthood. The marriage and role changes associated demands the women to function in multiple roles in society. The position in social structure based on the social roles provides the sense of identity in women which is a determinant of mental health. Sometimes women have to play dual-role or multiple roles within the family structure. The women maintain equilibrium with roles of a mother, wife, working woman and so on. The nutritional intake, exercise and other healthy habits determines women's health.

f) Mid-life

Mid-life is a transitional stage in which individual experience multiple changes which are biological and social. The women have to cope with various issues such as children moving out of home, difficulties in intimate relationships, death of parents, aging and the advent of menopause. In western cultural context midlife is a period of loss, despair and physical decline (Fodor 1990). The women experience 'empty nest syndrome' during mid-life which is

the result of children becoming independent and moves out to pursue higher education or job or get settled with a family of their own. This results in feeling of lose or depression. Another issue is the aging and death of parents or the 'double burden' on the women looking after the aged parents and family (Schatz and Seeley 2015). Menopause is a significant transition during mid-life which signals the end of reproductive cycle. Various bio-psycho-social changes are associated with menopausal transition. This multi- dimensional change in mid-life demands continuing tendency to orient the adjustment needs of women. The adjustment processes that women make during transitions have impact on the family, work and social life.

g) Old Age

Better standard of living has led to the increase in life expectancy and this increased the population of the aged. The biological aging process results in decline in cognitive, biological and psycho motor functions. Increase in geographical mobility, industrialization and globalization, results in families living apart and this has impacted the care of elderly. The World Report on Aging and Health (2015) introduces the concept *'Healthy Aging'* as the process of developing and maintaining the functional ability that enables well-being in older age. The functional ability incorporates physical, psychological and social functioning and changes due to aging process (Manton 2006). The functional capacity of female reaches its peak during adult hood and from mid-life it declines naturally, especially after the menopause. Midlife is considered as an intersection point of the growth and decline of multiple biological, psychological and social processes in individual life. Women during this period undergo multiple transitions related to various domains in life as transition from reproductive phase to non-reproductive, from the role of working women to retirement, role shift from mother to mother in law, grandmother and so on.

Menopause is an important biological marker that determines the well-being of women as it leads to various changes in the physical, psychological and social domain. The health of women during and after menopause is a prime factor that demands increased attention, as there is increase in the life expectancy and the growing population of the aged (Singh 2014).The women are likely to live one third of their life beyond menopause. If the women's health during this stage is given proper care, by adopting healthy life style practices better will be their health during old age and their contribution to society.

1.4 Menopause

Menopause is a growth stage at the mid-life of a woman encompassing transitional phases which are physiological, psychological and social. The menopausal transition is a universal phenomenon which is referred as cessation of menstruation which may last from 6 to 13 years. The term menopause is derived from the word *'men'* means *'month'* also the term is related to *'mene'* which means '*moon'* (months measured by moon) and 'pause' is derived from the Greek work 'pauein' means 'stop' . The word 'Menopause' *(menespausie)* was used for the first time in 1816 by French Physician De Gardanne (Valcic 1996). W H O defines the term *natural menopause* as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. Menopause occurs with the final menstrual period (FMP) which is known with certainty only in retrospect a year or more after the event. An adequate biological marker for the event does not exist (WHO 1996a).

Menopause occurs because the female body no longer produces sufficient estrogens hormone. This is a time of fluctuation of hormones and emotions. WHO's Scientific Group on Research in the Menopause (1981) recommended terms such as pre menopause, peri-menopause and post

menopause based on the transitions. Basically, the stages are classified into three- the first stage, is premenopausal stage beginning around 40 years of age and denoting the decline of estrogen production. In peri-menopause, the second stage, estrogen levels continue to decline and the consistency and regularity of the menstrual flow changes as well. Post-menopause, the third stage, follows a year and beyond the absence of menses. Stages of Reproductive Aging Workshop 2001 (STRAW) further categorized menopausal phases as late reproductive stage, early menopausal transition, late menopausal transition, early post menopause and late post menopause. The passage through these phases is termed as 'menopause transition'. The women in divergent social strata experience the transitional stages differently.

1.5 Bio Medical and Socio-Cultural Perspective

In the literatures published in the 17th and 18th centuries the menopause was evaluated from a bio-medical perspective. It reflected a negative attitude towards menopause and aging process. Menopause was considered as a deficiency disease that required medical attention and recommendations for Hormone Replacement Therapy (HRT) started with this biomedical representation of menopause. In the year 1940 Albright and colleagues linked osteoporosis to ovarian failure and the concept of 'post-menopausal osteoporosis' were discussed in the article published in the Journal of the American Medical Association (Albright 1884). The identification of sex hormones and estrogen revolutionized the studies on menopause. In the mid of 20th century the Robert Wilson's widely discussed book "Feminine forever" was published. He is considered as a key person in the medical construction of menopause. According to him 'tragedy of menopause' can be avoided by Hormone Replacement Therapy. He recommended the use of estrogen for life

–"hormones from puberty to grave" and believed this would curtail negative effects of menopause (Wilson 1963). The media and pharmaceutical industry propagated this idea and estrogen treatment became essential for menopausal treatments. In 1938, the development of synthetic estrogen made a remarkable progress in the menopausal medical treatments. As HRT was linked with the increase in endometrial cancer, the popularity of HRT declined in western societies (Smith 1975). The findings of studies the 'Heart and Estrogen/ Progestin Replacement Study' and studies of the Women's Health Initiative showed that HRT increases risk of heart attack, clots and breast cancer. These lead to decrease in recommendations for HRT worldwide.

Later on, in 1970's studies about menopause embraced a broader perspective by covering aspects of attitude, beliefs and culture of women. The experts from field of Sociology, Nursing and Anthropology have critically evaluated the medicalization of menopause that views it as a disease which required medical attention (MacPherson 1981, Formanek 1990). Feminist writers as Cooney (1993) criticized the treatment of menopausal women, as a victim of medical dominance and power being held by doctor. The researchers from the field of Anthropology and Cultural studies noticed the cross cultural variations in menopausal experience of women. The proponents of bio-cultural model view menopause as an embodied experience based on socio-cultural aspects. The core factor is the cultural variations in the menopausal experience of women.

Studies show that in western society, generally the experiences is often constructed negatively (McKinlay & Lyon 2008) and more over the menopausal transition is medicalised as a disease (Utain 2005). European women associated the concept as end of fertility, women loosing youthfulness or becoming less

attractive (Gergen 1985). But the women in some non-Western cultures do not appear to have symptoms related to menopause (Flint 1975). In studies conducted among Japanese women Vander (2005) and Mills (2007)looked at menopause across the culture and reported that the women do not concern themselves with menopause. He noted that many studies hypothesized reasons for Japanese women not having hot flashes. One common hypothesis is that Japanese diets, commonly consisting of vegetables and soy, may prevent menopausal symptoms (Vander 2005; Mills 2007). In Emile Martin's cultural analysis of female body and its functions based on the biological process, she evaluates that in capitalist society menopausal women are viewed as unproductive. Erving Goffman (1963:4) in his work analyzed that menstruation as a 'social stigma' and menopausal changes such as heavy bleeding, sweating, depression and nervousness are 'stigma symbols' which is representing loss of control over women's body (Goffman 1963b). These studies emphasizes that menopausal experiences of women are influenced by cultural factors.

Nancy Datan (1986) famous sociologist in her study among Mayan's found that Women's specific concerns about menopause vary by culture. In a study conducted among Mayan and Greek peasant women Beyene (1989) noted significant difference and similarities in the menopausal perceptions and symptom experiences. According to Beyene the onset of natural menopause is earlier in developing countries than in developed countries. The Mayan women became menopausal at ages 41 through 45. The women did not consider menopause as a major crisis. The women indicated that the only recognized symptom of menopause was menstrual irregularity followed by the final cessation of menses and none reported hot flushes or cold sweats. Mayan women considered menopause to be a life stage free from taboos and restrictions. They reported better sexual relationships with their husbands,

because of no risk of pregnancy. As Mayans, Greek women reported freedom and better relation with husbands but they understood the concept of hot flush, and the older women even offered the Greek word for this symptom. They were also able to give detailed accounts of the process of hot flushes and the times they most often felt the sensations and changes in their bodies

According to Hunter (2007) menopause is a bio-psycho-social phenomenon which has to be analyzed using the life course perspective of health. During menopause there are overlapping transitions related with physiology, mood, cognition, and social roles. Thus, socio- economic factors and the cultural dimension in which a woman lives makes her menopausal experience positive or negative.

1.6 Menopause in India

Indian society is male dominant and women are restricted from many privileges in society. The Indian tradition views the biological process of menstruation as a social taboo surrounded by restrictions and myths. Traditional literature gives elaborate description on the code of conduct for women during menstruation. The spiritual ideology ingrained in Indian tradition brought the idea of 'pollution' and 'impurity' related with menstrual blood. Menopause is the cessation of menstruation which is considered a sign of impurity. The biological process of menopause is attributed to freedom from the cultural constrains and social taboos.

The post-menopausal women in India are considered to have better social status and freedom when compared with menstruating women (WHO 1996a). The benefits of freedom from procreation and discomforts of menstruation make menopausal status more acceptable. In a study conducted among Rajput community, menopause is considered as a "*reward*" and women

feel liberated from the social restrictions and taboo (Flint 1975). Once a girl reach the age of menarche she had to live in *purdah* (veiled & secluded), but after menopause, she had the opportunity to come down stairs from their women's quarters to where the men talked and had drinks. The women could now publicly visit and joke with men after attaining menopause, vastly changing their gender roles (Flint 1975). Because of the new privileges and better status in society women accepts menopause positively. Satpathy (2016) stated that a high proportion of rural women in Punjab were happy to welcome menopause.

While analyzing age at menopause in India, there are variations in the onset of menopause. Studies show that the average age of menopause is 46.2 years. Generally the age at which natural menopausal period occurs is between the ages of 40 -55 for women worldwide. In India, the mean age at menopause reported in different studies is between 41.9 and 49.42 (Pallikadavath 2016). This shows that Indian women are menopausal at younger age when compared to women in western countries that means menopausal women have a long way to go and need the attention of society to lead a functioning life.

1.7 Menopause in Kerala

The quality of life in Kerala is equivalent to the developed nations and far ahead than many states in India. The development programmes in Kerala is exemplary and has received distinctive acclamation as 'Kerala model development'. The women in Kerala enjoy better status and the state ranks first in India in gender development index. The sex ratio in Kerala is 1058 females per 1000 males, while in India it is 933 females per 1000 males according to 2011 census. This is an indicator of the better health status of women in Kerala. According to 2011 Census the total population of the state is 3.34 crores and female population constitute 52.02 percent of the total population. Life

Expectancy at birth of women in Kerala is 76.9 years which is the highest in India.

According to District level household and facility survey -3(2007-2008) the women in Kerala has better asses to the medical resources. The women receive better education, health services and reproductive health care facilities. The incidence of premature menopause is lowest in Kerala. This is reflected in the analysis of onset of menopause. According to National Family Health Survey-3 *(NFHS*-3) report 2005-2006, menopause is defined as absence of menstruation for 6 months and above preceding the survey. The NFHS data provides detailed analysis of onset of menopause in 15 Indian states. The data includes statistics of married women aged between 30-49 years. According to the report onset of menopause is lowest in the state of Kerala (11.6 percent) and highest in Andhra Pradesh (31.4 percent). In Kerala the mean age is estimated in between the age group 45-55. The median age of menopause in Kerala is estimated as 49 years. This shows that Kerala women spends one third of their life in post-menopausal stage.

The Women in Kerala balance multiple roles both inside and outside the home, all of which may affect their health. The process of menopause is a natural transition but various biological, psychological and social changes are associated with the menopause. During the transitional phase of menopause women undergoes simultaneous trajectories in the dimensions of personal life, work life and social life. The severity of menopausal symptoms and the multiple roles in society demands the need to maintain equilibrium between the self and environment. Dennerstein (1990) noted that positive attitude towards menopause is related with the positive experiences that woman receives from society and negative attitude is associated with negative experiences. The

perception is determined by attitude and knowledge of women about menopause and other reproductive factors. The individual perceptions of menopausal women are shaped by socio-cultural factors of the women. Studies show that women in Kerala experiences physiological and psychological changes during menopause. In this context, the health issues of menopausal women are relevant as there has not been any specific health programme to address the issues. The menopausal women, in order to adjust with symptoms will have to adopt coping strategies for effective functioning in social roles. The present study attempts to find how the married women in Kerala are experiencing menopause and how they cope up with the changes.

Chapter - 2
Review of Literature

Contents

In the reproductive life span of a woman there are two mile stones which are considered to be a biological marker and a transitional phase. The first is the stage in which she attains puberty, the event marks the beginning of menstrual cycle and the second stage is the cessation of menstruation (Hall 2009). The phases are denoted by the terms 'Menarche' and 'Menopause'. Menarche signals the beginning of reproductive life cycle, through this process of menstruation woman attains sexual maturity. Menopause indicates the cessation of reproductive functions by the stoppage of menstrual flow.

Menopause is a crucial transitional phase which is, not only linked with loss of fertility but also to various mid-life issues and diseases (Ahuja 2016). It involves overlapping transitions and trajectories which are determined by life course factors (Newhart 2013). Life trajectories are pathways defined by the aging process (Elder 1985: 31) which is influenced by factors across the life of an individual as socioeconomic position, early reproductive history, age at menarche and menopause, menstrual issues, social support system and life style factors (Kuh 1997, Mishra 2010). The transition during menopause involves changes in social status or identity both personally and socially. The life course approach is effective in analyzing the life transitions and their personal and social consequences (George 1993). The essence of life course perspective is inter-linking social change and the life-course factors (Riley 1985).

2.1 Life Course Factors

According to Mayer (1990) the Sociology of Life course focus on the patterns of societies which are categorized as various sub systems, internal dynamics of groups that individual lives and inter relations of individual to the society. The Life Course perspective in Sociology has four dimensions: First aspect is that individual life course is the product of societal and historical process that links to the life of other persons, structured by social institutions. Second dimension is that it explores the biological and psychological events of maturation and decline. Thirdly, the person acts or behaves on the basis of prior experience; hence it is a self-referential process. And finally the individual experiences reproduce and change social structures (Jeangros, Cullati, and Sacker 2015).

Life Course is a social phenomenon which reflects socio-historic factors with person's biography which is varied across space and time (Elder 1985).This approach deals with age-differentiated, socially recognized series of transitions (Rossi 1980). Life course is a passage through the various stages of life that involves events, transitions and trajectories as entering into school, employment, marriage, retirement and the like (Elder 2003). Elder notes that transitions are the changes in the status that are distinctive and time bound that impacts the life course of an individual may be for long-term. The early life transitions have life-long impact, shaping later events, experiences, and transitions. The life transition involves changes in identity and status of individual personally and socially resulting in behavioural changes and adjustment (Elder 2003). The changes during the life course are socially organized which forms social pathways of education and work, family and residences. These pathways are structured by social institutions and normative patterns.

Diewald (2000) states that life course is the product of culture, society and history; also they are the product of biological aspects. The variations in the biological and cultural aspects are resulting in socio-cultural differences (Rutter 1997).

2.1.1 Bio-Social Factors

Studies show that menopause is a complex biosocial process which includes biological and cultural aspects (Pathak 2010). Reproductive senescence is considered as universal biological process, but research shows importance of culture (Flint 1975, Lock 1994).The menopausal experience of women is shaped by social and cultural difference and this influences her approach towards the menopause as well as her well-being (Avis 2001). The review of literature demonstrates link with life course events as reproductive factors ie, age at menarche (Mishra 2009), fertility history, age at menopause (Pathak 2010), socio-economic and cultural factors (Ruth 2016).

2.1.1.1. Reproductive Factors

Reproductive factors have influence on the menopausal experience of women. Mishra (2009) defines "reproductive health as the ability of women to pass through the reproductive life span which starts from menarche and beyond with successful childbearing, free from gynecological diseases". Reproductive health is influenced by early reproductive factors as age at menstruation, menstrual issues, conception, number of children and use of contraception, socio-economic status, culture, patriarchy and social system at large. Fertility pattern is a major factor that is often related with menopause. Studies show that there is association between nulliparity and low number of children with menopause (McMahon B 1996, Clausagar 1992). The women who are

nulliparous and who had low use of oral contraceptives reported earlier onset of menopause (Ceballos et al. 2006). In contrast, the women with high parity and long use of oral contraceptive have lower menopause symptoms (Obermeyer 2007). The decreased reproduction with short periods of lactation may expose the body to more estrogen stimulation and sudden decline of it during menopause can manifest in the form of hot flashes or osteoporosis. According to Aloia (1985) relatively longer lactation is associated with calcium depletion and risk of osteoporosis. Beyene (1989) found the variations in the fertility patterns of Mayan women. Mayan women married early and they had successive pregnancies and experienced longer periods of amenorrhea coupled with malnutrition. Thus they rarely experienced regular menstrual cycle and attained early menopause. Mayan fertility patterns too vary in traditional and industrial societies. Studies show that the reproductive patterns of traditional societies are more likely to represent the situations to which the human genes are adapted (Muller 2009). The phenomena of estrogen deficiency may be due to the change in reproductive pattern of women in industrial society. McNeilly (1979) reported that the women in industrial society can have 35 of her 37 reproductive year regular menstruation. The reason for this is less number of children and less years of post-partum amenorrhea.

a. Age at Menopause

The average age of Final Menstrual Period (FMP) varies between different ethnical groups (Gold et al. 2001). Studies shows that onset of natural menopause was earlier in developing nations than developed Western countries. The age at which natural menopause occurs is between 45 and 55 years for women worldwide (Kaufert 1986). The studies conducted in American countries found that the average age at menopause is between 50-52 years

(Treloar 1967).The women from western countries have higher menopausal age compared with other parts of the world (Wright 1981). In developed countries, the average age at menopause is about 51 years, whereas in countries like Philippines, Papua New Guinea, in various parts of Africa, India, Pakistan and Thailand, it is reported to be 45-50 years (McKinlay 1992). The studies shows that Asian women have similar age at menopause as Caucasian women but Thai women have been reported to have a lower median age at menopause, at age 49.5 years and Filipino Malay women have been reported to have an earlier menopause which is estimated to be around 47 to 48 years (Gold 2011)**.** There can be numerous factors contributing to the age at menopause. The changes in body weight blood pressure, age at menarche, socioeconomic status, age at first child birth, parity, income, education and dietary habits etc. are significantly related with the age at menopause. The age at menopause influences women's life course, fertility and her aging process (Jacobsen 2003).

b. Phases of Menopause

In order to refocus and refine the concept menopause WHO has introduced the concepts pre menopause, peri- menopause and post menopause (WHO 1996a). *Pre menopause* is often used ambiguously either to refer to the 1 or 2 years immediately before the menopause or to refer to the whole of the reproductive period before the menopause (WHO 1992).The period can be used to denote the entire reproductive period before the final menstrual period.

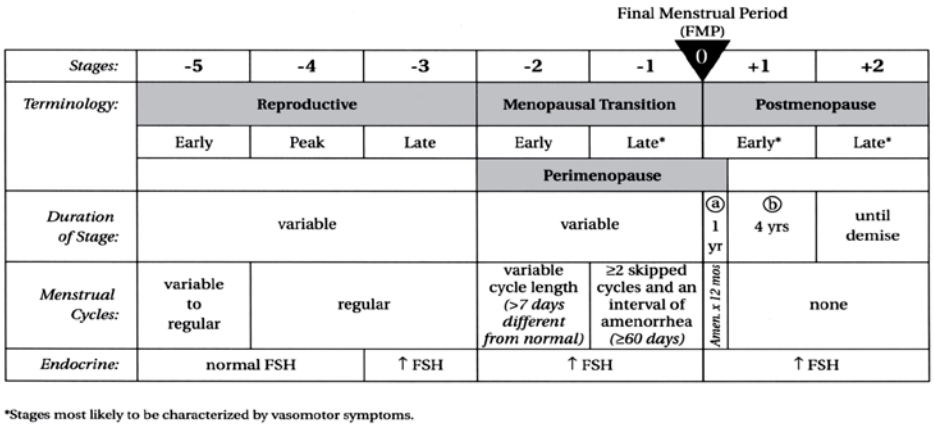
In **peri-menopause**, the second stage, estrogen levels continue to decline and the consistency and regularity of the menstrual flow changes as well. **Post-menopause**, the third stage, follows a year and beyond of absence of menses. Beyond these three processes, menopause is also defined as a specific point in time when estrogen levels drop so low that the menses cease for one

full year .The years surrounding menopause and encompassing the gradual change in ovarian function constitute an entire stage of a women's life, lasting from 6 to 13 years and also known as the climacteric (Northrup 1998).

The **post menopause** is divided into an early and a late phase. The early post menopause is defined as up to 5 years since FMP and may be further divided into a) the first 12 months after FMP and b) the next 4 years. The late phase has a definite beginning (5 years after FMP), but the duration is variable because it is lifelong.

To develop standardized and practical staging system for reproductive aging Stages of Reproductive Aging Workshop (STRAW) was convened in the year 2001. Later on in 2011 STRAW 10 reviewed based on the in critical changes in hypothalamic–pituitary– ovarian function that occurs before and after the final menstrual period. The classifications are 5 stages which includes reproductive phase (3stages), menopausal transition (2 stages, early and late menopausal transition), which is followed by post-menopausal phase. The post-menopausal phase is categorized as early and late post-menopausal phase. Figure 2.1 given below clearly shows the stages given by STRAW.

Figure 2.1 Stages of Menopause by STRAW



*Stages most likely to be characterized by vasomotor symptoms.

2.1.2 Socio-Cultural Factors

According to (Melby 2005) the variations in menopausal experiences are culturally influenced by gender roles and socio-economic status. According to Avis (2001) the socio-cultural factors across the life course of women determine the menopausal experience. Studies show the factors as racial background, geographical area, marital status, education, occupational status and religious beliefs, influences menopausal experiences of women (Avis 2001, Melby 2005, Dennerstein 1990).

The socio-cultural factors influence women in multiple dimensions. Study of Women's Health across the Nation 2008 (SWAN) found that racial factors influenced vasomotor symptom experience, with African-American women being the most symptomatic, followed by Hispanic and non-Hispanic Caucasian women, and Asian women being the least symptomatic. Gold et al. (2001) found that African-American women reported more vasomotor symptoms than Caucasian women. Studies show that religious values and cultural values inherent in the society determine behavior attitude and perceptions of women. Religion and religious involvement of the individual is related with well-being and better coping ability related to health challenges. The spirituality enables the individuals to cope with the uncertainty and changes in life (Ferrell 1998). Religious coping methods as prayer, sense of oneness and connectedness with God and perceptions about God enables individual to cope with negative health outcomes (Moos 1982). In a study conducted by Strezova (2017) among Macedonian women, it was found that onset of menopause is a phase in which women devoted more time to religion as they are being freed from the demands of family responsibilities. Women preferred traditional

medicines and alternative supplements which are inter- linked with religious practices.

The experience of menopause is usually influenced by beliefs that are inherent in culture. In western societies menopause is linked with anxiety related with the loss of beauty and youthfulness related with the process of aging. This is a stereotype that menopausal women are facing in their life transition (Formanek 2006). Kaufert (1986) noted that cultural stereotype of menopause by relating the lack of public knowledge and the unattractive view of menopause painted by the media. The menopause is associated with negative feelings, loss of meaning in life and many other ambivalent feelings that vary with the cultural background of the women. Bromberger (2001) suggested that due to psychosocial factors Western women have higher odds for distress than African American and Hispanic women. The Thai feels that midlife (*maeyai)* is a natural process but at the same time it is miserable (Chirawatkul 2002).In Arabic the word sinn al ya, is used to represent menopause which means that 'a period of misery' (Obermeyer 2007). In Korea, the women are not allowed to express their concerns about menopause to the husband as it is considered offensive (Elliott 2002). In a comparative analysis conducted by Beyene (1986), it was found that Greek women considers menstruation as curse as the result of Eve's sin and menstruating women are considered 'unclean' and are restricted from participating in the religious activities. The women of Greek culture expressed anxiety and anticipated health issues related with menopause. They associated menopause to growing old, loss of beauty, diminishing energy and downhill course of life. But these women did not seek medical intervention as the women from Western societies.

Positive perceptions are associated with the women from societies where their menopausal status is rewarded. The positive experiences related with menopause are linked with cultures that offer relief from the restrictions of menopause, freedom from contraception and child bearing. Women participate more in religious activities (Mustafa and Sabir 2012). For Islamic religious tribe from Niger, reaching menopause is a new step to a new life that includes new social, ritual and healing activities. The status of women in that society is redefined by roles as mother in law, grandmother, herbal healer and religious devotee. Among Guatemalan, Mayan women look forward freedom and status associated with menopause (Sievert 2013). A woman who belongs to a particular culture who perceives menopause as symptom free may not experience any menopausal symptom. In a study conducted among Hmong women from Southeast Asia, the women could not associate any physical changes with the occurrence of menopause. They regard the experience as an avenue to stop menstruating, an act that was regarded as shameful (Rice 2005). For instance, Mayan women from South America and Rajput women in India report no 'symptoms'. According to Beyene (1989) Mayan Indian women of Yucatan enjoyed their transition to menopause because it provided "relief from child-bearing, acceptance as a respected elder, and a surrendering of many household chores to the wives of married sons. The Mayans did not associate menopause with physical or emotional discomforts. They expressed feelings as “freedom”, “stage of being happy”. The pre-menopausal women looked forward onset of menopause.

Studies show that age at menopause varied among married or widowed in comparison with never married women. Sievert (2001) found that age at menopause is later among married women than unmarried or divorced women. Marriage is a significant factor, as bio-socio-behavioural factors can alter

internal hormonal range related with sexuality, conception and procreation. The marital status and marital satisfaction affects the quality of life of menopausal women (Ehsanpour 2007).

Poverty, unemployment, low income, lack of basic amenities, living and working conditions are the socio-economic factors that affect the menopausal adjustment of women. Studies show that poor socio-economic circumstances across the life course of women is significantly related with a younger age at menopause (Gold et al. 2001, Stanford 1987). Gold et al. (2000) found that lower menopausal age is associated with low socioeconomic status. According to Kaczmarek et al. (2017) socioeconomic status is an inter-connecting factor between the place of residence and quality of life of menopausal women. In another study Bharadwaj (1983) found that women from low socio-economic position have a tendency to ignore menopausal symptoms than women from high socio-economic position.

The other factors that influence menopausal women can be the educational level and the employment status. Hunter (2007) reports the benefit of education and behavioural changes in the menopausal experiences. Studies report that women with less education have been linked with increased symptomatology (Gold et al. 2001). In a study, Jennings (1984) correlated the employment status with the psychological symptoms. The employed women reported fewer symptoms when compared with unemployed women (Williams et al. 2009). The absence of employment among women is considered as a predictor of physiological symptoms and psychological issues as anxiety disorders (Hunter 1986). In another study by Kakkar et al. (2007) working women reported higher level of stress and unemployed women more somatic symptoms.

2.2 Gendered Habitus of Menopausal Women

Bourdieu (1990) has introduced the term habitus, which means the system of experiences, perceptions, preferences and actions which is referred as dispositions that are inculcated from childhood through socialization Habitus is the product of history and produces individual and collective practice. The individual agent develops dispositions through habitual objective conditions they encounter. The habitus is the embodied socialized body which is formed through the habitual interactions. Bourdieu explains that body is in the social world but the social world is in body. Thus the identity of a person is shaped by the social system and the normative system. Ruyters (2012) noted that gendered identity emerges from embodiment of social structure which is generated through social fields and it is a product of embodied history of women. Thus gendered habitus of women are ways of thinking about self that is an integral part of identity. The gendered habitus is the socially constructed ideas of masculinity and femininity which shapes the body and forms habits and expressions that determines gender identity (Krais 2006).

Through the socialization individual develops unique ideas based on normative pattern and culture (Riley 1985). The cultural factors mold the perceptions and attitude of menopausal women and influence the reactions to the occurrence of menopause. In societies where reproductive functions are considered as an important function of women, menopause is viewed as a time of loss. And in cultures where menstruation is considered as pollution and impurity, menopause is a signal of relief from the burdens associated with menopause. The factors as socio-economic factors, ethnicity, life style factors and dietary habits shape menopausal experiences of women.

The change due to hormonal imbalances during menopause is considered universal but how women experience menopause differs by ethnicity and culture (Im, Ko, and Chee 2014). The experiences of women are personal and are interwoven with a woman's social status, sex role, personal circumstances, life history and state of health (Bowles 1986). Studies show that the symbolic meanings and experience of menopause are culturally and socially contextual (Jones et al. 2012). In another study Melby (2005) found that the subjective experience of women in specific culture determines the menopausal experience and quality of life.

In Indian context, menstruation is considered as a cultural taboo and numerous restrictions and rituals are associated with menstruation. The stigma related with menstruation is based on the traditional beliefs about purity and pollution which is rooted in religion (Bhartiya 2013) . Religious values and cultural values inherent in the society determine behavior attitude and perceptions of women. There are numerous beliefs and practices associated with religion as women are not allowed take part in religious rituals, enter temples or worship places, prepare food in kitchen, clean images of deities, touch basil plant and so on (Bhartiya 2013). In many parts of India during menstruation women have to stay in 'menstrual huts' which is constructed exclusive for this. During menstruation women have to cook food themselves and at the end of menstruation they are considered pure after oil bath (Garg 2015)Some euphemisms or terminologies are used to represent the life events of menstruation and menopause. Euphemism is an indirect representation of something which is unpleasant. In Kerala, at Sabrimala temple the women in the age-group 10-50 years are not allowed to enter the temple, on 28th September 2018, the Supreme Court of India removed this ban on the basis of religious equality granted to males and females (Hindu 2018). The women after

menopause experience freedom and better status after menopause (Dennerstein 1990). The patriarchal gendered social structure determines the status of women in society.

2.3 Quality of Life of Menopausal Women

The World Health Organization (1993) defines Quality of Life (QoL) as an individual's perception of their position in life in the context of the culture and the value system in which they live and in relation to their goals, expectations, standards and concerns. The quality of life is based on evaluation of one's position during the individual life course in relation to goals and standards in cultural setting. These are linked to transitional stages and events in life course. Studies shows that conceptualizations about quality of life changes with the family formation, mother-hood and retirement. Kuh (1997) states that the factors as marital status, educational level, social and economic level, and the number of children who live with the family are among other factors that significantly impacts the quality of life of post-menopausal life.

The process of ageing is a lifelong process which starts at conception and continues till death. The functional ability of human body is based on the earlier life situations and exposures to different factors. Low birth rate and disorders during pregnancy may result in chronic diseases during older age. Thus the health at old age is a reflection of the life style adopted by the individual. There are modifiable factors and non-modifiable factors in the life course on an individual. Practicing better life style by carefully adjusting to the life changes can produce good health in later life. On the other hand, some life course factors are non-modifiable as natural calamity or other environmental threat affecting the health.

The perceptions about the well-being depend on the parameters women set to evaluate themselves during a life stage. These well-being parameters change with the growth phases and life circumstances. The well-being of women can be affected by patriarchal values and culture. Gender and culture are crucial factors affecting women's health and help seeking behaviour. The position in social structure is based on the social relations with others and social roles associated to each relation. Role identity and self-perception generated from social relation is a base of quality of life. Poor identity and self-perception can influence physical and mental health of women. Social support and social relations plays an important role in determining the quality of life. Social support can ease the changes and stress during the life transitions and is positively correlated in reducing health disorders. It can also influence the help-seeking behavior of women to cope with diseases. Mortality is higher among the isolated individual and there is association between social relation and standard risk factors. Rubinstein (2013)noted that variations in psychosocial factors influence the crisis management during transitions.

The World Health Organization (1993) defines the quality of life as the individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. W H O has categorized six broad domains to measure the quality of life of an individual. It is given below.

Figure 2.2 Domains and facets in six domains of WHOQOL

Domains	Facets incorporated within domains
Physical health	*Energy and fatigue* *Pain and discomfort* *Sleep and rest*
Psychological	*Bodily image and appearance* *Negative and Positive feelings* *Self-esteem* *Cognition*
Level of Independence	*Mobility* *Activities of daily living* *Dependence on medicinal substances and medical aids*
Social relationships	*Personal Relations* *Social support* *Sexual activity*
Environment	*Financial resources* *Autonomy* *Health and social care accessibility* *Home environment* *Opportunities for acquiring new information* *Opportunities for recreation* *Physical environment (pollution/noise/ traffic/climate)*
Spirituality	*Religion /Spirituality/Personal beliefs*

Source: WHOQOL-100 (1995)

2.3.1 Physical Domain

WHO identified six domain, but according to Pensri et al(2007) specific domains determines the general well-being of menopausal women. They are the Physical, Psychological and Social. Studies about physical domain

show that the symptoms of menopause can affect the 'Quality of Life' of menopausal women (Blumel 2000). During natural menopause, there is a loss of ovarian follicular activity resulting in increases of follicle stimulating hormone and luteinizing hormone, decreases of estrogen and progesterone, and a cessation of menstruation. As the result of these hormonal variations most of the women report different signs and symptoms during menopause.

2.3.1.1 Vasomotor Symptoms

Study of Women's Health Across the Nation (SWAN) reported relationship between cultural factors and menopause symptom. The 'hot flushes' or 'hot flashes' are the hallmark symptom that women experience during menopause. Generally these are sudden sensations of heat that affects the body parts as chest, neck and face (Hardy 2002).The feeling of heat is initially centered in the upper part of the body and it spreads upwards and downwards throughout the body. Hot flashes and night sweats are physiologically the same phenomenon (North American Menopause Society 2004). Night sweats are often disruptive to sleep and frequent awakening has been linked to mild depression, changes in attention span and memory, irritability, fatigue, and decreased quality of life. Peri-menopausal and menopausal women sleep less, report increased frequency of insomnia, and are more likely to use prescription sedatives. Studies have addressed the relationship between sleep disturbances and hot flashes with varying results(Gold et al. 2000).

The vasomotor symptom varies widely between populations around the world. While comparing the different populations around the world 40-80 percent of women experienced these symptoms, whereas in South East Asia the prevalence is much lower (McKinlay 1992). The studies conducted by Beyene (1989) among Greek and Mayans, Flint (1975) in India, Melby (2005) in Japan

shows that the experience of hot flushes are lower when compared to North American and European women.

2.3.1.2 Urogenital symptoms

With menopause, endogenous production of estrogen declines causing gradual atrophic changes in the estrogen dependent tissues of the vagina, vulva, and urethra (Warren MP 2015). The decline in estrogen results in thinning of vaginal walls and decrease in vaginal secretions. These changes increases risk of vaginal infections and urinary tract infections(Van Voorhis BJ 2008).It is estimated that fifty percent of all menopausal women experience troubling atrophic urogenital symptoms within three years of menopause (Bachmann 2008).Symptoms include vaginal dryness, itching, irritation, pain, urinary frequency, urinary incontinence, and recurrent urinary tract infections (Bachmann 2008, Raz 2011).Sexual issues too are associated with the urogenital symptoms of women (Sukwatana 1991). Studies shows that women after menopause reported sexual issues during the post-menopausal phase and urogenital issues prolonged longer than other symptoms among Australian women (Melby 2005). Urogenital issues are often under reported among menopausal women. Speaking about sexual issues and vaginal issues are considered as a social stigma or taboo (Gandhi 2016).

2.3.2 Psychological Domain

Many peri-menopausal women report symptoms of stress, irritability, tearfulness, depressed mood, decreased ability to concentrate, and a decreased sense of well-being. Some women experience tremendous changes in mood and they always find it difficult to adjust to the changes. Studies prove that women experience profound sense of loss at menopause. They feel that they lost their beauty or youth or they experiences loss of maternal role. The sociologist calls

it 'empty nest syndrome'. Some menopausal women may also experience anxiety, depression and/or irritability. Mood disorders, high stress and depression are reported to potentially worsen the physiological symptoms of menopause (Hunter 1996).The mood issues are sometimes related with the hot flushes and sleep disturbances. Poor sleep quality or inadequate amounts of sleep, is linked to chronic fatigue, lack of motivation, lack of concentration, feelings of tension, irritability and physical illness (Shaver& Paulsen 1993). According to Liao (2000) women who experienced early or premature menopause is more likely to have depression and stress. Choi M states that the women with longer peri menopause experienced more depressive symptoms. Some women experience profound sense of loss after menopause related with loss of maternal role or loss of beauty which may make them feel that they lost purpose in life (Glazer 2001). Studies shows that mood disorders were higher among women who had negative attitude towards menopause and aging (Dennerstein 1990).The psychological factors are linked with social support and coping ability of menopausal women.

2.3.3 Social Domain

While analyzing the mid-life experiences, women's role in social context as well as work place has to be emphasized (Barnett 1987).Social interaction of women in family and society, nurturing relationship and emotional support from friends and family is necessary for the well-being of women (Afridi 2017).The social life of a woman is centered on the activities at home and work –life at home and at employment and socio-religious activities.

2.3.3.1 Family Life

The close knit relationships are necessary for healthy survival in society. This support is received from the network of relations as family,

friendship, employment, religion and other kin network. Social relationship generates feeling of self-worth and provides resources to tackle life challenges (Gabe J 2004). It moderates physical and mental health during the major life transitions and unexpected turnovers (Fiori K L 2012). Menopausal changes reflect on women's personal life, family and her inter-personal relationships which in turn influence the Quality of Life of women. In traditional societies of developing nations, the role of women is centered on the family that is deep rooted in the strong support of extended kinship networks. During menopausal transition women experiences the "empty nest syndrome" (Defey 1996). The loss of mother role and departure of children can bring emptiness or depressive reactions in the life of a woman. According to Shorey and Ng (2019) the women who had pursued a career or who were active in the social life had better mental health during their transitional years than women whose role had been primarily restricted to that of mother and home-maker. During menopausal transition the relationship with the partner or feelings about the relationship with partner changes (Avis et al. 2009). Dimkpa (2011) in their study found that, the most poorly adjusted domains were the feelings of psychological distress, lack of health care orientation and altered sexual relationships

2.3.3.2 Work Life

In the work sector, wellbeing and health of workers determines quality of life and participation in work. Soules et al. (2001) noted that job performance of women had been negatively affected by menopause. Griffiths (2013) reported that among a sample of peri and post-menopausal women, 40% felt that their performance at work was negatively affected due to menopause symptoms. The symptoms viewed as most problematic included: trouble in concentrating, tiredness, poor memory, depression, low confidence and sleep disturbance. Vasomotor symptoms (hot flushes and night sweats) are commonly reported

problems that interfere with work, especially if severe. According to Jennings (1984), night sweats, hot flushes and insomnia or troubled sleep were found to be most bothersome and disruptive to women's professional lives. Insomnia or trouble in sleeping was considered the most disruptive to work. Mitchell and Hill (1996) found difficulty in concentrating posed a significant challenge for working women. Griffiths (2013) found a significant negative correlation between symptoms and 'work ability' (the balance between a person's resources and work demands that may increase the risk of being sick from work. Dean-Shapiro (2009) in a study reported that symptoms had a moderate to severe negative effect on work outside the home.

2.3.3.3 Social Life

Menopause may be a particularly important life change for women whose identity is significantly related to social and family life. This signifies the end of a childbearing years of women and changes in affective involvement with partner, changes in relationship with children, retirement from job, changes in social roles and so on (Huerta 1995). Sometimes women experiences marital instability, widowhood, illness or loss of parents, disabilities related with aging. According to Blumel (2000) there is significant relationship between the experiences of menopausal symptoms of women from different parts of world and the Quality of Life. Consequently, themes of individual loss take root in this culture in which individualism may have priority over social relationships (Lock 1994). According to Hunter (1986) social support is said to enable normalization and conformation of adaptive beliefs, reduces isolation and negative beliefs.

2.4 Menopausal Adjustment Strategies

Menopause is a stressful event but the menopausal experience of women varies with bio-cultural factors. Strategies for managing stress can help

women cope not only with menopause, but with life and aging in general. Social adjustment is an effort made by an individual to cope with standards, values and needs of a society in order to be accepted.

Adjustment is also viewed as a psychological process that involves process of thinking and framing mental constructions. The transitional women's perceptions about themselves and attitude towards their social roles will influence their level of adjustment. Studies show that physiological symptoms are not seen problematic by all menopausal women. In a study conducted by Guthrie et al. (2003) among Australian born women, only 26 percent of peri-menopausal and 59 percent of post- menopausal women reported that they were bothered about flushing episodes. If the events and transitions during menopause are considered as bothersome affecting the health and well-being, coping strategies are adopted by women to manage the situation (Greenblum 2010). Thus, the strategies adopted by menopausal women in order to cope with menopausal changes are highly relevant.

Coping is defined as 'thoughts and behaviours that individual use to manage the internal and external demands of situations that are appraised as stressful (Folkman 2004). According to the theory of Lazarus and Folkman (1984) the coping is categorized into two a) problem focused coping and b) emotion focused coping. Skinner and others have summarized the process of coping into five categories problem-solving (instrumental action), support seeking (seeking advice from others), avoidance (including denial), distraction (focusing attention elsewhere) and positive cognitive restructuring (reinterpreting stressors in a positive light).

Following Matheny (1986), Reynolds (1997) categorized the coping strategies to manage menopause symptoms as **combative** and **preventative**,

with each type of strategy having a physical and a psychological component. Combative coping was viewed as having two main components - techniques for the management of physical signs of the flush (e.g. cool-down techniques for reducing the intensity or duration of heat and sweating sensations) and techniques for managing cognitive and emotional distress (e.g. calming anxiety, challenging negative thoughts, finding humour during flush episodes). Preventive coping was also regarded as potentially addressing physical and psychological aspects of flushing, as some strategies may aim to reduce the objective likelihood or intensity of flushing (e.g. by wearing loose and light clothing, or avoiding enclosed, hot spaces) and some may attempt to enhance general psychological resources for coping (e.g. managing life stress, developing positive attitudes to ageing, and increasing social support.

2.4.1 Physical Activity

Waszak (2000) considers physical activity as an important coping strategy that affects the course of menopause. Physical activity helps in lowering blood pressure, cholesterol, BMI, skin folds & fasting insulin (Owens et al. 2004). According to Ueda (2009) moderate exercise is effective in alleviating and preventing post-menopausal osteoporosis and heart diseases. Skrzypulec (2010) found that women, who regularly exercised, felt better and had less symptoms of menopause. Studies also prove that Aerobic exercises provide cardio -vascular conditioning and this is effective in decreasing heart rate, blood pressure and improves the breathing process in an individual (Seals 1997) . Studies have assessed the physiologic measures of hot flashes, night sweats and heart palpitations and found that exercise decreased the frequency of these menopausal symptoms (Owes 2004). In a study Asbury (2006) found that healthy post-menopausal women gained sufficient benefit from moderate-

intensity exercise. Activity such as such as yoga tai chi, aerobics, walking, and strength training may help reduces the severity of menopausal symptoms.

2.4.2 Dietary Changes

Dietary change is a lifestyle factor that may provide benefit to women during menopause. The dietary factors showed significant relation with the menopausal adjustment of women. Studies show that dietary intake can affect timing and frequency of hot flushes among menopausal women (Dormire 2007). In another study by Sturdee (2011) avoiding diet as caffeine and spicy foods may help to minimize hot flushes or their impact on menopausal women. Dormire (2007) correlates the life of both Japanese and Caucasian women living in Hawaii, and found that they have minimal menopausal complaints and she associated it with the consumption of rice. The consumption of cheese, milk and wheat was found effective to increase bone density among menopausal women (Beyene 1989). Japanese, which consume high amounts of isoflavones in the form of soy, also have documented low levels of reproductive related cancers and menopausal symptoms. In a study conducted among American post-menopausal women by Murkies (1998), soy phytoestrogens had positive impact on hot flushes and women benefited from intake. The phytoestrogens as naturally occurring sterols of plant origin which are exhibiting estrogenic and anti-estrogenic properties, found in soy, black cohosh, and red clover. The women who adopted intake of these as part of comprehensive naturopathic care experienced relief from menopausal symptoms.

2.4.3 Medical Intervention and Hormone Replacement Therapy

Menopause is an individual experience with some women making the transition smoothly, while other women have their lives and relationships disrupted by troubling symptoms (Wilhelm 2002). Prior to 2002 and publication

of the WHO results, women were routinely prescribed hormone therapy (then referred to as hormone replacement therapy) for menopausal symptoms to improve quality of life (Nelson 2005).Currently recognized risks of oral hormone therapy have forced women and their healthcare providers to consider what quality of life is expected from available treatments for menopausal symptoms and to consider alternative therapies (Utain 2005). Therapies that target both vasomotor symptoms and chronic disease prevention are currently hormone based and hormone therapy (HT) is significantly more effective than available non-hormonal treatments for menopausal symptoms (Lewis 2009). Hormone Replacement Therapy, is the gold standard treatment for menopausal symptoms (Lewis 2009), commonly refers to estrogen and estrogen/progestin preparations in oral, vaginal, dermal patch, dermal spray or vaginal ring (Alexander 2007).

2.4.4 Social Activities

Studies show that participation in social activities promotes social integration and better mental health to menopausal women. It helps to enhance cognitive stimulation of menopausal women (Brissette 2000). Participating in hobbies and activities in social circle helps the women to overcome stress and depression which will affect the quality of life. The social activities and the dominance of spirituality promote better adjustment to the psychological issues during menopause. These factors might act as stressor hindering well-being of menopausal women. In order to cope with changes women participate in social activities as voluntary services (Afridi 2017).The women participates in group exercise and recreational activities at clubs or training centers that can enhance psychological-wellbeing (Aiello et al. 2004). Thus interactions in social circle promote stress relief and enables women to cope with menopausal difficulties.

2.4.5 Spiritual Activities

Menopause is a transitional stage in which women needs re-orientation in their life related to changes in social roles, relationships and identity. Religiosity is associated with the physical health and in the aging process religion is an important coping mechanism (Courtenay 2016). In religious coping is centered on religious involvement and personal prayer or meditation. It has other dimensions as finding meaning during sufferings and turmoil, comfort in an omni-potent source which provides safety and security, fostering social solidarity and self-identity, assisting others in society and transforming life (Pargament 1997). According to Schneider (2002) religion provided positive re-orientation and had fewer psychological issues related with menopause. Many women are now viewing menopause as a general life-stage development, which is resulting in a search for new meaning in their lives. Studies show that spiritual coping is effective in reducing severity of depression in postmenopausal women (Lotfi 2012). Spirituality provided a new meaning in life and this enable the women to meet losses and deepen in faith which provided women a positive outlook (Jaeger 2004). The spiritual activities and prayer act as direct or indirect coping mechanism which helps in adaptation with post-menopausal changes (Shafiee 2016). Traditional religions consider biological process of menstruation as ritually unclean. For example, in Shabarimala temple women are allowed to enter the sanctum sanctorum only after menopause. George (2002) notes that women form such cultures experienced new freedom and confidence in their life after menopause. Studies show that spiritual interventions enable women to cope with menopausal symptoms, depression, and anxiety (Shafiee 2016). Spiritual intervention increases inner peace, hope and sense of health promoting psychological and social well-being (Kim 2012)

2.4.6 Alternative therapies

With the recognition of the substantial risks of Hormone Therapy, there has been a surge in interest of adopting alternative therapies for menopausal symptoms. Use of bio-identical hormone therapy (BHT) has gained popularity with patients; however it is a contentious topic in clinical medicine(Johnson 2019).Herbal and nutritional supplements are increasingly popular and increasingly controversial. There are no randomized placebo controlled studies that indicate efficacy in these products and data from less rigorous studies are inconsistent. Vitamin E, soy products, black cohash and red clover are the most widely used herbal and nutritional supplements for menopausal symptoms (Newton et al. 2010). Studies shows that women also follow methods, which incorporate mind and body as acupuncture, traditional Chinese medicine and reflexology (Johnson 2019).

2.4.6.1 Yoga

In a study conducted by Joshi et al. (2011) yoga is considered as an alternative therapy as it effective in reducing menopausal symptoms. Yoga is a method which is useful for menopausal women as it reduce effects of hormonal changes and balances endocrine functions. The practice of yoga is a spiritual method as it involves the process of meditation. Chattha (2008) conducted a study on the effect of yoga on the menopausal symptoms and perceived stress in peri-menopausal women and found that there is a greater decrease in perceived stress of women who practiced yoga. Studies show that yoga has significant effect on insomnia of post-menopausal women and found that yoga is effective in reducing quality of life (Afonso et al. 2012). Practicing the postures recommended for the menopause transition, is beneficial for physical and emotional condition and can help to reduce the unpleasant symptoms related with menopause.

The above literature review demonstrates that menopausal experience of women varies in socio-cultural context and the issues related with menopause from a social perspective is unexplored in Kerala context. So far no study is carried out to find about the effect of menopausal symptom on the quality of life of menopausal women in Kerala and the adjustment strategies adopted by them. In a situation like this the present investigation hopes to provide information about menopausal women of Kerala which may be helpful to address their issues.

Chapter-3
Methodology

Contents

The Sociology of Life course is a distinctive perspective which is relevant to study life transition. The life transition involves changes in identity and status of individual personally and socially resulting in behavioural changes and adjustment (Elder 2003). The changes during the life course are socially organized which forms social pathways, which are structured by social institutions and normative patterns. World Health Organization recommends the life course methodology in understanding the women's health (WHO 2015). This approach is applied to understand the menopausal adjustment of women in Kerala.

3.1 Theoretical Frame Work

Perrie Bourdieu (1930-2002) discusses the concept of '*habitus-field-capital',* which provides the basic explanation from the subjective and objective

perspective to analyze the experiences of menopause. The word '*habitus'* is a concept widely used by sociologists as Marx Weber, Edmund Hussrel and Norbert Elias. According to Bourdieu (1984:170) *Habitus* is the system of experiences, perceptions, preferences and actions which is referred as dispositions that are inculcated from child hood through socialization. The habitus is the embodied socialized body which is formed through the habitual interactions. It is the product of history and produces individual and collective practice. The individual agent develops dispositions through habitual objective conditions they encounter (Bourdieu 1992). The habitus are the product of internalization of structures which differentiates between class, gender and other structures. The patriarchal norms and values shape the habitus of women related with the menopause. Bourdieu (1984: 437) introduces a concept called 'bodily hexis' where "the body is the site of incorporated history". Bourdieu has used the term '*bodily hexis'* to refer to permanent dispositions which differentiate between the gender through the appropriate postures and bodily movement which we categorize as feminine and masculine. Bourdieu explains that body is in the social world but the social world is in body. He views *'field'* as the network of relations among the objective positions (Bourdieu & Waquant 1992). It is the social context in which individual practice is accomplished and through the individual practices they develop dispositions specific to the field and becomes habituated. In certain context the individual is dominated by the filed or is dominant in the field.

This provides the frame work to understand women's embodied gender experiences and structure of power inequalities. According to him 'gender is the fundamental dimension of habitus that modifies social qualities that are interlinked to social factors'. The individual born in a historical society or a culture incorporates it to their habitus through the process of socialization. This

shapes a '*gendered habitus'* in the body which differentiates between the male and the female. In other words, it creates permanent dispositions that are gender appropriate, which reflects masculinity and femininity. These elements of gender identity are inculcated through practice and influences perceptions, habits and expressions. The gendered relations are embedded in *bodily hexis* and the constancy of patriarchal gendered habitus shapes perceptions and behavior within the social field. The fields are structures that constitute hierarchy and produce discourses and activities.

The gendered habitus is characterized by unequal distribution of different forms of capital. This delimits the horizon of possibilities a woman can explore in a particular historical society. According to him social identity is the formed from the gender identity and is the base of sexual division of labor. The bodily experience a child experience from the social field leads to the awareness about gender in relation with others. The gendered division of labour is objectified beyond the family and extends to wider social structure. This creates the fundamental opposition between male and female, rich and poor, dominant and dominated classes. This differentiation leads to gendered hierarchy in the form of patriarchy and other related opposition system. The individual variations in economic, social and cultural capital as the result of power relations and makes a woman deprived and dominated. Though the changes during the menopause are the result of natural biological transition, the social position of a woman in patriarchal society makes her dominated by patriarchal values in the form of economic, social, cultural and symbolic capital. According to Bourdieu (1986) the social activities of women enhances the social capital of women. He uses the term social capital to denote the social support system which in turn enables the individual to assess other forms of capital. The ability to assess other forms of capital creates a sense of well-being and satisfaction.

Erving Goffman (1963:4-5) evaluates various stigmas that hinder individual integration in a society in his book '*Stigma: Notes on the Management of spoiled identity'*. According to him stigma is a phenomena where an individual with an attribute is discredited and rejected. Goffman (1963a) has categorized stigma into three. The first is the 'abominations of the body' (physical disabilities); the second stigma is the 'issues of individual character' ('moral issues, failures); and the third is the 'tribal stigma' (the discrimination based on class, ethnicity).According to Dennerstein (1996) the women in order to avoid social stigma may conceal their feelings and emotions and this in turn develop depressive symptoms. The women keep silent, mask their behaviors, detach from self and avoid open discussion. In every culture there are certain terminologies which avoided direct reference to menopause or in certain culture there are no terminologies to depict the symptoms. For E.g. among Mayan's there is no term synonymous for "hot flushes".

Emily Martin (1987) in her work '*The Woman in the Body: A cultural analysis of reproduction'* discusses the capitalist system controlling the human body through the structural power. Her extensive research work is a cultural analysis of female body and its functions based on the biological process of reproduction. She analyzed the biological process of human body as menstruation, child birth and menopause. The embodied experiences of women from various strata of society are influenced by the dominant cultural and medical framework. The medical perspective prevailing in western society is the product of the cultural metaphors of male dominance and capitalism. Martin states that: "Menstruation not only carries with it the connotation of a productive system that has failed to produce, it also carries the idea of production gone awry, making products of no use, not to specification, unsalable, wasted, scrap" (Martin 1992:46). According to her the body resembled machine and the

communication systems coordinated by nervous system carried specialized functions. The nervous system has the characteristics of the communication system and endocrine gland performs its functions similar to the radio station (Martin 1989:40). The female body and the reproductive system are viewed as a hierarchy of relation which is compared to the dominant capitalist system.

The field of science and medicine are like the capitalist structure that alienates the women from her body. The analysis of the embodied experiences in the light of cultural and medical metaphors signifies the mainstream view of female body. The menopause is described as *'a system breakdown in the system of authority'*. The discourses and interpretations about her reproductive experiences highlight the fragmentation and alienation of women to her body. The embodied experiences of women related to the reproductive process are influenced by the medical and cultural metaphors of the dominant culture of a society. In the capitalist framework the menopausal and post-menopausal women are viewed as unproductive. According to Emily Martin women's body becomes something that she needs 'to cope with' or 'to be controlled'. The alienated feelings increases in medical settings and women feels vulnerable, controlled and dominated.

These major trends are utilized as the theoretical framework in determining the subjective experiences of menopausal women in Kerala about menopause, perception, awareness, symptoms and coping methods.

3.2 Statement of the problem

The menopausal transition is a universal phenomenon which is referred as cessation of menstruation. The women during menopause undergo multiple challenges during mid-life. Women faces physiological changes as the menopause include hot flushes, sweating, chills, cold, moist and numb

extremities. Also develop signs of depression, irritability, anxiety etc which are considered to be the result of hormonal changes. But there are variations in the menopausal experiences across the cultures. The research on the cross cultural variations present various dimensions of difference and similarities related with menopausal experiences. Studies have revealed that women's experience and attitude towards menopause are influenced by beliefs and expectations inherent in the prevailing socio-cultural system.

The studies related to menopausal experiences, perceptions and adjustment strategies are limited in Kerala. In Kerala where the life expectancy of female at birth is 76.3 and the average age at menopause is estimated to be 47.95, approximately 28 years will be spend in the post menopause period. If women could identify their menopausal changes and manage it through better life style they can spend rest of their life with satisfaction. Studies have revealed that if women are able to receive support from family and society they can cope with the problems associated with menopause in a better way. With this in view the present study aims to make a sociological analysis of the experiences of women during the menopausal transition. The menopausal experience is analyzed by evaluating the symptom severity, social life adjustment and coping strategies adopted in order to cope with menopausal symptoms. The perceptions and awareness of women about menopause and help seeking nature of women during menopause are also analyzed.

3.3 Objectives

1. To find out the life course factors of menopausal women.
2. To examine the role of life course factors in the gendered habitus of menopausal women
3. To identify factors determining the quality of life of menopausal women.

4. To find out the various adjustment strategies adopted by menopausal women.
5. To explore the interrelation between menopausal symptoms, social life and adjustment strategies.

3.4 Hypotheses

1. The life course factors are associated with quality of life of menopausal women with regard to their symptom severity.
2. There is relation between life course factors and coping strategies of menopausal women.
3. There is association between :

    a) Menopause symptoms and menopausal adjustment (Home-life relations, Work life issues, Social Life)
    b) Social isolation of menopausal women and menopausal adjustment (Home-life relations, Work life issues, Social Life)
    c) Home life stress of menopausal women and social life domains of menopausal women
    d) Work Life Issues of menopausal women and adjustment strategies adopted by women
    e) Social involvement and adjustment strategies adopted by menopausal women
    f) The women who adopt bio-medical methods are also adopting socio-religious adjustment strategies

3.5 Clarification of the Concepts

Menopause

Menopause is a biological transition in the life of a woman which is related with the cessation of menstrual cycle during which she has to pass through physiological and psychological changes.

Menopausal women

In the present study menopausal women are those married women who are in the transitional phases of menopause as peri-menopausal, menopausal and post-menopausal stage.

Menopause Transition

Menopause Transition is referred to the period before Final Menstrual period when there is variability in menstrual cycle (WHO 1996). In the present study menopause transition is the period of transition from peri-menopausal to post-menopausal phase.

Life Course Factors

Life course factors are the bio-social factors and socio-cultural factors that are influencing the menopausal changes in women.

Gendered Habitus

Gendered habitus in the present study is the embodied ways of thinking, feeling and acting which is shaped by the gendered dispositions in the social structure of Kerala society, which influences the subjective experiences of menopausal women.

Adjustment

Adjustment refers to the behavioural process that an individual adopts to maintain balance with the changing environment (Coleman 1941). In the present study, adjustment refers to the coping strategies adopted by menopausal women to adjust with menopausal changes.

Quality of Life

Quality of life is the well-being of menopausal women related with their physical, psychological and social aspects during the menopause transition.

3.6 Variables

The independent variables in the study are the life course factors - fertility pattern, age at menarche, menopausal status, geographical area, rural-urban difference, religion, educational level, employment status, and socio-economic status. Menopausal symptoms, adjustment and coping strategies of the menopausal women are the dependent variables. The relationships between these variables are analyzed in the following chapters.

3.7 Research Design

The present research aims to find out the physical, social and cultural aspects influencing the experience of menopausal women designed by the socio-cultural system. It also explores relationship between variables and ends by testing hypotheses. Hence the research design is descriptive in nature.

3.8 Universe and Sample

The universe of the study comprises of all married women in Kerala of the age group between 40-60 years who are passing through the transitional

phases of menopause. The data was collected from three districts that represented the socio-cultural features of Kerala representing south, north and central regions as Thiruvananthapuram, Ernakulam and Kozhikode. Respondents were selected from both rural and urban areas and comprised of unemployed and employed women who are going through peri menopausal, menopausal and post-menopausal phase. Due to lack of demographic data about the menopausal women, researcher adopted snow ball sampling method. According to Coleman (1958) the snowball sampling is uniquely designed for Sociological research, as it allows the sampling of natural interactional units. Snowball sampling is a method of chain referral where the initial respondent refers future samples from their acquaintances, commonly used in social science research to locate hidden populations. The initial sample size consisted of 600 menopausal women and from this sample, women who had hysterectomy and gynaecological disorders were excluded. Later on sample size was limited to 500 menopausal women who are going through natural menopause.

3.9 Pilot study

Pilot study was conducted in Ernakulam district as it was easy to get respondents both rural and urban, unemployed and employed women who are going through the menopausal phases. In-depth interviews and discussions were conducted with the respondents to analyze the issues of menopause and the factors that are influencing the social life of menopausal women. The researcher also had interactions with medical professionals and experts in this field to analyze the coping strategies. The pilot study helped in accruing knowledge about the bio-social dimensions of the study and variables. Thus the feasibility of the study was assessed and tool was designed accordingly.

3.10 Tool for Data Collection

Data was collected from primary and secondary sources. In the present study secondary data was collected from census reports, journals, newspapers and books. Questionnaire was the tool used for collection of data from primary sources, the menopausal women. The questionnaire consisted of 35 questions, which included closed ended and open ended questions and 4 scales. All relevant information concerning the life course factors, awareness and perceptions, symptom severity and social life of menopausal women was collected using the questionnaire. The Menopause rating scale (MRS) by Heinemann LA et al. (2004) was employed to measure the severity of menopausal issues .Three subscales were used to measure somatic, psychological, and urogenital symptoms. The scale included 11 symptoms on a scoring scale from "0" (none) to "4" (very severe symptoms). It is a formally validated scale according to the requirements for quality of life instrument. Social domain of Specific Menopause Quality life scale Pamela A. Jacobs et al. (2000)which included 19 statements were used to assess the social life of menopausal women. Coping strategies were assessed using five point Likert scale and the revised version (2016) socio economic scale by Kuppuswamy was used to find out the socio-economic status of the respondents.

3.11 Pre-Test

After constructing the questionnaire the researcher administered the tool on 50 menopausal women. Based on the pre-test the questions were modified and unnecessary questions were omitted.

3.12 Data collection

In the initial stages of data collection, the respondents were contacted through the members of 'Kudumbasree' and through the initial respondents

further samples were contacted. The social and cultural restrictions to speak about menopause made many respondents uncomfortable and to answer or even refer the term menopause. Some said it is shameful to speak about it. The medical terminologies and concepts were new to some and the researcher had to explain it to the respondents. There were some challenges that hindered data collection.

3.13 Analysis and Interpretation

In the present research a quantitative cum qualitative approach has been adopted for the analysis of data. The data was coded, tabulated and analyzed using Statistical Package for Social Science SPSS v 23 to understand the latent structure of data. To explore the underlying factors or variables an Exploratory Factor Analysis was conducted. Kaiser-Mayer -Oklin measure of sampling adequacy and Bartlett's test of sphericity was employed and found that all the scales employed are suitable for Principal Component Analysis. The factors extracted through Principal Component Analysis showed good internal reliability. For further in-depth analysis to explore the relationship between variables which were derived through factor analysis, Structural Equation Modelling SEM was used. Percentages, Chi-square test, T-test and ANOVA were used in the study to find the association and difference between the variables.

3.14 Scheme of Chapterisation

The first chapter gives an introduction to Sociology of health and the importance of understanding women's health in the cultural context. It describes the relevance of life course approach and gives emphasis to the events in reproductive life span of women with special emphasis to menopause. The

second chapter describes the related literature on menopausal experience in socio cultural context and coping methods adopted by menopausal women. The third chapter deals with the theoretical framework of the study and methodology. In the fourth chapter the researcher tries to find out the life course factors of menopausal women. The experience of menopausal women in the cultural context and the gendered habitus of women is analyzed from the life course perspective in the fifth chapter. The sixth chapter examines the factors affecting Quality of Life of menopausal women related with physical, psychological and social domain. The seventh chapter explains various adjustment strategies adopted by menopausal women. In the eighth chapter researcher explores inter-relation between determinants of Quality of Life and adjustment strategies adopted by menopausal women. The last chapter sets forth a summary of the findings and gives suggestions to improve the health of menopausal women.

3.15 Limitations

The major limitation of the study is the lack of awareness of the respondents regarding the menopausal issues and the cultural restrictions that prevented women from discussing about it. The women in the post-menopausal phase had to recall the onset of menopause and related symptoms, this could have affected the accuracy of the data. The lack of literature from a sociological perspective was a difficulty faced by the researcher and the lack of demographic data was another issue faced while collecting sample.

Chapter-4
Life Course Factors of Menopausal Women

Content

The Kerala achieved tremendous demographic changes in the recent decades through its egalitarian policies. The social development indicators in Kerala are comparable with that of developed countries in the world. The statistics shows that women in Kerala are far ahead in terms of sex ratio as the number of women exceeds number of men (1084 females per 1000 males) and female literacy rate is 91.9 percent which is much higher than the national average 74 percent. According to 2011 Census Report, the life Expectancy at birth of women in Kerala is 76.9 years which is the highest in India. This has made the social scientist to question whether the aging women have a better life. The quality of life of women is understood in terms of better disease prevention, health care, nutritional intake, higher level of education and good living and working conditions.

This study attempts to find out the quality of life of Kerala menopausal women, as the quality of life changes after the age of 50, biologically and socially. In the Indian and Kerala context, at this age emotionally she becomes a mother in law and grand-mother. Biologically it is the time when her body changes from reproductive to non-reproductive stage- Menopausal stage. This automatically raises the question of the quality of life of the increasing aging women population. To understand the quality of life in the older age World Health Organization (WHO 2015a) recommended life course approach. It is

helpful to understand how the individual social pathways during the life course are influencing the development and aging. In this study life course approach is used for analyzing the menopausal adjustment of married women in Kerala. Life course approach analyses the cumulative and interactive influence of social and physical factors on the health outcomes of an individual. According to Elder (1985)'Life Course' is the interaction of social and cultural factors that shape the personal experiences of an individual during the life span. It is the socially defined events and roles that individual plays over time that relates with the historical and socio-economic background. According to life course approach there are recognized stages in life as childhood, adolescence, adulthood and old age. During these life stages women undergo multiple transitions and trajectories which are determined by the life course factors.

According to Mishra (2009) taking a life course approach to study menopausal women involves life course factors as fertility, pregnancy, reproductive disorders, age at menarche and menopause along with factors as socio-economic conditions. This emphasizes the importance of understanding health by integrating the biological and social components that influences individual health (Anderson 1998). The bio-social factors which may influence the menopausal experiences are various reproductive factors as age at menopause and menarche, number of children, menstrual disorders and socioeconomic status as income, education and employment status and culture (Hunter 2007). Based on this the first objective of the study is to find the life course factors of the married menopausal women in Kerala.

4.1 Reproductive Factors

According to United Nations (2008) reproductive health is "a state of complete physical, mental and social well-being and not merely the absence of

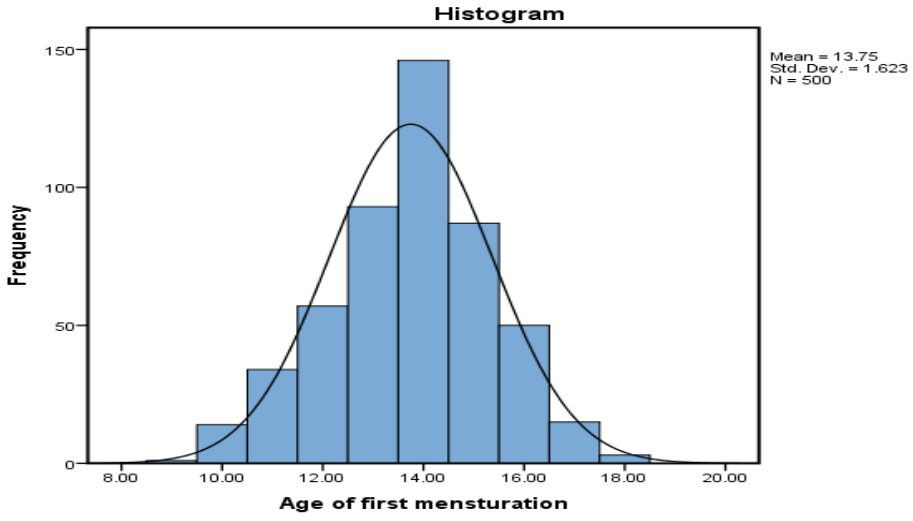
disease or infirmity in all matters relating to the reproductive system and to its functions and processes". Many researchers and policy makers have emphasized that the real reproductive health framework should go beyond the narrow confines of family planning to encompass all aspects of human sexuality and reproductive health needs, during the various stages of women's lives (Sai and Nassim 1989). According to Mishra (2010,) while analyzing the reproductive health factors - age at menarche, fertility, pregnancy outcomes, reproductive disorders and age at menopause are major determinants of health during life course. In the menopausal transition, early reproductive factors as age at menstruation, menstrual issues, conception, number of children and use of contraception plays an important role.

4.1.1 Age at Menarche

In the health trajectory of women, the timing of menarche and menopause are considered as an important phase which is associated with health risk for women in later years (Forman 2013). The reproductive process starts with menarche. Kissling (1996) quotes that "the menarche is a paradox as women often feel joy in their ability to bear a child and fertility is considered as a blessing, at the same time taboos and restrictions restrict women". There are celebrations to welcome the girl to her fertile age in every community, which is followed by numerous restrictions every seven days thereafter (Bhartiya 2013) . The event of menarche is celebrated among some community through religious ceremony as '*Thirandukalyanam'* during which womanhood and maturation is celebrated by inviting family and friends (Nagam 2012).Studies show that in Indian society the terms which associates with menstruation or reproductive process are looked down upon and personalized euphemisms are used to denote the processes (Bhartiya 2013). The idea of 'purity' and 'pollution' are associated with the biological process of menstruation.

Age at menarche is significant as it is considered as a sign of physical and cultural maturation. Forman (2013)found that multiple factors are influencing the age at menarche. The factors include hormonal exposures from prenatal stage to adolescent age, have influence on age at menarche. The biological variables include genetic patterns, life span, body mass index etc. (Nichols et al. 2006). The factors as dietary patterns and socio economic conditions that are culturally inherent in a woman's life span too have association to her age at menarche (Dennerstein 1990, M. Weinstein 2003). The stress during the childhood and adolescence are found to have influence on the growth process and body development of women. Studies show that age at menarche is associated with age at menopause. Women with early menarche are reported to have early menopause (Hardy R 1999, Henderson KD 2008).These considerations make an understanding of the age of menstruation of the respondents desirable and necessary. In the present study an attempt is made to find out the mean age at menarche. The results are given below.

Figure 4.1 The mean age of menarche



In the present study, the mean age of menarche is estimated as 13.75 and the median age is 14 years. The findings of the present study is almost the same as the mean age at menarche among Indian women (13.76 years), according to the study of Pathak (2014).

4.1.2 Early Menstrual Issues

Menstrual history and early menstrual issues are often reported to be linked with menopause and early age at menopause. Welt (2013) found early menstrual issues such as irregular menstrual cycles, excess bleeding plays a role in symptom severity during menopause. The most common disorder is dysmenorrhea i.e., severe pain during menstrual flow. These disorders can disrupt the psycho-social functioning of a woman. Studies show significant link between menstrual issues and socio-economic conditions, life style patterns, dietary habits and other complications as diseases. In the present study only 24.4 percent had early menstrual issues and 75.6 percent had no issues. The menstrual issue frequently reported is severe pain during menstrual days and 13.4 percent of the respondents suffer from it. Also women experience menstrual issues as bleeding (3 percent), headache (2.2 percent), ovary cyst (0.4 percent) and other issues (5.3 percent) which are psychological.

4.1.3 Reproduction and Contraception

According to Nair (2010b) the fertility rate in Kerala is well-known globally for the unprecedented fertility transition. Zachariah (1984) states that development in the health sector and universal education has led to the adoption of family-planning methods in Kerala and decline in fertility. It is lower when compared to other states in India. So the next question the demographers raise is whether there is any relationship between reproductive activities and

menopausal symptoms. Studies shows association between the number of children and the age at menopause (Progetto 2007).

In the present study, the reproductive pattern of menopausal women indicates that majority ie, 54.4 percent are having only two children.

In the detailed analysis of their family planning pattern it is found that permanent or temporary sterilization is a common method adopted by the respondents as birth control method after having the desired number of children. The graph below shows the relation between the number of children and family planning methods.

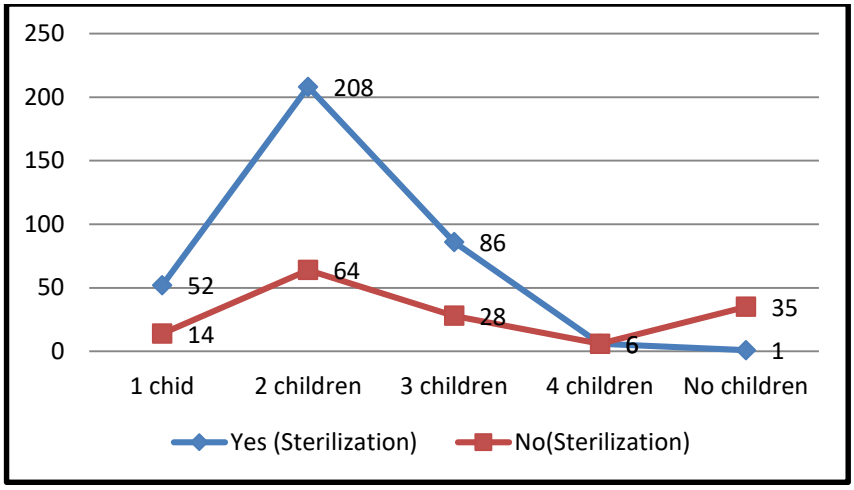


Figure 4.3 Fertility and sterilization pattern

From the figure it is evident that after the birth of second child 208 (57percent) women and after the birth of third child 86 women (25 percent) have opted to undergo permanent or temporary sterilization. Majority ie, 70.6% of the women had undergone permanent sterilization or temporary sterilization as recommended by the physician The women are also adopting family planning measures as contraceptive pills, copper IUD, DMPA etc.

4.1.4 Age Structure and Menopause Status

Age at menopause is defined as the age at last menstrual period after at least 12 months of amenorrhea (WHO 1981). The studies shows that there is variation in the age at menopause cross culturally (McKinlay & Lyon 2008). WHO (1996b) sates that natural menopause occurs between the age group 45-55 years. In developed countries, the average age at menopause is about 51 years, whereas in developing countries, it is reported to be 45-50 years (McKinlay 1992). The average age of menopause of an Indian woman is 46.2 years (Ahuja M 2016) and the average age of natural menopause in Kerala women was estimated to be 48.3 years (Sarika 2013).

Based on these age variations of menopause, sample is selected from married women, who are going through the different phases of menopausal transition and between the age group 40 to 60 years The women who had undergone hysterectomy is not included in the study. Based on the detailed stages of menopause categorized by STRAW, three stages of menopausal women is included. In the present study, the stages are modified as peri-menopausal, menopausal and post-menopausal.

The **peri-menopausal women** are women who are going through the *late menopausal transition stage* as given by STRAW, which is marked by increased variability in cycle length of menstruation, extreme fluctuations in hormonal levels, and increased prevalence of anovulation. The **menopausal women** are those who are in the *early post-menopausal stage (Stage 1a, of STRAW)* who are not having regular menstrual cycle since a year. The **post-menopausal women** are those from *early postmenopausal stage* who are not having mensuration for more than one year and less than four years.

The women from *early peri- menopausal stage* and *late menopausal stage* as categorized by STRAW are excluded from the study. The women from the early peri menopausal stage may not be aware of the changes and in late post-menopausal stage the reproductive endocrine function are more limited and the troubles may be the result of somatic aging. The table below shows the age structure of the respondents according to the menopausal status.

Table No: 4.1 Age structure of the Menopausal women

Age of the Respondents	Menopause Status of Respondents			Total
	Peri Menopausal	Menopausal	Post-Menopausal	
40-45years	38(7.6%)	13(2.6 %)	8(1.6 %)	**59(11.8%)**
46-50 years	46(9.2%)	111(22.2%)	57(11.4%)	**214(42.8%)**
51-55 years	14(2.8%)	78(15.6%)	109(21.8%)	**201(40.2%)**
56-60 years	1(0.2%)	4(0.8%)	21(4.2%)	**26(5.2%)**
Total	**99(19.8%)**	**206(41.2%)**	**195(39.0%)**	**50(100.0%)**

In the present study 99 women ie, 19.8 percent of the respondents are in peri-menopausal stage, excluding these women the average age of menopause is 48.38, which is exactly the same as Sarika (2013), and the median age of respondents is 49 years.

4.2 Socio-Cultural Factors

In the life course development, during the passage through menopause women experiences multi-faceted changes physiological, social and cultural. This is influenced by the socio-cultural background of women. Debbie (2003) found the cumulative impact of socio-economic disadvantage on the natural menopause and linked it with life course events during the childhood and adulthood of menopausal women. The familial structure and cultural factors influences the self-perception and awareness of a woman about menopause.

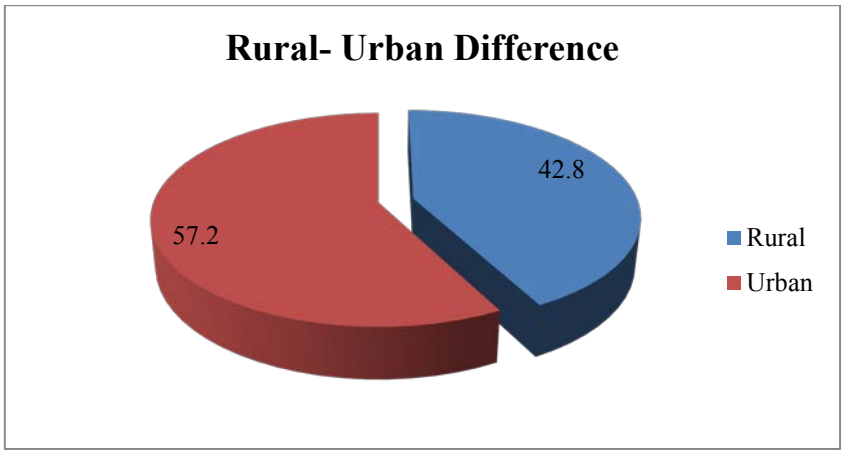
From the context of health, norms and tradition prevalent in the cultural system determines the help seeking behavior, formation of attitude, perceptions of women about self and the level of adjustment. The understanding of the socio cultural factors is desirable and relevant as it provides sociological link between the cause effect relationships between menopause and different factors. In the present study, socio-cultural factors include geographical area, religion, socio-economic status, education and employment status and income.

4.2.1 Geographical area

The pattern of geographical distribution makes the culture of Kerala unique and diverse. In order to get a clear picture of Kerala, the data was collected from various cultural zones as Kozhikode (northern region), Ernakulam (central region) and Thiruvananthapuram (southern region). 31.2 percent of the data was collected from Thiruvananthapuram, the most populous district with largest number of employed women, 33.6 percent from Ernakulam, the most populous urban agglomeration and 35.6 percent from Kozhikode, the largest urban area in Kerala and trade-hub of north Kerala.

Earlier studies show that the environment in which an individual lives determines the quality of life of the person. So the samples are taken almost equally from the rural and urban areas of these districts. According to 2011 census data the population of the state is almost equally divided between rural and urban area (Chaurasia 2011). The rural areas in Kerala are at present going through the process of urbanization that can be described as an 'urban village' with hardly any demarcation between urban and rural area. Even then based on the administrative demarcation 42.8 percent of menopausal women are from rural areas and 57.2 percent are from urban areas of these districts.

Figure 4.3 Rural-urban difference



4.2.2 Religion

Religious practices overtly or covertly control every activities of individual not only major events like birth and death but day to day activities. Hinduism, Islam and Christianity, the three dominating religious communities are found in Kerala. Some practices and taboos are associated with menstruating women in every community. Among the Hindus, the menarche is celebrated among certain community. During menstruation women are restricted from performing religious functions and entering prayer room. Menstruating women are considered to be *'in pollution'* or '*ashudhi'* and are banned from entering kitchen or public spaces at home (Puri 2006). Practice of menstrual bath to remove impurity in the fifth day of mensuration is followed in certain community. Menstruating women are restricted from entering the temple sanctuary. First mensuration is celebrated among Muslims in the northern districts and women during mensuration refrain from doing 'namaz' (Bhartiya 2013). Among Christians, the history of menstrual taboo is rooted in Judaism, which prohibits women from positions of authority (Phipps 1980). In Bible the book of Leviticus 15:19 restricts women during menstruation for

seven days. In Kerala, among Jacobite Christians menstruating women are restricted from partaking in sacraments or reading and touching holy items like Bible or religious icons. These women can experience freedom and liberation with the onset of menopause.

Shoba Rani (2009) in her study explains that women from Hindu community feel relieved after menopause as it enhances the socio-religious realms of the functioning of menopausal women. Thus the status passage of menopause liberates women from the limitations imposed by religious taboos, enhances social position and social participation of women. Studies shows that religion of the respondents play an important role in determining the cultural believes and taboos related with pollution and purity. So, an analysis of the religious background of the respondents is carried out.

Table No: 4.2 Religious composition

Religion	2011 Kerala	Sample Percentage
Hindu	54.73	44.4(222)
Muslim	26.56	31.2(156)
Christian	18.38	24.4(122)
Total	99.67	100.0(500)

Source: Census (2011) Source: Primary data

In the present study women from Hindu religion constitute the majority, followed by Muslims and Christians. An interesting thing that can be observed is that the sample of the present study is almost representative of the religious structure of Kerala society.

4.2.3 Socio-Economic Status

Lawlor et.al (2003)in their study found that the socio- economic status in child hood and adult hood is crucial in determining the age at menopause. According to their study there is association between life deprivation and age at menopause as this is linked with childhood diet and behavioral patterns in life span. Debbie (2003) also found that there is significant relation between menopausal women's socioeconomic status and her awareness about menopause and her help seeking nature In this study, the revised version (2016) of Socio Economic Status (SES) scale developed by Kuppuswamy is used to find out the Socio economic status of the respondents. The SPSS is used to analyze the respondent's Socio-economic status. The total score of the SES ranged from 0-29and they were grouped into five classes (26-29) upper class, upper middle class (16-25), lower middle class (11-15), upper lower class (5-10) and lower class (< 5) as given in table 4.3.

Table No: 4.3 Socio-Economic Status

Socio-Economic Status	Frequency	Percentage
Upper lower class	160	32.0
Lower middle class	136	27.2
Upper middle class	151	30.2
Upper Class	53	10.6
Total	**500**	**100.0**

Even though the study was conducted in three districts of Kerala, covering rural and urban areas, the data reveals that there are no respondents from the lower class according to the socio-economic status scale.

4.2.4 Educational Status

Education is important to enhance the capability of an individual and in process enlarge opportunities and options for sustained improvement in the well-being (National Human Development Report 2001).Based on the study Elliott(2002) expressed that education is power which liberates women form social stigma related with menopause According to Ganapathy et al. (2018) educated women adopted healthy lifestyle practices and coping strategies to adjust with the biological and psychological changes during menopausal transition. Based on this information education is taken as a variable.

Table 4.4 Educational Status

Education	Frequency	Percent
Below SSLC	117	23.4
SSLC	176	35.2
Plus two or Equivalent	70	14.0
Graduate	95	19.0
Post-Graduation and above	42	8.4
Total	**500**	**100.0**

Female Literacy Rate in Kerala is 91.98, which is the highest among Indian states (Census 2011).This reflecting in the present study as there are no illiterate women among the respondents and only 23.4 percent are below SSLC.

4.2.5 Employment and Economic status

The studies conducted on work and menopause reveals that there is correlation between the employment status of women and menopause (Ama and Ngome 2013) According to Griffiths (2013) women's menopausal symptoms

significantly affected the work performance and coping at work was found difficult during the menopausal transition. Based on this an attempt is made to find out the employment status of women.

Table: 4.5 Employment Status

Employment Status	Frequency	Percent
Employed	265	53.0
Unemployed	235	47.0
Total	**500**	**100.0**

According to the Marxian concept the participation of women in economic activities liberates the women from the clutches of patriarchy and male domination inside the family and society. The equal educational opportunities and matriarchal system prevailing in Kerala society promoted the employment opportunities for women. The present data indicates that 53 percent of the women are employed. They are more involved in service sector and in the past years there has been tremendous growth in this sector which comprises of sales, hotels, servicing consumer appliances(Guruswamy 2006). There is also increase in the women who are involved in self –employment through the '*Kudumbasree'*. In the present study 36 percent are engaged in service sector 29 percent are involved in teaching profession, 19 percent are engaged in menial jobs, 17 percent are self-employed and very few are professionals. Among the employed women 34 percent of the respondents are earning between Rupees 6000-16000, 30 percent are earning above 30,000, 25 percent have income 16,000-30,000 Rupees and 11percent have income only between 1000-6000 Rupees per month.

4.3 Summary

As recommended by World Health Organization (WHO 2015a) life course approach is the method that is used in the study for analyzing the menopausal adjustment of married women in Kerala. In this chapter an attempt is carried out to find out the life course factors of menopausal women in Kerala. In life course, the reproductive health factors as age at menarche, menstrual issues, family planning is studied along with socio-economic status, age, education, employment and religion.

While analyzing the reproductive history of the respondents it is found that the mean age of menarche is 13.75 years. Most of the menopausal women have no early menstrual issues. The reproductive pattern of the women indicates that majority have two children. It was interesting to find that 70.6% of the women had undergone permanent sterilization or temporary sterilization as recommended by the physician and majority of the women underwent sterilization soon after second child. In order to understand the role of socio-cultural factors on menopausal adjustment the respondents were selected representatively from rural and urban area from Thiruvananthapuram, Ernakulam and Kozhikode, from the age group 40-60 years. The women from the age groups 46-50 years and 51-55 years constitute the majority. Peri-menopausal, menopausal and post-menopausal women are included in the sample and majority of the women are from menopausal and post-menopausal phase. Representing the religious structure of Kerala 44.4 percent of the sample are Hindus, then Muslims and Christians. According to the Socio Economic Status (SES) scale developed by Kuppuswamy 32 percent of the respondents are from upper lower class, 27.2 percent are from lower middle class, 30 percent are from upper middle class and 10.6 percent are from upper class. In the present study most of the women have completed SSLC and above. There are no

illiterate women and only 23.4 percent are below SSLC. With regard to employment, 53 percent are employed. Besides the self-employed and few professionals, others are employed in various employment sectors.

Chapter - 5

Gendered Habitus of Menopausal Women

Contents

Bourdieu's concept of habitus encompasses habitual ways of thinking, acting, and being (Bourdieu 1984, 1990). Habitus is embodied socialized body formed through the interactions with multiple factors in the life course of an individual. It is rooted in family in which an individual is socialized and it is conditioned by the social structure of society. Bourdieu calls it 'socialized subjectivity' which is structured and conditioned by the social structure. According to Bourdieu, the habitus is specific and this specific habitus shapes one's behavior across multiple contexts. This habitus shapes embodied experiences and individual's position in stratified society based on race, gender and socioeconomic level. Bourdieu (2000:24) states that the gendered habitus is formed by "system of dichotomies," in culture and women accept sexism because of their feminine dispositions. Thus the gendered habitus is culture specific dispositions which are formed as the result of patriarchal structure. Gendered habitus is the system of perceptions, feelings and expressions which are formed as the result of interactions with the social structure. The gendered habitus is formed through the process of socialization during the life transitions of women.

Clausen (1986: 2) states that life course is "a progression through time" and the challenge of sociologist is to focus on the intersection of biographical and historic factors (Miller 1959). Hence to understand the gendered habitus of

menopausal women - awareness, feelings, self-perception and attitude towards menopause is analyzed in the context of life course factors. Life course is determined by historical period which is shaped by cultural norms, perceptions and social institutions. Gendered habitus of menopausal women is a new field of study in Kerala. By incorporating life course factors of women the researcher is trying to get a better picture about the gendered habitus of menopausal women.

In the case of menopausal women the reproductive life starts with menarche and ends with menopause. The transitional phase from reproductive phase to non-reproductive may extend for years which includes biological changes and social changes (Sierra 2005). Here, in the present study the life course factors of menopausal women are the bio-social factors and socio cultural factors. Reproductive factors such as age at menopause and menarche, number of children, menstrual disorders makes up the bio-social factors. Socio cultural factors include geographic region, religion, income, education, employment status and socioeconomic status.

According to Mishra (2010) to analyze the reproductive health during menopause, factors such as menarche, fertility, menstrual disorders which are interlinked with socio-economic conditions have to be considered. Studies have shown that the cultural factors influence the reactions to menopause which can be understood by the difference in the meanings people attach to this transitional phase. The knowledge, perceptions and attitude towards menopause and experiences related with menopause differs cross-culturally (Leiblum 1986). These variations are the result of reproductive factors and socio-economic factors. So an attempt is made to find out how it is in Kerala. One of the objectives of the study is to examine the role of life course factors in the

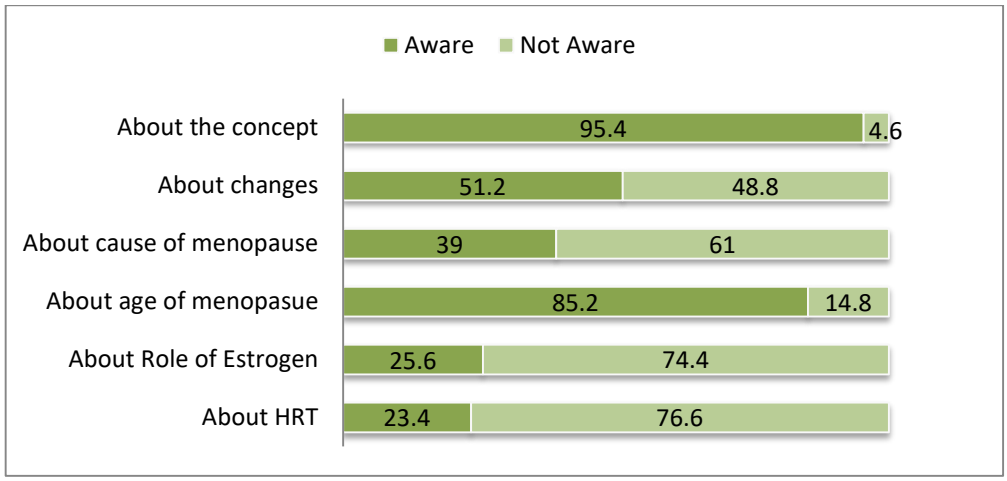
gendered habitus of menopausal women. In the present study, based on Bourdieu's (1984) contribution, the gendered habitus is the awareness, feelings, perceptions and attitude of menopausal women towards menopause. It is analyzed in the light of reproductive and socio-cultural factors.

5.1 Awareness of Women about Menopause

In order to understand the gendered habitus of menopausal women, the awareness of menopausal women about menopause is analyised. Awareness is a social construct which an individual acquires through the interaction with social environment. The awareness of women about menopause is determined by culture and socio-economic status of women. Kerala stands out among all states in India with regard to social development indicators. But women in Kerala have unseen restrictions, as women are expected to be submissive and silent due to the dominance of patriarchal norms (Joseph 1999). The cultural restrictions to discuss the matters related with menopause can create lack of awareness about the menopausal symptoms and treatment. According to Devi (2015b) awareness about menopause might empower women to cope with menopause changes. Also it was found that the women who had better awareness about the menopause experienced less consequence (Pan 2002). Awareness regarding menopause is necessary, adequate knowledge and information about symptoms and complications of menopause will enhance the adjustment towards menopause (Hunter 1996).

Hence to understand whether the women in Kerala are aware about the different aspects of menopause, the researcher evaluated the awareness of menopausal women about the concept, changes, cause of menopause, age at menopause and their awareness related with role of estrogen and Hormone Therapy. The responses are presented below.

Figure 5.1 Awareness of Women about Menopause



It is interesting to note that in a state like Kerala even today there are women who have not heard of about menopause even though they are going through the menopausal changes. The diagram above shows that 4.6 percent of the respondents have not heard about the concept menopause. Biological process of menstruation and menopause is kept hidden and women are ashamed to discuss the issues related with these process. Women are not referring to the term menopause rather they refer menopause as *'athu'* means 'it'. Also other synonyms are used in their cultural context. But now it seems they started discussing about it as it is found from the response. Only 9.8 percent said that discussing about menopause is a cultural taboo, 34.4 percent felt that there is no need to discuss about these issues, 46.6 percent discussed about menopause in their social circle. To understand more they were asked about the source of information and it was found that 48.2 percent received information from family members and 19.2 percent from friends. 20.2 percent are depending on magazines as 'vanitha' and 'arogyamasika' for information and 8.2 percent is using sources as internet and minority are dependent on other resources.

Cinthura (2017) noted that most of the bodily changes related with menstrual pattern were not noticeable as there is a system of under reporting of menopause symptoms in India due to socio-cultural factors (Borker 2014). In the present study, 51.2% women going through the transitional phases are aware about the changes or symptoms related with menopause. Most of the respondents(61%) are not aware about the cause of menopausal changes but 85.2 percent of the women are aware about the age at menopause. While comparing studies from developed and developing countries, the women from Western countries appeared to be better informed about medical aspects as HRT and other knowledge (Hsien 2002) than women from China (Lam 2003) and India (Cinthura 2017). Same is found to be true in the present study as most of the women ie, 76.6 percent are not aware about Hormone Replacement Therapy. Most of the respondents are not aware about the role of estrogen or side effects of estrogen therapy. This shows that menopause is not much medicalized in Kerala society and women considers menopause as a natural process than a disease.

5.1.1 Awareness and Life Course Factors

Bourdieu(2000) has mentioned gendered habitus is the product of social structure which is based on the patriarchal norms. This in turn shapes the 'mental construct' of women which formulates the awareness, feelings, perceptions and attitude. The gendered habitus of menopausal women are the product of different life course factors which are inter dependent. Studies show that awareness regarding menopause is based on different life course factors like fertility history, age at menarche, geographical factors, social-economic factors, and cultural factors (Leon 2007).. Awareness about menopause is the understanding which is gained through social interaction and experiences during the reproductive span (Lee 2003). For instance, there are evidence that early life

course factors as age at menarche, menstrual disorders etc. are having relationship between menopause and other life events (Mishra 2010). Therefore an attempt is made in this study to find out whether the awareness of women towards menopause is shaped by life course factors. A Chi square test was carried out to find out whether the reproductive factors of the menopausal women are interlinked with the gendered habitus. The result is given in the Table 5.1.

Table 5.1 Awareness about Menopause and Reproductive Factors

Awareness	Reproductive Factors			
	Fertility	Age at Menarche	Age at Menopause	Menopause Status
About Concept	Significant	Not significant	Significant	Significant
About cause of Menopause	Significant	Not significant	Significant	Not significant
About changes during Menopause	Not significant	Significant	Significant	Significant
About Age at Menopause	Significant	Significant	Significant	Significant
About Role of Estrogen	Significant	Significant	Not significant	Not significant
About Hormone Therapy	Significant	Significant	Not significant	Not significant

Statistically significant at .05 level

From the analysis it is evident that the fertility pattern ie, number of children of menopausal women are significantly associated with awareness about the cause of menopause, concept of menopause and also with medical aspects of Hormone Therapy and role of estrogen in menopause. The data reveals that the women with less number of children are more aware than women with more number of children. Thulaseedharan (2018b) noted that the women with educational and employment aspirations are using contraceptives

as the method of fertility control in Kerala, the finding of the present study can be related to this. In the present study the women with less number of children are more aware than women with more number of children. The factors as education and employment might be the proxy variables in determining the awareness. Fertility pattern of women in Kerala indicates that women in Kerala has reached below-replacement fertility level in the 1990s where as the rest of the Indian population is in the mid-level of demographic transition (Nair 2010a). The social development policies, higher social equity, low age at marriage and use of contraceptives are the major factors that led to the decline in fertility rate in Kerala (Zachariah 1984). The unique fertility pattern is the contribution of high female education and employment opportunities which are the product of social structure in Kerala.

The interval between the menarche and menopause is considered as the reproductive life span of women (Wu 2014). In the present study the life course factors as age at menarche is linked with the awareness of women about the age at menopause, about the changes related with menopause and knowledge about HRT and role of estrogen. The age at menopause is found to have strong association with the awareness of menopausal women about concept, changes during menopause and age at menopause. No significant relation was found between their awareness related with the role of estrogen or HRT.

The menopausal status is found significantly related with the awareness about concept, awareness related with changes and age in which menopause occur. But no significant relationship was found related with the medical knowledge. Studies show that post-menopausal women are more aware about the changes related with menopause (Ama 2013), supporting this finding in the present study menopausal and post-menopausal women are more aware about aspects related with menopause. Borker (2014)also states that Kerala

women consider menopause as a natural process and is not having awareness about the medical aspects

According to Melby (2005) the socio cultural factors in life course in specific geographical location influences the meanings and experience of menopause. Studies of Borker (2014), Dennerstein (1990) have found significant impact of religion education and socio economic status on the awareness of women towards menopause This implies that social and cultural background determines the awareness of menopausal women. Bourdieu (1989) has mentioned the habitus is reflected in the objective division in class structure, age group, region, gender and so on. Based on this an attempt is made to find out whether the awareness of women towards menopause is shaped by socio-cultural factors in life course methodology. A Chi square test was carried out to find out the association between the gendered habitus and the socio-cultural factors and the results are given below.

Table 5.2 Awareness about Menopause and Socio-Cultural Factors

Awareness	Socio-Cultural Factors					
	Region	Rural-Urban	Religion	Education	Job	SES
About Concept Menopause	significant	not significant	significant	significant	significant	significant
About cause of Menopause	significant	not significant	significant	significant	significant	significant
About changes during Menopause	significant	significant	significant	significant	significant	significant
About Age at Menopause	significant	not significant	significant	significant	significant	significant
About Role of Estrogen	significant	significant	significant	significant	significant	significant
About Hormone Therapy	significant	not significant	significant	significant	significant	significant

As it can be seen in the table 5.2 chi-square test reveals that the association between awareness and socio-cultural factors is highly significant. That is Culture and social background plays an important role in determining the awareness of women.

Further analysis shows that the women from Ernakulam and Thiruvananthapuram are more aware about menopause than the women from Kozhikode; the reason can be the unique cultural patterns which are the result of structural factors as matriliney, caste structure and educational pattern in the different geographical regions of Kerala. Cinthura (2017) found that the awareness of menopausal women is associated with the rural-urban difference and women from rural areas were unaware of their stage of menopause as they lack resources in rural society. But in contrast to this, in the present study rural-urban difference is not found associated with the awareness of women about menopause. This may be because in Kerala differentiation between rural and urban areas are less and most of the rural areas in Kerala are dominated by sub-urban features (Susuman 2014).

Religion is considered as an important factor in determining the awareness of women about menopause. Chi-square test reveals that the religion is having significant association with awareness related with menopause. Borker (2014) found that Hindu women are more aware about the aspects related with menopause than Muslim women as education is higher among Hindu women. In the present study also, Hindu women have better awareness compared with Muslim.

Ama (2013) found close association between awareness and education and employment status. In this study the educational status and employment of the women are significantly associated with the awareness related to concept,

age at menopause, changes, cause of menopause and medical knowledge of menopause. Thus education and employment are major factors which are influencing the awareness of women towards menopause.

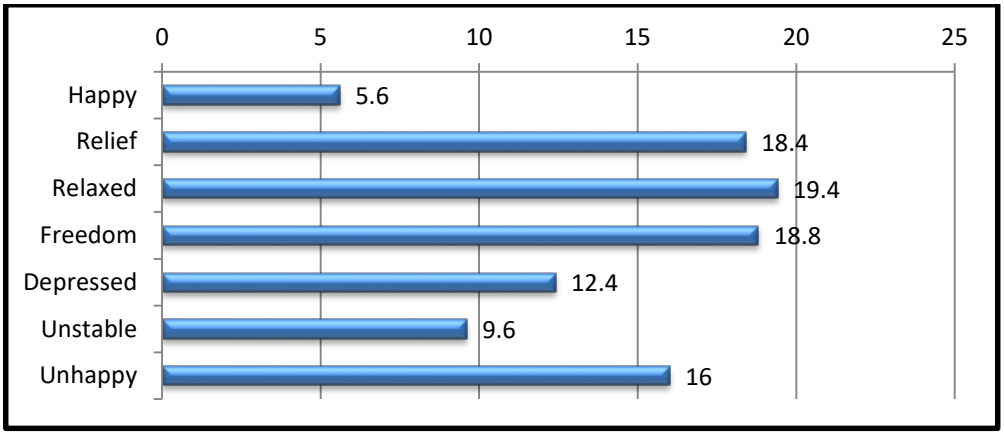
According to Mason (1986) as the gendered stratification the socio-economic class to which a woman belongs do influences her awareness and life options. In a study conducted in Mumbai, Wani (2012) found significant link between a woman's socioeconomic status and her awareness about menopause .The study also found that women in low strata are not aware about the medical treatment. In her study she noted that it is women from lower strata who experienced more menopausal symptoms but they are not able to recognize and seek medical help for the symptom. Supporting this in the present study, the socio-economic background of the women is significantly related with awareness of women towards menopause.

5.2 Feelings and Life course Factors

The second aspect of the gendered habitus that is evaluated in the study is the feelings of women towards menopause which is shaped by the social structure. Cultural and social aspect plays an important role in determining how the individual in society think and feel about menopause. These aspects are the reflection of norms and values prevalent in the cultural system. Traditional belief system inherent in the cultural system is passed on through the process of socialization. Positive feelings as relief and satisfaction are based on the cultural perspective about fertility (Mishra 2009). Feelings are associated with self-perception about female body and associated stigma. In the study to examine the role of life course factors on gendered habitus of menopausal women direct question is asked giving the respondents a chance to express their feeling. Both

positive and negative feelings related with menopause are expressed. The diagram below represents the feelings of women related with menopause.

Figure 5.2 Feelings of women towards Menopause



Above analysis shows that, most of the women(62%) expressed positive feeling as relaxation, freedom and relief related with the menopause than negative feelings The bio-cultural analysis of Beyene (1986), Flint (1975) and Lock (1994) gives emphasis to the importance of culture in determining the menopausal experiences of women. The women from cultures which have priority to religious values and cultural restrictions menopause is a sign of relief. As Joseph (1999) mentions education in Kerala does not do anything to eliminate gender roles, rather it disseminates traditional notion of gender segregation.The gendered habitus of women in Kerala society is shaped by traditional cultural values and patriarchy. There are studies which found that the women from non-western societies associated positive feelings as they felt relief from worries and taboo of menstruation, freedom from contraception and increased status prescribed by the cultural norms. Bromberger (2001) suggested that feelings of distress and anxiety are more among American women than Hispanic women. Earlier studies have shown that the bio-social factors in the

life course of women determine the feelings of women related with menopause. To understand the relation between life course factors and feelings of women associated with menopause chi-square analysis is carried out and the result is given below.

Table 5.3 Association of Life Course Factors with the Feelings

Life Course Factors	ρ Value	Significance
Age at Menarche	P<0.05	Significant
Fertility	P<0.05	Significant
Phase of Menopause	P<0.05	Significant
Geographical Region	P<0.05	Significant
Rural-Urban	P>0.05	Not Significant
Religion	P<0.05	Significant
Education	P<0.05	Significant
Occupation	P<0.05	Significant
Social Economic Status	P>0.05	Not Significant

***Statistically significant at .05 level*

The Chi-square analysis shows that most of the life course variables in the study are significantly associated with the feelings related with menopause. The reproductive factors such as age at menarche, fertility and phases of menopause are significantly related with menopause. The reproductive life history starts with menstruation and in Indian society this event is either celebrated or over looked. In most of the communities in Kerala menarche is celebrated and the event of menarche is joyfully accepted with rituals, ceremonies and gifts. This shows that in Kerala society much importance is given to feminity and child bearing. In the present study the age at menarche was significantly related with feelings related with menopause. The fertility pattern of the women was significantly associated with the feelings towards menopause. Studies show that use of contraception is common in Kerala as the level of education of the females is high. So after the birth of two children

women adopted temporary or permanent birth control methods (Thulaseedharan 2018a). In the present study women who had less number of children associated positive feelings as relaxed, relief and freedom related with menopause. Related with the phases of menopause, the menopausal and post-menopausal women expressed positive feelings related with menopause than the women from peri-menopausal phase.

The socio-cultural factors play a decisive role in determining the feelings of menopausal women (Afridi 2017). The feelings are based on the cultural beliefs and expectations regarding menopause and aging in society. The significant socio-cultural factors significantly related with feelings related with menopause are geographical zone, religion, education and occupation of menopausal women.

Studies from South India show that women perceive menopause as convenient for life, free from menstrual taboos and unwanted pregnancies (Ray 2010, Aaron 2002). Supporting this finding more number of Hindu women expressed freedom and relief related with menopause. The women from other religions expressed positive as well as negative feelings related with menopause. Religion is significantly related with the feelings towards menopause.

Education and employment status of women were associated with women's feelings towards menopause. In the present study, most of the respondents had basic elementary education. It was found that women with lower education expressed unhappiness, whereas educated women felt relaxed. This might be due to the priority given to the childbearing role by less educated women. Most of the educated women in the present study were employed and employment status was significantly associated with feelings towards

menopause. Kittel et al (1998) found that employed women associated anxiety and stress associated with menopausal symptoms as physical and emotional signs affected their work relations. In the present study, the employed women expressed freedom and other positive feelings than unemployed. The reason can be freedom from the menopausal symptoms that affected their social relations at work place.

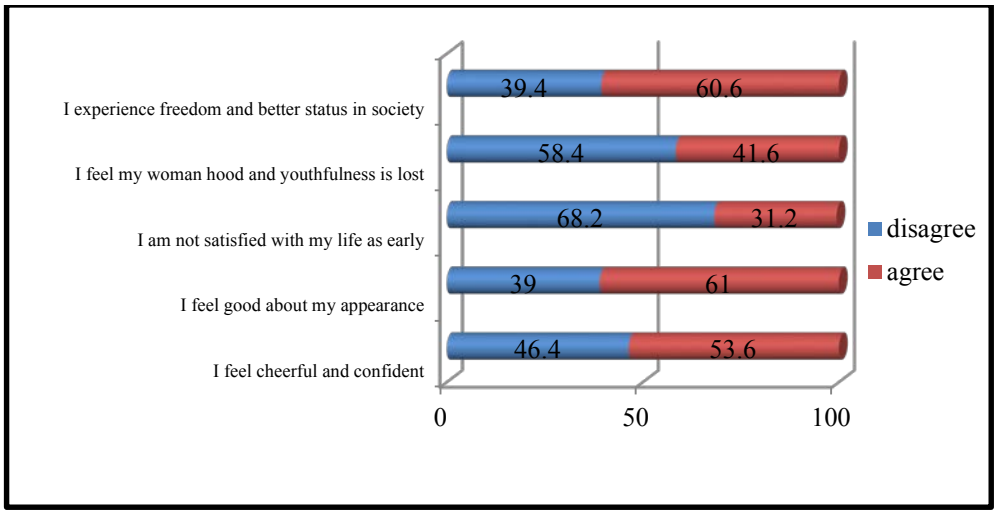
The Geographical region is an important cultural factor that can influence the feelings towards menopause. In the present study data was collected from different zones of Kerala as Thiruvananthapuram, Ernakulam and Kozhikode. The data reveals that there is significant relationship between the geographical region and feelings of women towards menopause. According to Census data (2011) Kozhikode is a district with high fertility rate in Kerala, in which majority are Muslim population. In the present study, women from Kozhikode district expressed more negative feelings than women from Ernakulam and Thiruvananthapuram. The reason for negative attitude among women may be due to their preference to have more number of children, religion, education and employment.

In the present study the factors as rural-urban difference and socio-economic factors are not significantly related to feelings women have towards menopause. The rural urban difference showed no significance in the study. In Kerala due to effective egalitarian policies in terms of healthcare and social reforms social disparity is lower compared with other states in India (Zachariah 1984), probably because of this, socio-economic status of the respondents is not significantly associated with menopause.

5.3 Self-Perception of Menopausal Women

The experiences of menopausal women in different social context reflect different meanings related with menopause. According to Memon (2014), Indian women viewed menopause positively as the social status is elevated with aging and menopause. Perception is the third aspect of the gendered habitus that is analyised in the study. The self-perception of women is dependent on the cultural factors. According to Melby et al. cultural attitudes and perceptions about the menopause are determined by health conditions, experiences of mother during menopause, social perceptions about child rearing and social role expectations, attitude of women during menopause transition. In a cultural analysis by Evarts and Baldwin (1997)they states that the cultural stereotype related with menopause is rooted in the unattractive picture painted by media and lack of awareness. There are different factors influencing the self-perception of women during menopause. Since it is an individual evaluation, the respondents were given few statements asking them to state agree or disagree. Table below shows the self-perception of women about menopause.

Figure 5.3 Self- Perceptions of Menopausal Women



Studies shows that elderly women are respected and they enjoy better status in Kerala culture (Shaju 2011). It may be because of this 60.6 percent of the women perceived that menopause give them more freedom and better status in society and most of the women ie, 68.2 percent are satisfied with the life. The perception about beauty is not much influenced as 61 percent of the respondents feel good about their appearance and 58.4 percent disagree with the statement that womanhood and youthfulness is lost. The menopause has affected the confidence level of half of the women ie, 53.6 percent and they felt that their cheerfulness and confidence is lost.

5.4 Attitude of Women towards Menopause

Sommer et al states that attitude of menopausal women varies with the ethnic group. The cultural attitudes and meanings assigned to menopause in cultural context are influenced by prior reproductive health condition, socio-economic factors, religious beliefs and social support system of women. The biomedical perspective that portrays menopause as a deficiency disease contributes negative attitude towards menopause (Shore 1999).

Goffman's (1963) theory of social stigma is applied here. The idea of social stigma related to the biological process of menstruation which is associated with the purity and pollution is prevalent in the belief system of patriarchal dominant Kerala society. Goffman (1963) notes that stigma is a phenomenon where an individual with an attribute is discredited and rejected. The biological process of menstruation and menopause are 'symbols of stigma'. The symptoms as hot flushes, sweating experiences, heavy bleeding and other physical changes associated with menopause restricts the women from cultural integration. Menopause signals freedom from the prejudice and cultural restrictions. Most women are hesitant to speak about the menopausal changes.

Even though they speak it may be limited to a closer circle. The menopausal changes as hot flushes, sweating experiences, heavy bleeding, depression signifying the issues of transition phases is considered as 'symbols of stigma' in society. The women may not acknowledge the symptoms as hot flushes attributing it to ventilation issues or climatic change.

In the present study an attempt is made to find out the attitude of women towards menopause. Attitude towards menopause determines how women interpret their lives in socio-cultural context after menopause (Akkuzu 2009). The attitude is evolved in the social context and are influenced by social beliefs and taboos in society related with menopause (Bowles 1986). Dennerstein et al (1994) found that positive attitude toward menopause is the outcome of positive experiences of menopause from the culture. The women from the society which judge women on the basis of their appearance and youthfulness may perceive menopause negatively (Kelly 2001). The cultural system prevailing in society influences the attitude of menopausal women and this in turn shapes menopausal experiences as positive or negative.

In the present study to find out the attitude of menopausal women in Kerala, four items are used to assess the attitude towards menopause in a five point Likert scale from 'strongly agree' to 'strongly disagree'. The scores ranged 4 to 20. From the statements the scores were calculated and identified whether women in Kerala view menopause positively or negatively. Higher scores, indicates women consider menopause as natural, less medical and more positive towards menopause. The findings show that women in Kerala is considering the biological process of menstruation and menopause as natural phenomena rather than a medical event. In the present study, the mean score is

12.39±2.95 and median is 12.00. This shows that women are more positive towards menopause.

5.4.1 Life Course Factors and the Attitude of Women towards Menopause

Menopause is a multifaceted process that involves biological and socio-cultural changes. In general, it is assumed that the attitude is influenced by factors across the life as early reproductive factors and socio-cultural factors. So an attempt is made to analyze the impact of life course factors on the attitude of menopausal women. The menopausal status is considered as an important variable that can influence the attitude towards menopause. During the transitional phases of menopause, experience of women varies in different societies which may be influenced by bio-socio-cultural factors. Studies show that post-menopausal reflected positive attitude regarding the cessation of menopause and pre-menopausal women had mixed feelings and more negative attitude towards menopause (Bowles 1986). Based on this a One Way ANOVA is done to find whether attitude of menopausal women vary on the basis of menstrual status.

Table 5.4 One Way ANOVA on Attitude towards menopause and Menopause status

Attitude Towards Menopause				F Value	P value
Menopause Status	**N**	**Mean**	**S.D**		
Peri- Menopausal (Irregular)	99	13.2020	3.63930	5.484	.004*
Menopausal (Since a Year)	206	12.3689	2.65032		
Post-Menopausal	195	12.0051	2.81106		
Total	**500**	**12.3920**	**2.95767**		

**Statistically significant at 0.05 level*

The above analysis shows that attitude towards menopause vary significantly based on the menopause status of the respondents. According to

Avis (1991) as women pass from peri-menopausal phase to post-menopausal phase, women became more positive towards menopause. But in the present study the mean value indicates that peri- menopausal women are more positive than menopausal and post-menopausal phase. The physical symptoms related with vasomotor symptoms are more prevalent in late peri-menopausal phase (Avis 1991).This can be the reason for the variation. Kalb (2007) noted in a study that peri- menopausal women are not much aware about the menopausal changes. Studies show association between parity and menopausal experiences (Avis 1991). In culture which gives high priority to fertility, menopause will be a time of loss and women attach negative attitude related.

The attitude was found significantly related with the parity and null parity of women. So in Kerala where the women are adopting family planning methods to control population (Devi 2010), One Way ANOVA was carried out to find out whether the attitude towards menopause varies significantly with fertility pattern

Table 5.5 One Way ANOVA on Attitude towards menopause and Fertility

Attitude Towards Menopause				F Value	P value
Fertility	**N**	**Mean**	**S.D**		
1	66	12.1061	2.27447	10.733	.000**
2	272	11.8125	2.55669		
3	114	13.5877	3.52692		
4	12	15.0833	3.82476		
No children	36	12.6111	3.12847		
Total	**500**	**12.3920**	**2.95767**		

** *Statistically significant at 0.05 level*

The above table indicates that that attitude of menopausal women vary with fertility pattern of women. The women with more children have positive

attitude compared women with null parity and less number of children. Thus attitude of women towards menopause varies with the fertility of menopausal women.

The socio-cultural factors may influence the menopausal experience of individual influencing the attitude towards menopause (Ayranci 2010). According to Joe (2010) socio- cultural characteristics as religion, education and employment status were associated with menopausal symptom severity and attitude of menopausal women towards menopause. Based on this an analysis is carried to find out whether the attitude varies based on the socio-cultural factors.

The geographical region interferes in the attitude formulation of menopausal women. Studies show that regional atmosphere impacts the attitude of married women towards menopause. In this study One Way ANOVA was carried out to find out whether the attitude towards menopause varies significantly according to geographical zones.

Table 5.6 One Way ANOVA on Attitude towards menopause and Geographical Region

Attitude Towards Menopause				F Value	P value
Geographical Region	**N**	**Mean**	**S.D**		
Ernakulam	168	11.4583	1.61154	65.484	.000**
Thiruvananthapuram	156	11.3333	2.10785		
Kozhikode	176	14.2216	3.65072		
Total	**500**	**12.3920**	**2.95767**		

** *Statistically significant at 0.05 level*

While analyzing the mean score, it is evident that women from Kozhikode district have more positive attitude towards menopause than women form Ernakulam and Thiruvananthapuram. The One Way ANOVA's result

shows that women's attitude towards menopause vary significantly on the basis of their region.

Religion is an influencing variable in the attitude formation of women towards the biological process. Based on religious values the idea of purity and stigma is associated with menopause. In Kerala, even today traditional notion of gender segregation exist. Women in menstruation are considered as 'impure' and they are restricted from the entry to the temple. But menopausal women are allowed as they are free from the pollution of menstrual blood. Hence, One Way ANOVA is done to find out whether the attitudes towards menopause vary significantly based on the basis of religion of the respondents.

Table 5.7 One Way ANOVA on Attitude towards menopause and Religion

Attitude Towards Menopause				F Value	P value
Religion	**N**	**Mean**	**S.D**		
Hindu	222	11.8514	2.38215	29.977	.000**
Muslim	156	13.8205	3.55144		
Christian	122	11.5492	2.38141		
Total	**500**	**12.3920**	**2.95767**		

** *Statistically significant at 0.05 level*

From the table it is evident that attitude vary significantly based on religion of the respondents. The mean scores shows that compared to Hindus and Christians, attitude of Muslim women are more influenced by the religion. The mean score of 13.82 indicates that Muslim women are more positive towards menopause. Sievert (2013) noted that attitude of women towards menopause varied based on religion. According to him Muslims have more positive attitude because they cannot read Qu'ran during menstruation and menopause indicates freedom from religious restrictions.

Education is a crucial determinant in the attitude formulation and perception of every individual. Studies show that attitude of women towards menopause varied in relation with educational status and women with higher education had positive attitude towards menopause (Larocco 1980).Based on this information, One Way ANOVA is done to find out whether the attitude towards menopause vary significantly based on their education.

Table 5.8 One Way ANOVA on Attitude towards menopause and Education

Education	Attitude Towards Menopause			F Value	P value
	N	Mean	S.D		
Below SSLC	117	13.1795	2.99602	3.018	.011
SSLC	176	12.4148	3.30257		
Plus two or Equivalent	70	12.0714	2.10122		
Graduate	95	12.0105	2.83404		
Post-Graduation and above	42	11.5000	2.36076		
Total	**500**	**12.3920**	**2.95767**		

*** Statistically significant at 0.05 level*

The above table reveals that the attitude of menopausal women varies with the educational qualification but the variation is not statistically significant. Memon (2014) noted that educated women had positive attitude towards menopause but in the present study even though there is variation such a trend is not seen. The mean scores of attitude scale reveals that women with education below S.S.L.C have highest mean score, indicating that they have more positive attitude. Education empowers women in the adjustment process and enables them to cope with various issues (Devi 2015a).

The employment status of women plays a major role in determining attitude of women towards menopause. In a comparative analysis conducted by

Polite (1980) positive attitude is found with women with employment and better professional status. Based on this information, One Way ANOVA was done to find whether the attitude towards menopause varies significantly with employment status of menopausal women.

Table 5.9 One Way ANOVA on Attitude towards menopause and Employment Status

Employment Status	Attitude Towards Menopause			F Value	P value
	N	Mean	S.D		
Employed	265	12.0189	2.61617		
Unemployed	235	12.8128	3.25535	9.120	.003*
Total	**500**	**12.3920**	**2.95767**		

** Statistically significant at 0.05 level*

The data of the State Planning Board (2017) shows that female work force participation rates in Kerala is low compared with the educational attainment. The table shows that in the present context the employment status of the women varied significantly with attitude towards menopause. The unemployed women have more positive attitude towards menopause. The women's menopausal symptoms significantly affected the work performance and coping at work was found difficult during the menopausal transition. During the menopausal transition the problems associated with menopause have impact on the working women. The most reported symptoms are trouble in concentrating, tiredness, poor memory, depression, low confidence and sleep disturbance (Griffiths 2013). This may be the reason employed women are not having a positive attitude towards menopause.

According to Avis (1991) the attitude towards menopause varied based on the socio-economic status of the respondents. The women from lower socio-economic strata expressed more stress and negative attitude. The reason behind

this may be women from lower social strata are depressed by multiple factors. More positive attitude towards menopause is found among the middle class women from urban areas. Studies show that the attitude varied with the socio-economic status of women (Tripathi 1967). Hence an attempt is made to find whether the attitude towards menopause varies on the basis of their socio-economic status with the help of One Way ANOVA.

Table 5.10 One Way ANOVA on Attitude towards menopause and Socio-Economic Status

Attitude Towards Menopause				F Value	P value
Socio-Economic Status	**N**	**Mean**	**S.D**		
Upper lower class	160	12.7750	3.19384		
Lower middle class	136	12.4706	2.98872		
Upper middle class	151	12.1391	2.82380	2.129	.096
Upper class	53	11.7547	2.34443		
Total	**500**	**12.3920**	**2.95767**		

*** Statistically significant at 0.05 level*

In the present study, the attitude towards menopause does not have any significant difference based on the socio-economic status of the respondents. Wilbur (1995) also found no significant relationship between attitude and socio-economic status.

5.5 Summary

In this chapter an attempt is made to examine the role of life course factors in the gendered habitus of menopausal women an integrated approach combining bio-social factors in life course of women is used. The menopausal women in Kerala are aware about the basic concepts related with menopause and the main source of information is family and friends. Most of the women

are not aware about the medical aspects like hormone therapy and role of hormones related with menopause. Chi-square analysis of the association between reproductive factors such as fertility pattern, age at menarche and menopause and awareness revealed that they are significantly associated with awareness. Socio-cultural factors such as geographical factors, religion, education, employment status and social-economic status are significantly related to awareness about menopause. But rural-urban difference is not associated with the awareness of women about menopause.

The analysis of feelings towards menopause revealed that women in Kerala have positive feeling towards menopause. 62 percent of the menopausal women expressed positive feeling as relaxation, freedom and relief. In the reproductive factors age at menarche, fertility pattern and phases of menopause was significantly related with feelings. In the present study women who had less number of children associated positive feelings as relaxed, relief and freedom related with menopause. The menopausal and post-menopausal women expressed positive feelings related with menopause than the women from peri-menopausal phase. The socio-cultural factors as geographical factors, religion, education and employment status was significantly related to feelings towards menopause. Women from Kozhikode expressed more negative feelings than women from other regions. According to the findings Hindu women expressed freedom and relief related with menopause. The employed women expressed freedom and other positive feelings than unemployed. The socio-economic background and rural urban difference was not associated with the feelings.

Perception is the third aspect of the gendered habitus that is analysed in the study. The analysis of the perception revealed that most of the menopausal women in Kerala experience freedom and better status in society related with

menopause and also they are satisfied with the life. Flint's (1990) study in Indian society also found that menopause is not considered as a medical issue and women considered menopause as a positive event which gave them freedom and better status in society. But menopause is affecting the confidence level of half of the Kerala menopausal women even though their perception about beauty is not much influenced.

Based on Goffman's (1963) theory of social stigma an attempt is made in the study to find out the attitude of women towards menopause. Even though Kerala is a patriarchal dominant society, with the idea of social stigma related to the biological process of menstruation is associated with the purity and pollution is prevalent in the belief system, it is found that women in Kerala society have a positive attitude towards menopause, consider menopause as natural and less medical. The statistical analysis of One Way ANOVA revealed that there is a significant difference in attitude towards menopause and factors as fertility pattern, menopause status, geographical factors, religion, education and employment status. There is no significant variation in the attitude and socio-economic status of the respondents.

Thus the gendered habitus-awareness, feelings, perceptions and attitude of menopausal women of Kerala - is determined by life course factors. Women are aware about menopause and its cause and they have a positive feeling of relaxation, freedom and relief. Menopausal women perceive them self in a better status and this reflected in their positive attitude towards menopause.

Chapter - 6

Determinants of Quality of Life

Contents

According to Dennerstein (1996) menopause is a major transition in mid-life of women, scientifically menopause is the last menstruation but the transition period may last for around ten years. It is a time of major physical and psychological changes which affect the quality of life of menopausal women in later life (Mishra 2010). Owing to the increasing life expectancy, the women have to spend their one third of the life time in post-menopausal phase. During this phase women passes through major changes as children leaving home, physical illness of self and dependents, stress related with transitions. The socio-economic factors and cultural factors influence the menopausal transition and adjustment that women adopt (Dennerstein 1996). Hence, menopause is both biological and social construct which can affect the Quality of Life.

The concept of 'Quality of Life' is a subjective disposition that arises from the interaction with society. The societal influence on subjective well-being is the product of link between the agency and structure (Giddens 1984). The subjective satisfaction is the key determinant in understanding the Quality of Life. The cultural system determines the subjective experiences and perceptions which are shaped by the different forms of habitus.

According to Bourdieu (1989) the subjective dispositions are developed through the habitual objective conditions the individual experience in social field. The quality of life is a subjective disposition which is culturally determined. Studies show that nature and severity of menopausal symptoms vary according to culture (Greenblum 2010). Studies from different parts of the world show that the experiences of menopausal symptoms of women has significant impact on quality of life of menopausal women (Blumel 2000).The present study is an attempt to analyze the subjective experiences of menopausal women in Kerala based on the symptom severity and its impact on quality of life.

W H O identified six domains in life that impacts the quality of life, as physical health, psychological well-being, level of independence, social relationship, environment and spirituality. The life satisfaction of women related to specific domains determines general well-being (Pensri et al.2007). In the present study, the determinants of quality of life of the menopausal women can be perceived as the well-being of women related to her a) Physical wellbeing in relation to her energy, pain and discomforts related with menopause b) Psychological well-being related to her changes during menopause transition and well-being related to awareness, self-perception and feelings related to menopause c) Social well-being related to home life, work life and social life.

In the present study, one of the objectives is to identify the determinants of quality of life of menopausal women in Kerala. Studies show that menopause is a bio-psycho-social phenomena which can influence the quality of life of menopausal women (Elder 1998). Based on this assumption basic three domains physical wellbeing, psychological well-being and social well-being as given by

W H O is taken and life course factors are linked to analyze the quality of life of menopausal women. Biological changes associated with menopause are universal but subjective experiences related with menopausal symptoms are explained based on language difference, culturally determined expectations about menopause transition and associated changes in social roles (Adler SR 2000).

The subjective satisfaction of an individual is socially determined and is influenced by the position and power that an individual has in social structure. So in the present study an attempt is made to find out the physical, psychological and social well-being of menopausal women in Kerala.

6.1 Physical and Psychological Wellbeing of Menopausal Women

The physical and psychological well-being of menopausal women is determined by the symptoms severity experienced by the menopausal women. The menopausal women undergo various physiological and psychological changes that affect the general well-being of women during mid-life transition. Hot flushes or flashes are common symptom which is often reported by women linked with cold sweats and sleep disturbances during the night (McKinlay 1992).Related with these symptoms women also experience palpitations. These symptoms related to hot flushes are termed as vasomotor symptoms. Dennerstein et al. (1993) categorized these psychogenic pathology related with menopause as 'dysphoria'. Due to estrogen deficiency osteoporosis and issues related as joint pain and muscular discomforts are associated with menopause. Relating to these physiological changes women experience psychological issues as depression, anxiety, mood disorders and irritability (Freeman 2006). Studies show that quality of sleep during the menopausal transition is associated with fatigue, lack of motivation, lack of concentration, feelings of tension (Paulsen

1993). Symptom severity associated with menopause is found to have negative impact on the quality of life of menopausal women.

Studies show that biological changes related with menopause is universal but subjective experiences varies based on culturally shaped expectation and normative pattern and concerns related with changes in social roles of women (Obermeyer 2007). These variations are resulting in changes in symptom reporting of women. Boulet (1994) suggest that differences in the symptom reporting among women may be due to lack of education or embarrassment to discuss. The research conducted in Indonesia (Boulet 1994), Japan (Lock 1998), Singapore, China (Boulet 1994) shows that hot flushes and other symptoms are less reported compared to North American and European women. Boulet and companions found that symptom reporting as a 'form of communication' which is part of cultural system in which they are living. Women from western societies tend to view symptoms as the part of biological changes which needs medical attention and women from non-western societies view menopause as a natural process which is part of life changes and sometimes this makes symptom severity during menopause non-specific or unnoticed. Studies from Indian society shows that menopause is not considered as a medical issue and women considered menopause as a positive event which gave them freedom and better status in society (Flint 1990). Women in Mayan culture were not familiar to the word 'hot flushes' which is considered as a universal biological phenomena related with menopause (Beyene 1989). There are specific terminologies in every culture which is used to denote to the concept menopause and symptoms. In Kerala, studies show that there is a trend to under report symptoms due to the unawareness or inappropriate concealment of information by the women (Borker 2014).Thus the cultural aspects play a great role in determining the symptom reporting.

In the present study an attempt is made to identify the physical and psychological factors affecting the Quality of life of menopausal women in Kerala. It is noted that multiple factors are determining the Quality of Life of menopausal women. In this study, the symptom severity affecting the Quality of Life of menopausal women is assessed using Menopause Rating Scale (MRS). It is a health-related quality of life scale (HRQoL) which used to measure the severity of menopausal-symptoms and their impact on the health related Quality of Life (Heinemann et al. 2004). The scale also follows the criteria set by W.H.O for the assessment of Quality of Life. Hence it is considered as the best tool for measuring Quality of Life of menopausal women in Kerala. It is a Likert framework consisting of three dimensions of issues which are again classified to 11 items that measure the psychological, somato-vegetative, and urogenital sub-scale.

In the present study to explore the most severe menopausal symptoms determining the Quality of Life of menopausal women factor analysis was conducted. Factor analysis is used to summarize data so that relationship between the factors can be better understood (Yong 2013). To understand the symptom severity of women experienced during menopause Exploratory Factor Analysis (EFA) is used to explore the data set and to reduce data to a smaller set of summary variables. Exploratory Factor Analysis is undertaken using Principle Component Analysis method to compute composite scores for the underlying factors for each item under the constructs. In the present study principal component analysis was considered as an appropriate way to find out the underlying factors that determined physical and psychological quality of life. The results and the findings are narrated below. In order to find the sampling adequacy Kaiser-Meyer-Olkin test was carried out.

Table 6.1 Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.871
Bartlett's Test of Sphericity	Approx. Chi-Square	2260.570
	df	55
	Sig.	.000

Kaiser-Meyer-Olkin Measure of Sampling Adequacy tests is a minimum standard which should be passed before a factor analysis using principal component analysis should be conducted. Kaiser-Meyer-Olkin Measure of Sampling Adequacy measure varies between 0 and 1, and values closer to 1 are better. Here in this case the value is **.871** which is good and hence the standard is met. Bartlett's Test of Sphericity (significant at $p<0.05$) is used to confirm that data set has a patterned relationship. In the study, Bartlett's Test of Sphericity was significant with Chi square value 2260.570, $p < 0.05$.

It is observed that 11 items in the Menopause Rating Scale show sufficiently large values suggesting that the statements are equally important for the contemplated problem (Communalities with values more than 0.5 may be taken as important as a thumb rule when the sample size is sufficiently large). The communalities are all above 0.5 which confirms that each item shares common variance with at least one other item. The values represents the sevirity of menopasual issues of eleven items in the Menopasue Rating Scale. The statements with high extraction values greater than 0.5 were retained in the analysis based on the communalities. It is seen that 56.17 % variation in the responses on 11 variables can be reduced to two factors which are having Eigen values greater than one (Appendix 3.1). The normality of the data is assessed using Q-Q plot and box plot (Appendix 2.1). Since the evidence of normality is

found, parametric methods of data analysis is carried out. Table below shows the principal component analysis of symptom severity.

Table 6.2 Principal Component Analysis showing symptom severity

Communalities			
		Initial	Extraction
1.	Hot Flushes (Sweating, episodes of sweating)	1.000	.584
2.	Heart Discomfort (unusual awareness of heart beat, heart skipping etc.)	1.000	.641
3.	Sleep problems(difficulty in falling asleep, sleeping through, waking up early)	1.000	.670
4.	Depressive Mood (feeling down, sad, verge of tears, lack of drive, mood swings)	1.000	.614
5.	Irritability (feeling nervous, inner tension, feeling aggressive)	1.000	.524
6.	Anxiety (inner restlessness, feeling panicky, tension)	1.000	.560
7.	Physical and Mental Exhaustion (Forgetfulness, Loss of Memory)	1.000	.536
8.	Sexual problems (change in sexual desire, loss of interest)	1.000	.519
9.	Vaginal Issues	1.000	.695
10.	Bladder Problems (difficulty in urinating, increased need to urinate, bladder incontinence)	1.000	.666
11.	Joint and muscular discomfort (Osteoporosis, pain in the joints, rheumatoid complaints)	1.000	.166

Table 6.3 Rotated Component Matrix indicating Symptom severity of Menopausal Women

Rotated Component Matrix		
	Components	
	Factor 1 Vasomotor symptoms	Factor 2 Urogenital symptoms
Sleep problems (difficulty in falling asleep, sleeping through, waking up early)	.783	
Heart Discomfort (unusual awareness of heart beat, heart skipping etc.)	.780	
Hot Flushes (Sweating, episodes of sweating)	.760	
Depressive Mood (feeling down, sad, verge of tears, lack of drive, mood swings)	.738	
Irritability (feeling nervous, inner tension, feeling aggressive)		
Anxiety (inner restlessness, feeling panicky, tension)		
Vaginal Issues		.802
Bladder Problems (difficulty in urinating, increased need to urinate, bladder incontinence		.782
Sexual problems (change in sexual desire, loss of interest)		.645
Physical and Mental Exhaustion (Forgetfulness, Loss of Memory)		.642
Joint and muscular discomfort (Osteoporosis, pain in the joints, rheumatoid complaints)		

From the factor analysis of symptoms using principal components and varimax rotation two factors showed prominence. The factors that got extracted from the factor analysis were named as F_1 -vasomotor symptoms and F_2-urogenital symptoms. Items from the psychological subscale showed less prominence and was not identified as a prominent factor in the analysis.

6.1.1 Vasomotor Symptoms

In the study, the first factor which is influencing the Quality of Life of menopausal women is vasomotor symptoms as hot flushes, heart discomfort, and sleep problems. Studies show that vasomotor symptoms increased during the menopausal transition and highest level is observed in women with natural menopausal (Dennerstein et al. 1993). In Kerala, Bindhu (2014) and associates found prevalence of vasomotor symptoms as hot flushes, fatigue, night sweats and sleep disturbance among women with natural menopause, supporting this study in the present study also women reported issues as hot flushes, sleep disturbances and heart discomforts related with menopause.

6.1.2 Urogenital Issues

The second prominent symptom that is influencing the Quality of Life of menopausal women are urogenital issues, which include issues related with vaginal atrophy and urinary complaints as urinary incontinence, difficulty in urinating, increased need to urinate and bladder incontinence. According to Sajitha (2017) in Indian context, the one of the most reported symptoms were urogenital symptoms, fatigue, weakness, body aches, and pains, hot flushes, mood swings and sexual dysfunction. The findings of the present study show the prominence of these factors.

Based on the findings the vasomotor symptoms and urogenital symptoms are considered as the major two factors that are affecting the Quality of Life of menopausal women in Kerala. The table below shows the descriptive statistics which shows the prominence of menopause symptom severity.

Table 6.4 Descriptive Statistics of Symptom severity influencing the Quality of Life

Descriptive Statistics	Vasomotor Symptoms	Urogenital Symptoms
Mean	4.448	5.403
Std. Deviation	3.290	3.287
Median	4.00	5.00
Minimum	1.00	1.00
Maximum	13.00	14.00
Range	12.00	13.00

The mean value of Urogenital Symptoms is 5.4031 with standard deviation 3.287 indicates that urogenital issues are the most severe symptom affecting the Quality of Life. The maximum scores reported for urogenital issues are 14.00 and for vasomotor symptoms maximum score is 13.00. This shows that even though the mean score reported is less, some women are experiencing severe menopausal symptoms. Studies show that the symptom severity experienced by the women is influencing the Quality of Life of menopausal women.

6.1.3 Life Course factors and Quality of Life Menopausal women

The symptom severity experienced by the menopausal women is universal but studies shows cultural variations in the symptom severity experienced by menopausal women. The variations in the experience of menopausal symptoms are associated with culturally shaped expectations and language differences of menopausal women which are generally linked with the perspective of society about ageing process and role expectations Obermeyer (2007); Adler et al. (2000). Dasgupta et al. (2016) found that reproductive and socio cultural factors can be related to the difference of symptom severity across cultures. Studies show close association between factors as menstrual, reproductive history, socio-economic and cultural factors (Sajitha 2017). Hence

in the present study an attempt is made to find out whether the life course factors as reproductive and socio-cultural variables are related to the symptom severity of menopausal women. To prove the hypothesis that there is significant difference between life course factors and symptom severity, One way ANOVA is carried out.

In a study conducted in Shimla by Sharma et al found an association between reproductive factors and menopausal experience of women. Studies show that reproductive factors as high parity and low parity is associated with menopausal symptoms (Laakkonen 2017). So to find out the whether the symptom severity of menopausal women in Kerala varies on the basis of fertility pattern one way ANOVA is done.

Table No.6.5 One Way ANOVA on Fertility and Symptom Severity

Urogenital Issues					
Fertility	**N**	**Mean**	**S.D**	**F Value**	**P value**
1	66	2.6667	2.63312	5.571	.000
2	272	3.6949	2.97199		
3	114	4.2018	3.64383		
4	12	5.2500	2.17945		
No children	36	5.3333	3.34664		
Total	500	3.8300	3.16688		
Vasomotor Symptom					
Fertility	**N**	**Mean**	**S.D**	**F Value**	**P value**
1	66	5.0758	2.86255	1.046	.383
2	272	5.8456	2.75005		
3	114	5.5877	3.63077		
4	12	6.2500	2.00567		
No children	36	5.7500	2.44219		
Total	**500**	**5.6880**	**2.95637**		

The above ANOVA result shows that experience of urogenital symptoms of menopausal women varies significantly based on fertility pattern of women. From the mean scores it is evident that the women with more number of children experience severity in urogenital symptoms. The data reveals that there was no variation in the vasomotor symptom experiences based on the fertility pattern of menopausal women.

Studies show that the symptom severity of the menopausal women is influenced by the menopause status. Yim (2015) found that as women progressed towards post-menopausal phase they experienced more symptoms related in different domains. During peri menopausal phase physical symptoms was found highest and sexual issues were highest in post- menopausal phase. Hence an attempt is made to see whether the symptom severity of menopausal women vary with menopause status.

Table No.6.6 One Way ANOVA on Menopause Status and Symptom Severity

Urogenital symptoms					
Menopause Status	**N**	**Mean**	**S.D**	**F Value**	**P value**
Peri Menopausal(Irregular)	99	4.4545	3.28656	5.196	P .006
Menopausal(Since a Year)	206	4.0340	3.26157		
Post-Menopausal	195	3.2974	2.92760		
Total	**500**	**3.8300**	**3.16688**		
Vasomotor Symptoms					
Menopause Status	**N**	**Mean**	**S.D**	**F Value**	**P value**
Peri Menopausal(Irregular)	99	5.2424	3.30766	1.455	P .234
Menopausal(Since a Year)	206	5.7524	2.57414		
Post-Menopausal	195	5.8462	3.13394		
Total	**500**	**5.6880**	**2.95637**		

The ANOVA scores of the present analysis indicate the difference is not significant ie, there is no significant variation on symptom severity based on menopause status. But the mean scores indicate that peri menopausal women and menopausal women are experiencing more urogenital symptoms than postmenopausal women.

Studies show that socio cultural factors have impact on the symptom severity of menopausal women. The symptom severity experienced by the menopausal women is universal. In this present context, the impact of socio-demographic status on menopause symptom severity is assessed using One way ANOVA is done to test whether the mean scores of menopausal symptom severity vary significantly based on socio-demographic variables as place of residence, religion, educational status, income and occupational status.

Kerala is a state with cultural diversity and each geographical region has unique cultural features. From the different geographical zones districts that have rural-urban features are taken for the study. One way ANNOVA is done to find out whether urogenital symptoms vary with geographical region. So an attempt is made to find out whether urogenital and vasomotor symptoms vary with the geographical region.

Table No.6.7 One Way ANOVA on Geographical Region and Symptom Severity

Urogenital symptoms					
Geographical Region	**N**	**Mean**	**S.D**	**F Value**	**P value**
Ernakulam	168	4.3869	2.94851	17.601	**P < 0.05**
Thiruvananthapuram	156	2.6218	2.26714		
Kozhikode	176	4.3693	3.72251		
Total	500	3.8300	3.16688		

Vasomotor symptoms					
Geographical Region	**N**	**Mean**	**S.D**	**F Value**	**P value**
Ernakulam	168	6.2143	2.68092	10.259	**P < 0.05**
Thiruvananthapuram	156	6.0128	2.55516		
Kozhikode	176	4.8977	3.36041		
Total	**500**	**5.6880**	**2.95637**		

The mean scores show that women from Thiruvananthapuram have lower urogenital issues compared with other two districts. The mean value of vasomotor symptoms (hot flushes sleep disturbances and heart discomfort) shows that women in Ernakulam and Thiruvananthapuram reported severity than women in Kozhikode. The result indicates that there urogenital symptom severity vary with the geographical region of women.

Durkheim (1912) in his book 'Elementary forms of the Religious life' notes the importance of shared beliefs and practices. In the context of menopause there are various restrictions and taboos associated with religion which women in transition are supposed to follow. Norms and prejudice prevalent in cultural beliefs related with the idea of purity and pollution of female body is intrinsically linked and deep rooted. Here an attempt is made to find out the variation in symptom severity based on religion of the respondents, with the help of One way ANOVA.

Table No.6.8 One Way ANOVA on Religion and Symptom Severity

Urogenital symptoms					
Religion	**N**	**Mean**	**S.D**	**F Value**	**P value**
Hindu	222	3.5135	2.97003	6.57	**P < 0.05**
Muslim	156	4.5833	3.70694		
Christian	122	3.4426	2.56502		
Total	500	3.8300	3.16688		

Vasomotor symptoms					
Religion	**N**	**Mean**	**S.D**	**F Value**	**P value**
Hindu	222	4.8378	3.44456	3.165	**P < 0.05**
Muslim	156	3.9679	3.89113		
Christian	122	4.1721	3.09009		
Total	**500**	**4.4040**	**3.52557**		

Source: Primary Data

The results show that symptom severity of menopausal women varies on the basis of religion. The women from Muslim community reported highest urogenital issues. But while assessing the mean scores of vasomotor symptoms Muslim women reports lowest symptom severity. Vasomotor symptoms as hot flushes and associated symptoms are found highest among Hindu women. The statistics shows that there is significant difference on the basis of religion and symptom severity experienced by women.

The wide spread formal education among women in Kerala is a crucial factor in the impressive demographic status in Kerala. High level literacy rate and educational performance of women in Kerala is determines women's reproductive health status, age at fertility and life –expectancy. So here an attempt is made to find out whether women from different educational background have variation in the symptom severity.

Table No.6.9 One Way ANOVA on Education and Symptom Severity

Urogenital symptoms					
Education	**N**	**Mean**	**S.D**	**F Value**	**P value**
Below SSLC	117	4.9915	3.65894	6.413	**P < 0.05**
SSLC	176	3.9034	3.13629		
Plus two	70	3.6714	2.83212		
Graduate	95	2.8737	2.49784		
Post Graduate	42	2.7585	2.67030		
Total	**500**	**3.8300**	**3.16688**		

Vasomotor symptoms					
Education	**N**	**Mean**	**S.D**	**F Value**	**P value**
Below SSLC	117	5.3590	4.08627	3.210	**P < 0.05**
SSLC	176	4.2216	3.60979		
Plus two	70	4.7143	3.20391		
Graduate	95	3.6316	2.96810		
Post Graduate	42	3.7561	2.51774		
Total	**500**	**4.4040**	**3.52557**		

The data shows that menopause symptom severity significantly varies with different educational background (P <0.05). While evaluating the mean score of urogenital symptoms, the women with lower education are experiencing more menopausal symptoms than women with higher education. The same is seen with regard to vasomotor symptoms, women with lower education experience higher symptom severity than the women with higher education.

According to Damodaran P (2000) prevalence symptoms related to menopause varies across ethnic groups and between rural and urban women Kerala is a state with less rural-urban difference and in most of the places rural areas are being urbanized. Most of the rural areas have sub-urban features and villages in Kerala are going through the process of rural-urban continuum. Even then an attempt is made to find whether the rural-urban difference has any influence on the menopausal health of Kerala women with the help of T Test. To test the significant difference between the mean of two variables with related features T Test is used. The results are given below.

Table No.6.10 T test analysis of Symptom Severity and Rural-Urban Difference

Symptom	Rural-Urban Difference	N	Mean	Std. Deviation	T-value	P-Value
Urogenital Symptoms	Rural	214	4.1355	3.22335	1.871	**P>0.05**
	Urban	286	3.6014	3.11001		
Vasomotor Symptoms	Rural	214	5.5234	3.00499	-1.077	**P>0.05**
	Urban	286	5.8112	2.91867		

The above table shows that symptom severity score of urogenital issues varies with the place of residence and indicates that rural women have more urogenital issues than urban women. The independent sample T-test revealed that susceptibility to urogenital symptoms is higher for rural women in the sample than urban women and vasomotor symptom was found higher among urban women than rural. But rural-urban difference is not found significant since the P value is greater than 0.05.

From the One way ANOVA analysis results it is evident that there is significant difference between life course factors of symptom severity of the menopausal women. Hence the hypothesis which states that 'life course factors are associated with quality of life of menopausal women with regard to their symptom severity' is proved.

6.2 Social Welling of Menopausal Women

The health and well-being of menopausal women are dependent on social circumstances and their social roles at home, work place and society (Greene 1980). Studies show strong relationship between social support and health and also it exerts lifelong influence on the general well-being of individual (Feeney 1990). According to Maunder (2001) social support reduces

isolation and negative beliefs. The network of social relationship provides psychological and emotional support to the women during the menopausal transition. Lack of support or lack of coping will lead to adjustment issues at different arenas in social life.

The social domain of menopausal women were analyzed using 'Menopausal quality of life questionnaire' developed by Jacobs PA, Hyland ME and Ley A (2000). The scale is for measuring the impact of the menopause on quality of life which consisted of 48 questions, from that the statements which measures the domains of social interaction was adopted. The questionnaire consists of positive and negative statements which measures social life quality of life related with family life, work life and social life. Exploratory Factor Analysis was undertaken using Principle Component Analysis method to compute scores for the underlying factors for each item under the constructs. The results and the findings are narrated below.

Table No.6.11 Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.795
Bartlett's Test of Sphericity	Approx. Chi-Square	2494.257
	df	171
	Sig.	.000

In the present analysis, Kaiser-Meyer-Olkin Measure of Sampling Adequacy measure varies between 0 and 1, and values closer to 1 are better. Here in this case the value is .**795** which is adequate for factor analysis. Bartlett's Test was significant with Chi square value 2494.25, $p < 0.05$ which confirmed patterned relationship.

Table No.6.12 Principal Component Analysis showing Social life domain

Communalities		
	Initial	**Extraction**
I get very irritable with people at home	1.000	.602
I lose my temper over small things	1.000	.704
I scream and shout at people at home	1.000	.674
Because of my symptoms, I sometimes have to get out of places, e.g. supermarket, bus	1.000	.337
I am finding it increasingly difficult to do my work	1.000	.418
I'm afraid to tell anyone at work how I feel	1.000	.479
At times I want to lock myself away at work	1.000	.523
I worry about missing work because of my symptoms	1.000	.531
I worry that I might snap at friends or at people at work	1.000	.464
I am more isolated than I would like	1.000	.678
Because of my symptoms, I miss out on leisure activities	1.000	.703
Things I used to enjoy have become a bit of a chore	1.000	.619
I find housework easy	1.000	.426
I have a good appetite	1.000	.239
My symptoms do not interfere with my work	1.000	.476
I can work hard if I want to	1.000	.439
I enjoy talking as much as I did early.	1.000	.479
I can concentrate on hobbies for as long as I used to	1.000	.591
I feel enthusiastic always	1.000	.503

Considering the extraction values in the communalities, statements with low extraction value of less than 0.5 were excluded from the analysis. Table explains that 4 factors were accountable for 52.03 % variation in the responses. The Eigen values of these 4 factors were greater than 1 (Appendix 3.2). It can also be claimed that, there are not much of outliers, since there is not much difference between mean and 5% trimmed mean. The normality of the data is

also checked using Q-Q plot and box plot (Appendix 2.2). Since the evidence of normality is found, parametric methods of data analysis is carried out.

Table 6.13 Rotated Component Matrix indicating factors affecting social life

	Components			
	Factor1: Social Involvement	**Factor 2:** Home life issues	**Factor 3:** Social isolation	**Factor 4:** Work Life Issues
I can concentrate on hobbies for as long as I used to	.762			
I feel enthusiastic with others	.687			
I enjoy talking as much as I did early.	.656			
My symptoms do not interfere with my work	.646			
I find housework easy	.644			
I can work hard if I want to	.610			
I lose my temper over small things at home		.821		
I scream and shout at people at home		.804		
I get very irritable with people at home		.753		
I worry that I might snap at friends or at people at work				
I have a good appetite				
I Miss leisure, because of symptoms			.824	
Things I used to enjoy have become a bit of a chore			.767	
I am more isolated than I would like			.760	
I worry about missing work because of my symptoms				.725
At times I want to lock myself away at work				.698
I'm afraid to tell anyone at work how I feel				.593
I am finding it increasingly difficult to do my work				.512
Because of my symptoms, I sometimes have to get out of places				

In the above table, the variables having high loadings are indicated. These variables are collected and organized based on their loadings. Four factors got extracted from the factor analysis, based on the commonalties found social life domain, appropriate names were given. The variables identified are F_1-social involvement, F_2-home life issues, F_3-social isolation and F_4- work life issues

6.2.1 Social Involvement

First factor indicated that women in Kerala are socially involved after menopause. The social life of women changes after menopause as the restrictions associated with menstruation is changed. Cultural freedom and better status of menopausal women promotes social involvement. The social involvement of women can increase after menopasue as they were free from mensturation which is considered as a stigma or taboo. Mensturation is stigmatized in Indian culture as the result of traditional idea of 'impurity' and 'pollution'(Bhartiya 2013). Studies in Indian context show that women experienced freedom and better involvement in society. The women from Rajput community at Rajasthan they were restricted from social interaction with men before menopause and interacted with men in public more freely after menopause (Flint 1975). In Kerala, women in all religion have some kind of restrictions related with mensturation which prohibits to take part in social activities and religious services (Bhartiya 2013). The restrictions associated are finally removed with menopause which enhances social participation involvement among women. The social involvement is closely related with the concept of social capital. According to Bourdieu (1983: 23) social capital is the social networks and relations that are legitimized by institutions as social groups or class membership.

According to Levasseur et al. (2010) social participation or involvement of women participation entails social contact, receiving resources from society as well as contributing resources to society. The biological process of menstruation and cultural taboos related with it was a hindrance for assessing social capital but after menopause social involvement of women is increasing after menopasue.

6.2.2 Home life Issues

In the present study most of the women reported increased anger and irritation at home during menopause. The women experienced emotional instability and affective disorders during menopause. Multiple demands at home, lack of social support at home and conflict over the child rearing process and household chores are identified as common stressors(Stephens 1999).According to Afridi (2017) menopause can be a stressful transition due the beliefs related diminishing role or role shifts in family life. Social support from family is important to share their subjective experience related with menopasue (Marlatt 2018). In Kerala, the shame and stigma rooted in the cultural system prohibits the women to discuss the matters related with reproductive process (Borker 2014). Family support interms of affective suppot is found associated with less symptom severity among menopasual women (Sajitha 2017).Thus in family effective communication is necessary to maintain the warmth of relations. Women experienced irritability and anger during the menopause and this is often reflected in the social interaction at home. Friedemann (1995) identified the quality of life of menopausal women implicated in the ability of coping adopted by the women during menopause. Supportive relationship at home can ease emotional distress and affective

disorders. But the cultural restrictions to discuss about such matters become a barrier in effective communication and understanding.

6.2.3 Social Isolation

Women feels inferior or becomes concious about the biological changes during the menopause transition and this results in social isolation and feelings of depreveation among women (Hashemipoor 2019). The menopasual changes as hot flushes, sweating ,palpitations and other psychological distress symptoms as anxiety, depression and mood-fluctuations hinders the social interaction of women. The women experiencing urinary incontinence and urogenital issues becomes self concious and disengages from social events. Because of these issues women expressed retrogressive feelings that denoted a change from better to a worse phase, which made them isolated or deprived.

6.2.4 Work-Life Issues

The second factor is the work life issues experienced by the working women in Kerala. For working women the symptoms as hot flushes and palpitations demotivates from involving in official meetings and intimate work interactions. Women may feel embarrassed to express the troubles caused by the physiological changes. Morgan & Patricia (2010) notes that The women mostly 'suffer in silence' with few practical adjustments(CIPD 2019). Poor memory and lack of concentration can undermine the confidence of working women. Physiological symptoms results in work-life isolation, irritability and poor co-ordination in the menopausal working women (Braun 2013). Studies show that women feel stressed in managing hot flushes at work place (Griffiths 2013). In the present most of the women experienced vasomotor symptoms as hot flushes, heart palpitations and sleep disorders. These symptoms can hinder

the relations at work-place. The women in Kerala manages dual role combing caring roles and work roles which can be stressful during menopause.

Table 6.14 Descriptive Statistics of Social factors influencing Quality of Life

Descriptive- Social Life Evaluation				
	Social Involvement	Home Life Issues	Social isolation	Work-Life Issues
Mean	20.6880	9.48	8.4340	13.5520
Variance	33.766	15.100	13.092	15.679
Std. Deviation	5.81087	3.886	3.61826	3.95963
Minimum	6.00	3.00	3.00	4.00
Maximum	36.00	18.00	18.00	23.00
Range	30.00	15.00	15.00	19.00

The mean value of social involvement is 20.688 with standard deviation 5.810 shows that menopausal women are sufficient opportunities for social interaction. This indicates that menopausal women have better opportunities the mean scores of 13.55 indicate that working women are facing issues at work place. The women also faced issues affective disorders and sudden outburst of emotions at home and women also experienced retrogressive feelings in life related with menopause. The factors as home-life issues, retrogressive life changes and work-life issues are impacting Quality of Life of menopausal women.

6.3 Summary

Menopause is bio-social phenomena and experience of menopause varied on the basis of cultural context. In this chapter an attempt was made to find out the determinants of Quality of Life of menopausal women in Kerala. The Quality of Life is a subjective disposition which is determined by the

cultural factors. The menopausal women undergo various physiological and psychological changes that affect the general well-being of women during mid-life transition. Based on this symptom severity influencing the Quality of Life of menopausal women was evaluated with the help of factor analysis. For that Menopause Rating Scale was used to find out physical and psychological symptom severity affecting menopausal women. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was conducted and the data was found suitable for factor analysis. From the factor analysis the two dominant factors which were found to influence the Quality of Life of menopausal women are urogenital issues and vasomotor issues. Urogenital issues include issues as vaginal atrophy and urinary complaints as urinary incontinence, difficulty in urinating, increased need to urinate and bladder incontinence. The second factor is vasomotor symptoms as hot flushes, heart discomfort, and sleep problems.

To understand the relationship between life course factors and symptom severity of menopausal women One Way ANOVA was conducted and the result shows that symptom severity of menopausal women varies according to the fertility pattern, geographical zone, religion and education. There was no variation in the symptom severity in the basis of menopause symptom severity and rural-urban difference.

To understand the social life of menopausal women questions which measured social domain of women from 'Menopausal quality of life questionnaire' was adopted. Principle Component Analysis method to compute scores for the underlying factors and Kaiser-Meyer-Olkin Measure of Sampling Adequacy proved that data is suitable for factor analysis. From the factor analysis four factors were found dominant in social life of menopausal women. The first factor derived through principal component analysis indicates that

women in Kerala are socially involved after menopause. It may be because the social life of women changes after menopause as the restrictions associated with menstruation is changed. The second factor indicates that women experience issues in relations at home. The women experienced adjustment issues related with home life. Women experienced irritability and anger during the menopause and this is often reflected in the social interaction at home. The third factor which was hindrance in social life was work life issues of menopausal women. For working women the symptoms as hot flushes and palpitations demotivates from involving in official meetings and intimate work interactions. The fourth factor is the social isolation and depriviation that women relate with menoapsue. The menopasual changes as hot flushes, sweating, palpitations and other psychological distress symptoms as anxiety, depression and mood-fluctuations hinders the social interaction of women. The symptoms as hot flushes, sweating experiences, heavy bleeding and other physical changes associated with menopause restricts the women from cultural integration.

Chapter - 7
Adjustment Strategies of Menopausal Women

Contents

According to 'The Dictionary of Sociology' adjustment is the process where an individual or a social unit enters into a healthy relationship with his/her environment, physical or social (Mitchell 1968:3). Adjustment is also viewed as the coping strategies that individual make to internal and external factors that appears to be stressful. The coping strategies are situation specific strategies which are used to manage the stressor. Coping with menopause symptoms depend on how women appraise them in their life (Rubinstein 2013). Culture determines the subjective experiences of menopausal women and how women are responding to the changes. Studies show that in cultures where menopause is medicalized it is a 'deficiency disease or reproductive failure'(Winterich 1999). But in some culture menopause is a 'normal' life change or natural process, which implies a positive outlook towards menopause. In societies where the idea of 'impurity or stigma' is attached, the menopausal women are found to have increased status (Flint 1990). Among Asian women post-menopausal women are free from gender roles and gendered restrictions (Beyene 1989), women in these societies report lower stress. Thus, culture determines how women respond to the menopause changes.

In a study conducted by Borker (2014) in rural Kerala it was noted that none of the women have heard about Hormone Replacement Therapy and they did not even report hot flushes and night sweats as post-menopausal symptom. Anjaly (2014) reported that 42 percent of the peri- menopausal women in Ernakulam are adopting remedial measures for self-help care during menopausal changes. Studies show that women in Kerala have high level of education, lower levels of fertility and high life expectancy. Hence one of the objectives is to find out the adjustment strategies adopted by menopausal women in Kerala to cope with menopause.

7.1 Adjustment Strategies adopted by Menopausal women

Emily Martin (1988:40) states that the embodied experience of women related to menopause is influenced by the medical and cultural metaphors of the dominant culture of a society. Martin states that though menopause is a natural process, the cultural pattern shaped by the capitalist system, where western medical norms and system of male dominance in society exist, women's body becomes something that she needs 'to cope with' or 'to be controlled'. In the present context Martin's theory is applied to find out how the women in Kerala cope with menopause.

Lazarus and Folkman's (1984) model of coping strategies is adopted to identify the coping strategies of menopausal women in Kerala,. They have categorized coping efforts into two categories: Problem focused coping and Emotion focused coping. Problem focused coping is instrumental action which is focused to address the problem directly and emotion focused is used to regulate the emotions related with the stress factors. The coping efforts that people adopt affect physical, psychological, and social well-being. Based on the Lazarus and Folkman model of coping strategies the menopausal women can

adopt problem focused coping as use of bio-medicine or natural remedies and life style changes as physical exercise, yoga and so on. The emotional focused coping strategies can be categorized as talking to friends and relatives, praying or meditation, social activities, redirecting negative emotions to positive or adopting distraction or avoidance (Rubinstein 2013). Based on this, 8 statements about life style changes as physical exercise, dietary changes, yoga and medical help seeking which is based on problem focused coping and talking to friends and relatives, praying or meditation and social activities as emotion focused coping strategies is included in the questionnaire. To identify underlying factors, related with the coping strategies adopted by menopausal women factor analysis was conducted. The coefficient Cronbach's Alpha is .**798** for the measure of coping strategies shows good reliability. In order to find the sampling adequacy Kaiser-Meyer-Olkin test is carried out.

Table 7.1 Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.828
Bartlett's Test of Sphericity	Approx. Chi-Square	1253.034
	df	28
	Sig.	.000

Kaiser-Meyer-Olkin Measure of Sampling Adequacy test value in this case is .828 which is very high and hence the required standard is met for factor analysis. Bartlett's Test of Sphericity was significant with Chi square value 1253.034, $p < 0.05$. Based on this factor analysis was carried out.

Table 7.2 Principal Component Analysis showing adjustment strategies adopted by menopausal women

Communalities			
		Initial	Extraction
1.	Physical activities*(Exercise, Walking ,Yoga etc)*	1.000	.572
2.	Dietary changes *(Avoiding certain food or Adding certain food)*	1.000	.688
3.	Medical help*(Visiting doctor, Vitamins, HRT etc)*	1.000	.636
4.	Taking with friends and relatives	1.000	.414
5.	Social activities*(Gatherings, Hangouts etc)*	1.000	.751
6.	Leisure activities*(Reading, Gardening etc)*	1.000	.763
7.	Religious activities *(Meditation, Prayer etc)*	1.000	.710
8.	Other activities	1.000	.004

Considering the extraction value in communalities, statements with an extraction value of less than 0.5 were excluded from further analysis. In the present analysis, factors were retained based on the communalities as they have high extraction values which is greater than 0.5. The table (Appendix 3.3) shows that two factors were accountable for 56.71 % variation in the responses on 8 variables. The normality of the data is assessed using Q-Q plot and box plot (Appendix 2.3). Since the evidence of normality is found, parametric methods of data analysis is carried out.

Table 7.3 Rotated Component Matrix indicating Adjustment strategies adopted by Menopausal Women

Rotated Component Matrix		
	Components	
	Factor 1 Socio-Religious	Factor 2 Bio-Medical
Social Activities (Gatherings, Hangouts etc.)	.844	
Religious Activities (Meditation, Prayer etc.)	.836	
Leisure Activities (Reading, Gardening etc.)	.836	
Taking with friends	.539	
Medical Help (Visiting doctor, Vitamins, HRT etc.)		.798
Dietary Changes (Avoiding certain food or Adding certain food)		.735
Physical activities (Exercise, Walking, Yoga etc.)		.698
Other Activities		

In the above table, the variables having high loadings are indicated. The factor analysis of coping strategies indicated that two factors showed prominence. Based on the commonalities found in each group, appropriate names were given to indicate the coping strategies adopted by menopausal women. In the coping strategies adopted by women the first factor derived through factor analysis highlighted socio-religious coping strategies and second factor indicated bio-medical coping methods.

7.1.1 Socio-Religious Strategies

Bourdieu (1986) denotes the term social capital to denote the social support system of an individual. Bourdieu (1986:51) defines social capital as durable network of institutionalized relationships or membership in a social group or organization which provides backing of a community. The activities

of women as participation in social activities, volunteering, and social services enhances the social capital of women. Social support mechanisms enhance social opportunities to interact and activities as social services provide broader network of relations (Raju 2016). In the present study, most of the menopausal women are adopting socio religious coping strategies to adapt to physical and social issues. Studies show that coping strategies like indulging in social activities as volunteers and community services are beneficial for mental health of women (Takeda 2015). The social support system of women enables them to remain integrated within community.

Women after menopause are free from religious restrictions and prohibitions. This increases religious involvement in women. Menopause liberates women from the cultural and religious restrictions that prohibit social interaction and involvement. Religious coping is an important strategy that could be used to cope with stressful situations (Ano and Vasconcelles 2005). Religious coping strategies as prayer and meditation can enhance a sense of control over stressful events (Dull 1995). Menopause is a stressful event which includes various bio-psycho-social changes. Thus, in the case of menopausal women participating in prayer, readings from holy books, meditation and participation in religious services are providing a sense of purpose and meaning for women.

7.1.2 Bio-Medical Strategies

Bio-medical coping strategies, which includes adopting self-treatments such as vitamin or herbal supplements, seeking help from medical practitioner or therapist, life style changes as engaging in physical activities exercise, walking or dietary modification as avoiding certain items as caffeine, sugar or adding certain items as soy, calcium rich diet and so on is the next coping

method. Studies show that to reduce symptom severity of menopause women are adopting regular exercise, diet rich estrogenic food as soy, alfalfa, rice and yams and for stress reduction women are doing yoga. If natural remedies are not effective to reduce symptoms women seek medical help of a practitioner. In the present analysis it was found that women are not familiar with Hormone Replacement Therapy.

Based on the factor analysis it can be seen that socio-religious and bio-medical strategies are the two major coping strategies adopted by the menopausal women in Kerala. The table below shows the descriptive statistics which shows the prominence of these two strategies.

Table 7.4 Descriptive Statistics of Coping Strategies adopted by menopausal women

Coping Strategies of Menopausal women		
Descriptive Statistics	**Socio-Religious Strategies**	**Bio-Medical Strategies**
Mean	17.3500	10.3660
Median	17.0000	12.0000
Variance	3.751	12.978
Std. Deviation	1.93675	3.60250
Minimum	12.00	3.00
Maximum	20.00	15.00

The table shows different level of copying strategies. The mean scores of 17.3500 with standard deviation 1.93 indicate that most of the menopausal women are adopting socio-religious coping strategies. The mean score which is close to maximum shows the prevalence of socio-religious coping among menopausal women. Relating to Martin's (1988) theory the cultural pattern and

socio-economic development in Kerala society is promoting the menopausal women to adopt coping strategies. This can be related to the low psychological symptom reporting among the menopausal women in the study.

Even though menopause is not much medicalized in Kerala, women are adopting coping strategies as socio-religious and bio medical strategies. Based on this an attempt is made to prove the hypothesis that there is relation between life course factors and coping strategies of menopausal women.

7.2 Life Course factors and Adjustment Strategies adopted by Menopausal Women

According to Rathus and Nevid (1986) adjustment is a process by which an individual respond to the stressor and cope with stress. In order to cope with menopause related physical and social issues women adopt coping strategies as healthy diet, life style modifications and socio-religious support system (Gayathri 2015), along with that socio-cultural factors as employment status, occupation, social support and life style factors play an important role in determining the adaptive coping strategies adopted by women (Roohafza 2009). In the present study role of reproductive and socio-cultural variables in adjustment strategies are analyzed. The adjustment can vary according to life course variables. Hence, an attempt is made to find out the difference in the adjustment methods based on life course factors.

In the life course of women, stages as peri-menopause, menopause and post-menopause will cover a half or one third of women's life (Perez-Lopez 2004). Symptom severity varies based on the menopause status. Studies show that women experienced higher instability during peri menopause phase than post-menopausal stage as they report more vasomotor symptoms as hot flushes

(Obermeyer 2007). Based on the subjective experience of menopausal symptoms, adjustment methods may vary. So an attempt is made with the help of One Way ANOVA, to find out whether adjustment strategies adopted by menopausal women vary based on menopause status.

Table 7.5 One Way ANOVA on Menopause status and Adjustment Strategies

Bio-Medical Strategies					
Menopause Status	**N**	**Mean**	**S.D**	**F Value**	**P value**
Peri Menopausal(Irregular)	99	10.6162	3.54478	.426	.653
Menopausal(Since a Year)	206	10.3932	3.48317		
Post-Menopausal	195	10.2103	3.76253		
Total	500	10.3660	3.60250		
Socio-Religious Strategies					
Menopause Status	**N**	**Mean**	**S.D**	**F Value**	**P value**
Peri Menopausal(Irregular)	99	16.7677	3.69729	3.510	.031
Menopausal(Since a Year)	206	15.8544	4.42699		
Post-Menopausal	195	15.3590	4.46803		
Total	500	15.8420	4.33111		

The analysis of the mean score indicates that there is no significant variation based on biomedical coping method adoption and their menopause status. But there is variation in the adoption of socio-religious strategies based on menopause status. In the present study it is found that women from peri-menopausal phase are adopting more socio-religious coping strategies than women from other phases. Studies show that peri-menopausal women may experience a sense of loss or emptiness than others as they experience a role shift, as their children grow and become independent (Onder 2016). This can be the reason for adopting more spiritual and social coping methods. Menopause

status is an important life course factor that can determine the menopausal adjustment strategies adopted by women.

The menopause symptoms and other issues related to bodily image and perceptions may increase the adoption of coping strategies (Perez-Lopez 2004). Thus menopause symptom severity is considered as an important variable that determines the coping methods adopted by menopausal women. Here an attempt is made to find out the variation in the adjustment strategies on the basis of symptom severity, with the help of One Way ANOVA.

Table 7.6 One Way ANOVA on Symptom severity and Adjustment Strategies

Bio-Medical Strategies					
Symptom Severity	**N**	**Mean**	**S.D**	**F Value**	**P value**
Low	293	9.9590	3.81844	8.377	.000
Moderate	182	10.6923	3.16993		
High	25	12.7600	2.80297		
Total	500	10.3660	3.60250		
Socio-Religious Strategies					
Symptom Severity	**N**	**Mean**	**S.D**	**F Value**	**P value**
Low	293	15.4915	4.70544	4.077	.018
Moderate	182	16.1319	3.79941		
High	25	17.8400	2.33952		
Total	500	15.8420	4.33111		

The above table reveals that symptom severity is significantly related with coping strategies adopted by menopausal women The mean scores indicate that women with high symptom severity are adopting more bio-medical and socio-religious coping strategies. Related to this Onder (2016) also found that symptom severity is significantly related with coping strategies adopted by menopausal women.

According to Chauhan (2009) adjustment mechanism are learned in environment, designed to deal with anxiety and stress, operates on habitual and automatic levels. The cultural environment plays and important role in determining the adjustment that women make during menopause. So, One Way ANOVA was done to find out whether the menopausal adjustment of women varies on the basis of their geographical area.

Table 7.7 One Way ANOVA on Geographical area and Adjustment Strategies

Bio-Medical Strategies					
Geographical Area	**N**	**Mean**	**S.D**	**F Value**	**P value**
Ernakulam	168	9.8512	3.49103	4.302	.014
Thiruvananthapuram	156	10.2436	3.54031		
Kozhikode	176	10.9659	3.69385		
Total	500	10.3660	3.60250		
Socio-Religious Strategies					
Geographical Area	**N**	**Mean**	**S.D**	**F Value**	**P value**
Ernakulam	168	15.6726	3.63532	9.813	.000
Thiruvananthapuram	156	14.8397	5.02702		
Kozhikode	176	16.8920	4.05741		
Total	500	15.8420	4.33111		

The above table shows that adoption of adjustment strategies vary based on the geographical zones of the respondents. The mean scores indicate that women from Kozhikode is adopting more bio medical and socio-religious strategies. Women from Ernakulam are adopting less bio medical methods and socio-religious methods are least adopted by women from Thiruvananthapuram.

Religion is an important variable as each religion has unique practices related with menopause. According to Steffen (2009) religion guides women to cope with menopausal issues. It can be both positive as well as negative. Studies

show that religious women have more difficult time with menopausal transition (Edgell 2007). So, to analyze whether there is any variation in adjustment strategies of menopausal women based on religion One Way ANOVA is carried out.

Table 7.8 One Way ANOVA on Religion and Adjustment Strategies

Bio-Medical Strategies					
Religion	**N**	**Mean**	**S.D**	**F Value**	**P value**
Hindu	222	10.0676	3.63865	9.914	.000
Muslim	156	11.3782	3.45168		
Christian	122	9.6148	3.46755		
Total	500	10.3660	3.60250		
Socio-Religious Strategies					
Religion	**N**	**Mean**	**S.D**	**F Value**	**P value**
Hindu	222	14.8739	4.77099	19.383	.000
Muslim	156	17.5385	3.19351		
Christian	122	15.4344	4.13809		
Total	500	15.8420	4.33111		

The table indicates that there is significant difference in adjustment strategies based on the religion of the respondents. The mean score shows that adjustment strategies adopted by women from three different religions have significant variation. The mean scores indicate that Muslim women are adopting more bio-medical and socio-religious adjustment strategies than other religions. According to Dimkpa (2011) also, depending on respondent's religion the practices related with the menopausal adjustment may vary.

Education can empower individual to make right choice that can determine the methodologies they can adopt to cope with a stressor. In the case

of menopausal women, education is an important predictor that determines the adjustment strategies (Rubinstein 2013). The educated women are assumed to adjust to the life challenges through different coping strategies. Studies show that women with higher education adopt better bio-medical treatment utilization (Roohafza 2009). Based on this, one way ANOVA is done to find whether the adjustment strategies vary based on education status.

Table 7.9 One Way ANOVA on Education and Adjustment Strategies

Bio-Medical Strategies					
Education	**N**	**Mean**	**S.D**	**F Value**	**P value**
Below SSLC	117	10.1282	4.18235	3.789	.005
SSLC	176	10.1989	3.41094		
Plus two or Equivalent	70	10.0857	3.62257		
Graduate	95	10.2737	3.37841		
Post-Graduation and above	42	12.4048	2.42003		
Total	500	10.3660	3.60250		
Socio-Religious Strategies					
Education	**N**	**Mean**	**S.D**	**F Value**	**P value**
Below SSLC	117	15.8803	4.06873	2.570	.037
SSLC	176	16.2614	4.09737		
Plus two or Equivalent	70	14.9571	5.20712		
Graduate	95	15.1474	4.83112		
Post-Graduation and above	42	17.0238	2.45435		
Total	500	15.8420	4.33111		

Education is a process for better adjustment. The table of the adjustment strategies indicates that there is significant variation in the menopausal adjustment on the basis of their educational background. The women with

higher education are adopting more bio-medical and socio-religious coping strategies than others.

Socio-economic position of the women determines the resource utilization in society. Studies show that socio-economic status was significantly related with biomedical and non-biomedical treatment utilization (Rubinstein 2013). According to Debbie (2003) the women from higher socio-economic position utilize medical treatment as hormone replacement therapy. Based on this socio-economic status is considered as an important variable. In order to find out whether women from different socio economic groups show variation in adjustment strategies One Way ANOVA is used.

Table 7.10 One Way ANOVA on Socio-Economic Status and Adjustment Strategies

Bio-Medical Strategies					
Socio-Economic-Status	**N**	**Mean**	**S.D**	**F Value**	**P value**
Upper lower class	160	9.9125	4.03505		
Lower middle class	136	10.1103	3.38772		
Upper middle class	151	10.9205	3.24042	2.560	.054
Upper class	53	10.8113	3.57371		
Total	500	10.3660	3.60250		
Socio-religious Strategies					
Socio-economic-status	**N**	**Mean**	**S.D**	**F Value**	**P value**
Upper lower class	160	15.7688	4.46400		
Lower middle class	136	15.7353	4.52030		
Upper middle class	151	16.2848	3.89081	1.123	.339
Upper class	53	15.0755	4.59870		
Total	500	15.8420	4.33111		

The above One Way ANOVA shows a significant variation in the adoption of biomedical strategies based on socio-economic status. But there is no significant variation in the adoption of socio-religious strategies on the basis of socio-economic status. The high Mean score of women form upper middle class indicates that they are adopting more adjustment strategies than others.

The statistical analysis to find out whether there is variation in adjustment strategies based on life course factors shows that the menopausal women significantly vary in their adoption of copying strategies according to the symptom severity, geographical zones, religion and education. Menopause status and socio-economic status does not show much variation in the adoption of coping strategies. Hence the hypothesis that there is relation between life course factors and coping strategies of menopausal women is proved.

7.3 Summary

An adjustment scale was developed based on Lazarus and Folkman model of coping strategies to understand the adjustment strategies of menopausal women in Kerala. The scale included questions related with problem focused coping and emotion focused coping. Based on that the present study found out various adjustment strategies adopted by menopausal women. To explore the strategies adopted by menopausal women factor analysis was conducted. Kaiser-Meyer-Olkin Measure of Sampling Adequacy test proved that data is suitable for factor analysis. The factors were derived using Principal Component Analysis and the extracted factors were grouped according to the loading. It was found that menopausal women in Kerala are adopting socio-religious and bio- medical strategies. The socio-religious adjustment strategies include social activities of women as participation in social activities, volunteering, social services and religious coping methods as prayer,

meditation, readings from holy books and participation in religious services. The bio- medical methods adopted by menopausal women includes adopting self-treatments such as vitamins or herbal supplements, seeking help from medical practitioner or therapist, life style changes as engaging in physical activities exercise, walking or dietary modification as avoiding certain items as caffeine, sugar or adding certain items as soy and calcium rich diet.

To explore the relationship between life course factors and coping strategies and to prove the hypothesis that there is relation between life course factors and coping strategies of menopausal women One Way ANOVA was conducted. The result shows that socio- religious and bio-medical strategies adopted by the menopausal women vary significantly according to the symptom severity, geographical zones, religion and education. There is no significant variation in the adoption of bio medical strategies on the basis of menopause status but there is significant variation in the adoption of socio-religious coping strategies. The reverse is found to be true in the case of socio- economic status.

Chapter - 8
Interrelations between Determinants and Adjustment Strategies

Contents

Menopause is a major transition which brings drastic changes in the biological, social and cultural life of the women (Jones et al. 2012). The socio-cultural factors prevailing in the cultural paradigm determines the women's menopausal experience (Delanoë 2012). The inherent cultural paradigm determines the mode of transition as positive or negative. The subjective experiences of the women are closely knit by the social system in which the woman is living.

In the previous chapter, symptom severity, social life and adjustment strategies of women were interlinked with life course variables as reproductive and socio-cultural factors. These are observable variables such as biological, social and economic indicators that can be directly measured, while the latent variables as severity of symptoms, social quality of life and adjustment cannot be directly measured. In the present study, the latent variables as symptom severity, social life and adjustment strategies were adopted to have a deeper understanding of the underlying factors. The severity of menopausal symptoms and the multiple roles in society demands the need to maintain equilibrium

between the self and social environment. The menopausal women will have to adopt coping strategies to alleviate distress. Hence the objective of the present chapter is to explore the interrelation between menopausal symptoms, social life factors and adjustment strategies.

To have a better understanding of the relationship between these observed and latent variables Structural Equation Modelling (SEM) is used as it is effective to explore the relation between underlying factors. Structural Equation Modeling is a statistical method of analysis based on covariance matrix, in which the number of observed variables can be reduced to smaller number of latent variables and casual relationship between the variables are examined. The SEM is an effective model that enables theoretical models to be tested and establish relationship between variables in mixed hypotheses. It combines factor analysis and regression analysis which can check the suitability of covariance matrix of observed data. While other statistical methods have explorative and descriptive framework SEM provides a confirmatory structure.

The Path analysis adopted in the present research is a subset of Structural Equation Modeling (SEM), the multivariate procedure that allows the examination of a set of relationship between one or more independent variables with one or more dependent variables, either continuous or discrete (Ullman 1996). This is based upon a linear equation system developed by Sewall Wright. Since 1960's Path analysis is adopted in social science to find the inter-relationships among a set of variables. This unique feature of path analysis is that it attempt to understand comparative strength of direct and indirect relationships among a set of variables. Lorraine Dennerstein (2002) has recommended Structural Equation Modeling for the detail of a range of factors that may influence latent or non measurerable variables in the research realted

to menopasue. To have a deeper understanding of the underlying factors an attempt is made to explore the relationship between variables and in the present study, Structural Equational Modelling is used to find association between latent variables.

A preliminary analysis was conducted to test the validity of the measurement portion using (CFA) Confirmatory Factor Analysis.The goodness of fit indices indicated that the hypothesized conceptual frame work exhibits good fit (Appendix 4). The relationship between latent variables as symptom severity, social life and adjustment strategies were tested using the path analysis. The latent variables which were derived through factor analysis are menopausal symptoms as urogenital symptoms and vasomotor symptoms, Social factors as home life issues, social isolation, work life issues and social involvement of menopausal women and thirdly, adjustment strategies as bio-medical and socio-religious strategies. The resluts are given below.

8.1 Interrelation between menopause symptoms and social life

The first phase of the analysis interlinks the symptom severity and other latent variables. The variables which were derived through factor analysis are urogenital symptoms and vasomotor symptoms. The hypothesis formulated in the present study is that there is significant relationship between menopause symptoms and menopausal adjustment (Home-life relations, Work life issues, Social Life).

The first factor derived through factor analysis is urogenital symptoms. Urogenital symptoms are vaginal dryness, dysuria, urinary urgency and incontinence. The decline in estrogen production results in atrophic changes in vulva, vagina and urinary tract and causes sexual and urinary issues. The

consequence of the changes may favour vaginal and urethral infections. These issues can be controlled by Estrogen therapies and pelvic floor exercises. Epidemiological studies reveal that 50% of the women suffer from at least one of the urogenital symptoms during menopausal transition. The vaginal atrophy and other complaints increase during the post menopause. The urinary atrophy as urinary incontinence, urgency and other infections are more often reported when vaginal atrophy is present (Pastore 2004). In the present study the relationship between urogenital symptoms and social life factors are hypothesized as follows. H_{1a} There is significant relationship between urogenital symptoms and home-life balance of menopausal women. H_{1b} is urogenital symptoms are significantly associated with social isolation of menopausal women.

Table 8.1 The path coefficient showing relation between urogenital symptoms and dependent variables is as follows:

Independent Variable	Dependent Variable	Type of Relation	Regression Coefficient	Standard Regression	Significance	Decision
Urogenital Symptoms	Home life stress	Direct	-.184	-.149	.001	Supported
	Social isolation	Direct	.196	.170	.001	Supported

While reviewing SEM path model it is evident that urogenital symptoms are associated with home life stress and social isolation. The path established shows that women with higher urogenital issues are having low home life stress (P = .001). Eftekhar et al. (2016) found that urogenital symptoms as vaginal dryness, pain itching etc. are affecting the sexual functioning domain of women. These factors can negatively affect the quality of life and the relationship between partners. The changes in perceptions and

fear of losing feminine roles can lead to negative self-image. This can lead to disengagement and social isolation. The Study of Women's Heath across Nation (SWAN) conducted a cross sectional study on 3000 women from different ethnic background and found that family relationship, social functioning and psychological factors are related to sexual disorders during menopause. Thus the hypothesis which states that urogenital symptoms are having significant relationship between social life factors is proved.

The second factor derived through the factor analysis is the vasomotor symptoms. McKinlay (1992) found increase in hot flushes during the peri menopausal stage and declines significantly after Final Menstrual Period. The women from western societies reported higher prevalence of hot flushes. In Indian context the most reported symptoms are vasomotor symptoms as hot flushes, heart discomfort and sleep disturbances (Singh 2014). Based on this it was hypothesized that the vasomotor symptoms are having significant relationship between social factors of menopausal women. The assumptions formulated here are H_{2a} vasomotor symptoms are significantly related to home-life balance, H_{2b} vasomotor symptoms are associated with work-life issues and H_{2c} vasomotor symptoms are related to the social isolation of women.

Table 8.2 The path coefficient showing relation between vasomotor symptoms and dependent variables is as follows:

Independent Variable	Dependent Variable	Type of Relation	Regression Coefficient	Standard Regression	Significance	Decision
Vasomotor Symptoms	Home life stress	Direct	.364	.308	.001	Supported
	Work Life Issues	Direct	.256	.212	.001	Supported
	Social isolation	Modified	.173	.157	.001	Supported

The established Structural Equation Modeling gives the result compatible with the hypothesis. Depending on the hypothesis, vasomotor symptoms are positively related to the home life stress and work life balance of the respondents. Utain (2005) in his study found that vasomotor symptoms such as hot flushes and sleep disturbances are associated with the irritability and anger associated with menopause. He noted in his work that hot flushes are the symptom that caused most difficulties at work place. Schiff et al. (1979) found association between hot flushes and poor work life performance along with disrupted daily activities at home. In Simon and Reape's study, hot flushes, night sweats and sleep disorders were found to be the most bothersome troubles that disrupted work life of women. There is significant, modified relation between social isolation of women during menopause and the vasomotor symptoms. Griffiths et al. (2013) have found association between vasomotor symptoms and depression and lowered confidence that in turn can lead to disengagement. Hence the hypothesis which states 'there is significant relationship between menopause symptoms and menopausal adjustment is proved.

8.2 Social Isolation and its impact on social life domains and adjustment

According to Hughes and Gove (1981) social isolation occurs when the individual lacks relative social interaction and lack of participation in social field. Lack of social integration can lead to less access to social and economic capital and this in turn can lead lack of power and deprivation in society (Bourdieu 1972). The level of social isolation is determined by the macro social structure that influences the micro level aspects. The subjective menopausal experiences of women can lead to disengagement and withdrawal and results in issues at work place, family and society. So it was hypothesized that social

isolation of menopausal women are having impact on social life domains and coping strategies. The H_{3a} here is formulated as women with social isolation have higher home life stress, H_{3b} is social isolation of menopausal women are positively related with work life issues and H_{3c} women adopting more socio-religious coping strategies have less social isolation.

Table 8.3 The path coefficient showing relation between social isolation of women and dependent variables is as follows*:*

Independent Variable	Dependent Variable	Type of Relation	Regression Coefficient	Standard Regression	Significance	Decision
Social isolation	Home life stress	Direct	.251	.234	.001	Supported
	Work Life Issues	Direct	.204	.186	.004	Supported
	Socio Religious coping	Modified	-.096	-.178	.001	Supported

The path analysis with standardized regression for social isolation is represented in the above table. The finding shows that social isolation of the menopausal women is having significant direct effect on the home life stress. The social isolation is related with work life issues of menopausal women. The path relation indicates that social isolation is having modified inverse relationship with socio-religious coping. Hence the hypothesis which states that there is association between social isolation of menopausal women and menopausal adjustment of women is proved.

8.3 Home life stress and its impact on social life domains and adjustment

The menopause is a transitional phase which influences personal life and inter personal relations in family which can affect the well-being of women.

The family roles changes, household work burden and multiple roles in family can generate stress in women. Social support is an important factor that helps in individual integration in society. The supportive relations in family that generates mutual concern, affection and sensitivity can ease the emotional and psychological distress (Conger, Rueter & Elder 1999). Lack of proper support and understanding in family during menopausal transition will increase imbalance in work life and social life. Hence it was hypothesized that home life stress of menopausal women are having impact on social involvement and work life issues. Here H_{4a} is stated as home life stress is significantly related to social involvement of menopausal women and home life stress is inversely related to the work life isolation of women (H_{4b}).

Table 8.4 The path coefficient showing relation between home life issues and dependent variables is as follows:

Independent Variable	Dependent Variable	Type of Relation	Regression Coefficient	Standard Regression	Signifi cance	Decision
Home life stress	Social Involvement	Direct	.231	.227	.004	Supported
	Work Life Issues	Modified	-.200	-.134	.004	Supported

The SEM analysis shows that the latent variable home life stress is significantly related to social involvement of women. The women with stress involves in social activities which can ease the stress experienced at home. Also it is evident that home life stress and work life isolation are inversely related. Based on the findings the hypothesis which states that there is association between home life stress and social life domains of menopausal women is proved.

8.4 Work Life Isolation and its relationship with the adjustment strategies

The work is a human transitive activity that involves physical labour. The social life of a woman is centered on the activities at home, work –life at home and at employment. The work life of a woman includes house hold responsibilities and employment. In a comparative analysis of menopausal women Griffiths et al. (2013) found that 40% felt that their performance at work was negatively affected due to menopause symptoms. The reasons were concentration issues, memory loss, depression, low confidence and sleep disturbance. The work environment as proper ventilation and facilities can comfort women from the menopause symptoms. Based on this in the present study it is hypothesized that work life isolation is related to coping strategies. The H_{5a} here formulated is stated as work life isolation is positively related with women adopting bio- medical adjustment strategies. H_{5b} is work life isolation is inversely related with socio-religious strategies adopted by menopausal women.

Table 8.5 The path coefficient showing relation between work-life isolation and dependent variables is as follows**:**

Independent Variable	Dependent Variable	Type of Relation	Regression Coefficient	Standard Regression	Significance	Decision
Work Life Isolation	Bio-Medical Strategies	Direct	.174	.191	.001	Supported
	Socio-Religious Strategies	Direct	-.084	-.172	.001	Supported

The structural model shows that the work life isolation is positively correlated with bio-medical strategies adopted by women. The relationship between bio-medical strategies and work-life isolation is stronger and positive ($\beta = 0.191$).The women with work life issues are opting for coping strategies as

exercise, dietary modifications and medical assistance. But among the women HRT is not popular but women adopt medical treatment for issues. The hypothesis two shows the negative relation with work life issues and socio-religious coping strategies. The women with work life isolation are adopting less socio-religious activities or in other words, women who are not opting for socio-religious coping strategies are facing issues and isolation at work place. This shows the importance of socio-religious coping adoption to reduce work life issues related with menopause. Based on the above the hypothesis which states that there is association between work life issues of menopausal women and adjustment strategies is proved.

8.5 Social involvement and its influence on Socio Religious coping strategies

The social involvement is vital for the psychological and physical well-being of menopausal women. Menopausal women more are vulnerable to imbalances and feelings of isolation. The social inclusion of an individual enables him to assess different forms of capital. Bourdieu 1986 states that social capital is the social networks and relations that are legitimized by institutions as family, social groups or class membership. These legitimized social networks and relations enable the individual to assess economic, cultural and social capital can be transformed to symbolic capital. The ability to utilize different forms of capital creates a sense of well- being and satisfaction in society. It was hypothesized that social involvement is significantly related to the socio-religious coping strategies

Table 8.6 The path coefficient between social involvement of menopausal women to dependent variable is as follows:

Independent Variable	Dependent Variable	Type of Relation	Regression Coefficient	Standard Regression	Significance	Decision
Social Involvement	Socio-Religious Strategies	Direct	.045	.134	.001	Supported

The path model establishes direct relationship between social involvement of women and adopting socio-religious coping strategies. The women who are having more involvement in socio-religious activities find relief from the stress and strain of menopause. According to Lim and Mac Gregor (2012) religious activity is connected to greater involvement in other types of civic activity, as volunteering and social work. Participation in religious or volunteer affiliations, can contribute to civic engagement and empowerment, as well as to health and happiness (McFarland and Thomas 2006). Thus the hypothesis which establishes the association between social involvement and adjustment strategies of menopausal women is proved.

8.6 Bio-Medical adjustment strategies and its influence on Socio Religious adjustment strategies

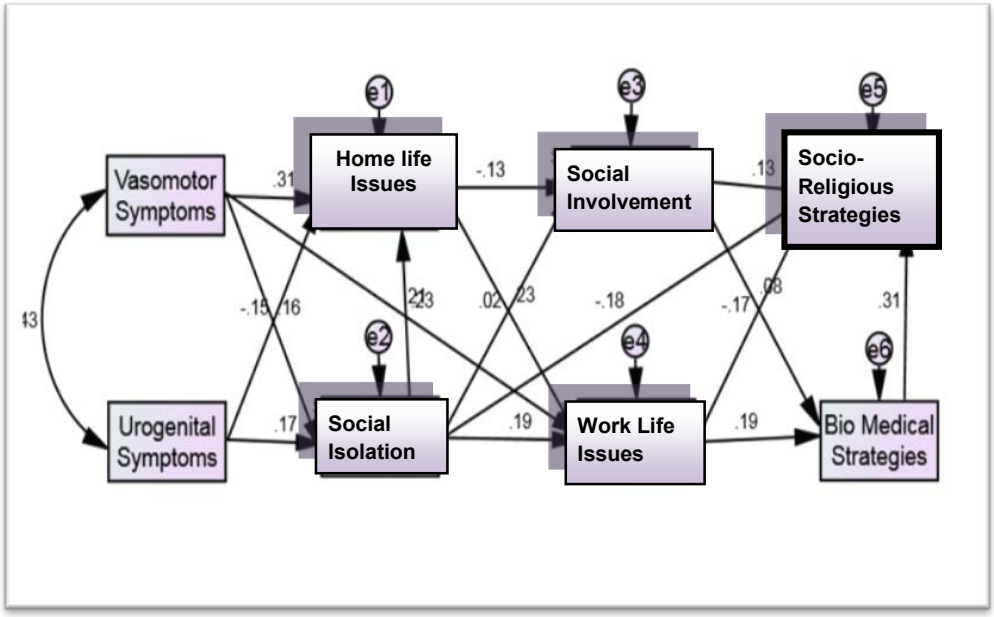
Lazarus and Folkman in their transactional theory of stress have categorized coping strategies as emotion focused and problem focused. The problem focused coping strategies include generating suitable solutions or finding alternative solutions to the existing problem. Emotion focused coping methods strategies are used to lessen the emotional stress and strain and these strategies include religious coping, social involvement etc. Studies show that the women who adopt bio medical strategies are also adopting socio-religious adjustment strategies. So here it was hypothesized that bio medical adjustment strategies are significantly related to socio- religious adjustment strategies

Table 8.7 The path coefficient showing relation between bio-medical strategies and dependent variable is as follows:

Independent Variable	Dependent Variable	Type of Relation	Regression Coefficient	Standard Regression	Significance	Decision
Bio Medical Strategies	Socio-Religious Strategies	Direct	.168	.312	.001	Supported

The Structural Model shows the established relation with bio medical strategies and socio-religious strategies. The women who are adopting bio-medical strategies as HRT, consulting physician, exercise, dietary changes are also adopting socio-religious coping as involving in social activities, religious activities. There is significant relation with the bio-medical and socio-religious coping strategies.

Figure 8.1 *Path Diagram showing the inter-relations between quality life determinants and adjustment strategies*



8.7 Summary

To explore the interrelations between menopausal symptoms, social life and adjustment strategies of menopausal women Structural Equation modeling was conducted. From the path analysis it was found that vasomotor symptoms as hot flushes, heart discomfort, sleeping issues and muscle and joint problems are significantly related with social life of menopausal women as home life issues, work life issues and social isolation. Urogenital issues as vaginal dryness, dysuria, urinary urgency and incontinence are influencing home life relations and women are feeling social isolation due to urogenital issues. Social isolation of menopausal women is having impact on social life domains as home life and work life relations. The women who have social isolation are adopting socio-religious coping. The women with stress involves in social activities which can ease the stress experienced at home. Also it is evident that home life stress and work life isolation are inversely related. The relationship between bio-medical strategies and work-life isolation is stronger and positive. The women with work life issues are opting for coping strategies as exercise, dietary modifications and medical assistance. The women with work life isolation are adopting less socio-religious activities or in other words, women who are not opting for socio-religious coping strategies are facing difficulties at work place. The path model establishes direct relationship between social involvement of women and adopting socio-religious coping strategies. The women who are having more involvement in socio-religious activities find relief from the stress and strain of menopause. It is also found that than bio-medical methods women are adopting socio-religious coping strategies. On the whole, it can be concluded that most of the menopausal women are adopting socio-religious coping methods for adjusting the physical, psychological and social issues.

Chapter - 9
Findings and Conclusions

Contents

Culture is the fundamental aspect that ensures the survival and well-being of individual in society. It provides ways to make sense of life events, meaning and purpose throughout the life. The gendered experiences of males and females are shaped by the biological and cultural aspects. How women perceive their gendered identities and related vulnerabilities are fashioned by the inherent normative system in specific culture. In the case of women, culture plays a major role in determining the subjective experiences of women.

Than men, women's corporeality is controlled by the biological process of menstruation, childbirth and menopause. In all these life events in women's life is controlled by the culture and normative patterns in society. Kerala is a picture of contradictions; culture determines the position of women in Kerala after menopause that makes them to adapt or adjust to the changes. The demographic indicators show that women in Kerala have better access to resources especially education and health. In spite of this, women are in the clutches of patriarchal constrains that make them vulnerable to the traditional beliefs and patterns which are more centered on menarche, pollution and purity. Not much studies are there about women and their health from a Sociological

point. In this study an attempt is made to study one crucial aspect in the life of Kerala women especially when the aging female population is on rise.

Menopause is a major life transition in the mid-life of women which incorporates biological and social changes. Menopause is a major biological transition which is interlinked by changes in gendered identity, self-perception and quality of life. Studies show that women in Kerala experience physiological and psychological issues related with menopause. But in some studies, it was noted that women in Kerala consider menopause as a positive life event which gave them better status and acceptance in society. Sometimes the issues of menopause are mostly under reported due to socio-cultural features of Kerala society. In Kerala, there are hardly any studies to analyze the menopausal changes of women in Kerala especially from a Sociological perspective. This study focuses on married menopausal women who are going through the natural transition process of menopause. The quality of life of menopausal women depends on the physical and emotional well-being during the transitional phases, the study attempts to analyze the factors that are hindering the quality of life of Menopausal women. The study examines gendered habitus of menopausal women and how society is influencing them to cope with the different challenges. Since menopause is a bio-cultural construct, the subjective experiences of women are analyzed from a life course perspective.

The universe of the study comprises of all married women in Kerala of the age group between 40-60 years who are passing through the transitional phases of menopause. The women who had hysterectomy were excluded from the study. In the present study, 500 married menopausal women who are going through different phases of menopause as peri- menopause, menopausal and post-menopausal phase were selected through snow ball sampling. The data was

collected from three districts-Thiruvananthapuram, Kozhikode and Ernakulam. Structured questionnaire was used as the tool for data collection which included closed ended and open ended questions. With the help of questionnaire the information regarding life course factors of menopausal women, gendered habitus, bio-psycho-social factors influencing quality of life and adjustment patterns of menopause were gathered. The attitude towards menopause, symptom severity and social domain of menopausal women were analyzed with the help of Menopause Attitude Scale, Menopause Rating Scale and Specific Menopause Quality life scale. The data was coded, tabulated and analyzed using Statistical Package for Social Science-SPSS v 23. At the initial stage, to explore the underlying factors or variables an Exploratory Factor Analysis was conducted. Kaiser-Mayer-Oklin measure of sampling adequacy and Bartlett's test of sphericity was employed and found that all the scales employed are suitable for Principal Component Analysis. The factors extracted through Principal Component Analysis showed good internal reliability. For further in-depth analysis Structural Equation Modelling (SEM) was used to explore the relationship between variables. Percentages, Chi-square test, t-test and ANOVA were used to find the association between the variables. Perrie Bourdieu's theory of habitus-field and capital, Goffman's concept of social stigma and Emily Martin's theory on women's body are used as the theoretical framework.

9.1 Life Course Factors

According to Elder (1985)'Life Course' is the interaction of social and cultural factors that shape the personal experiences of an individual during the life span. In the present study the life course factors are the bio-social factors such as the reproductive and socio-cultural factors that influence the menopausal experience. The reproductive factors of menopausal women

include the age, menstruation status, fertility pattern, menstrual history. Socio-cultural factors include geographical factors, religion, education, employment status and social-economic status

The sample in the present study consisted of menopausal women of the age group 40-60 years, who are going through various phases as peri-menopausal, menopausal and post-menopausal phase. In the present study 99 women ie, 19.8 percent of the respondents are in peri-menopausal stage, excluding these women the average age at menopause and median age of the menopause was calculated and it is found as 48.38 (±3.316) and the median age of menopause is 49 years. The mean age of menarche is 13.78(±1.623) and the median age is 14 years. The data reveals that 24.4 percent had early menstrual issues. The fertility pattern of the women indicates that 13.2 percent has only one child, majority ie, 54.4 percent are having two children and 22.8 percent has three children. Just 2.4 percent of the sample has 4 children or more this shows that women are adopting family planning methods. 70.6% of the women had undergone permanent sterilization or temporary sterilization as recommended by the physician. The data was collected from rural and urban areas of Thiruvananthapuram, Ernakulam and Kozhikode districts of Kerala. In the study representing religious structure of Kerala, 44.4 percent of the sample is Hindus, 31.2 percent are Muslims and 24.4 percent are Christians. According to the Socio Economic Status (SES) scale developed by Kuppuswamy 32 percent of the respondents are from upper lower class, 27.2 percent are from lower middle class, 30 percent are from upper middle class and 10.6 percent are from upper class. In the present study, 53 percent are employed and 47 percent are unemployed.

9.2 Gendered Habitus of Menopausal Women

The subjective experiences of menopausal women are determined by the inherent cultural system in Kerala society. In this context, Bourdieu's (1986) concept of habitus is found significant here. The gendered habitus of menopausal women are the awareness, feelings, perceptions and attitude of women towards menopause. To understand the gendered habitus of menopausal women an integrated approach combining bio-social factors and life course of women is used. It is found that the women in Kerala are aware about the basic concepts related with menopause and the main source of information is family and friends. Most of the women are not aware about the medical aspects as hormone therapy and the role of hormones related with menopause. The reproductive factors such as fertility pattern, age at menarche and menopause was significantly related with awareness. Socio-cultural factors such as geographical factors, religion, education, employment status, social-economic status were significantly related to awareness related with menopause. There is no difference with regard to the awareness of women about menopause on rural-urban basis. The analysis of the feelings towards menopause shows that women in Kerala society expressed more positive feelings as it gives them more relaxation, freedom and relief. In the reproductive factors age at menarche, fertility pattern and phases of menopause is significantly related with feelings. Women who had less number of children associated positive feelings. The menopausal and post-menopausal women expressed positive feelings related with menopause than the women from peri-menopausal phase. The socio-cultural factors as geographical factors, religion, education and employment status is significantly related to feelings towards menopause. To analyze the attitude of menopausal women attitude scale developed by Robert McKeown et al. (1990) was used. Data reveals that women in Kerala society consider

menopause as natural, less medical and have more positive attitude towards menopause. The present study shows that there is a significant difference between attitude towards menopause on the basis of fertility pattern, menopause status, geographical factors, religion, education and employment status. There is no variation in the attitude on the basis of socio-economic status of the respondents.

9.3 Determinants of Quality of Life

The quality of life is a subjective disposition which is shaped by the cultural system of society. According to Bourdieu (1989) the subjective dispositions are developed through the habitual objective conditions the individual experience in social field. Studies show that menopause is a bio-psycho-social phenomena which can influence the quality of life of menopausal women (Elder 1998). Based on this assumption basic three domains physical wellbeing, psychological well-being and social well-being as given by W H O is taken and life course factors are linked to analyze the quality of life of menopausal women.

The physical and psychological factors affecting quality of life is evaluated using Menopause Rating Scale. To explore the underlying factors which are affecting the quality of life of menopausal women, factor analysis using Principal component analysis was conducted. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was conducted and the score of .871 indicated that the data is suitable for factor analysis. From the factor analysis it was found that the women in Kerala are affected mostly by physical domain, mainly urogenital issues and vasomotor issues. The impact of life course factors on menopause symptom severity is assessed using the statistical methods. One Way ANOVA was done to test whether the mean scores of menopausal

symptom severity vary significantly based on the life course factors. The results shows that urogenital symptoms of menopausal women vary significantly based on fertility pattern of women and vasomotor symptom of women have no variation. No significant variation was found associated with symptom severity and menopause status of menopausal women. In the study it is found that the symptom severity varies according to the socio-cultural factors such as geographical region, religion, educational status and income of the respondents. There is no significant variation in symptom severity and rural urban difference of menopausal women. This proves the hypothesis that life course factors are associated with quality of life of menopausal women.

'Menopausal quality of life questionnaire' is used to assess the social domain of the menopausal women. Exploratory Factor Analysis using Principle Component Analysis method is used to analyze the social life domain of menopausal women. The score of .795 of Kaiser-Meyer-Olkin Measure test proved that the data is suitable for factor analysis. To reduce the dimensions factor analysis was used and the extracted factors are named as social involvement, home life issues, work life issues and social isolation.

The first factor derived through principal component analysis indicates that women in Kerala are socially involved after menopause. It may be because the social life of women changes after menopause as the restrictions associated with menstruation is changed. Cultural freedom and better status of menopausal women promotes social involvement. The social involvement of women increased after menopasue as they were free from the 'idea of pollution' associated with menstural blood. The findings of the present study can be related to the fact that the women in Kerala accept the menopause positively as they are involved in social life.

The second factor indicates that women experience adjustment issues related with home life. Women experienced irritability and anger during the menopause and this is often reflected in the social interaction at home. Supportive relationship at home can ease emotional distress and affective disorders. The third factor which was hindrance in social life was work life issues of menopausal women. For working women the symptoms as hot flushes and palpitations demotivates them from involving in official meetings and intimate work interactions. Physiological symptoms results in work-life isolation, irritability and poor co-ordination in the menopausal working women (Braun 2013).

The fourth factor is the social isolation.The symptoms as hot flushes, sweating experiences, heavy bleeding and other physical changes associated with menopause restricts the women from cultural integration. Goffman (1963) notes that stigma is a phenomenon where an individual with an attribute is discredited and rejected. The biological process of menstruation and menopause are ‘symbols of stigma'. Women may feel embarrassed to express the troubles caused by the physiological changes. They feel inferior or becomes concious about the biological changes during the transition and this results in social isolation and feelings of depreveation among women.Thus from the analysis it is evident that quality of life is affected by menopasual issues in physical, psychological and social domain.

9.4 Adjustment Strategies

Adjustment strategies refers to the coping strategies that women adopt to cope with menopausal difficulties. According to Emily Martin (1987) the embodied experiences of women is influenced by the cultural metaphors predominant in society. In a society which is controlled by the capitalist system,

western norms of medicalization will be predominant. The change that happens in women's body as the result of menopause becomes something that she needs 'to cope with' or 'to be controlled'. Hence to find out coping mechanisms the women in Kerala are adopting, Lazarus and Folkman model of coping strategies is used. Based on this coping strategies adopted by menopausal women are ascertained using a scale consisting of 8 statements. The Cronbach's Alpha score of .798 for the items shows good reliability. Factor analysis was conducted to understand the underlying factors and it was found that most of the menopausal women are adopting socio-religious strategies to adjust to the menopausal changes. The socio- religious strategies include the activities as religious involvement, relaxation activities and talking with friends and relatives. The women are also adopting coping strategies as exercise, dietary modifications and medical assistance. Among the women HRT is not popular but women adopt medical treatment for issues. The study shows that the adjustment strategies of the menopausal women vary on the basis of symptom severity, geographical zones, religion, education and socioeconomic status.

9.5 Interrelations between Determinants and Adjustment Strategies

To explore the interrelations between menopausal symptoms, social life and adjustment strategies of menopausal women Structural Equation modeling was conducted. From the path analysis it was found that vasomotor symptoms as hot flushes, heart discomfort, sleeping issues and muscle and joint problems are significantly related with social life of menopausal women related with home life, work life and social involvement. Urogenital issues as vaginal dryness, dysuria, urinary urgency and incontinence are influencing home life relations and social involvement of women. Social isolation of menopausal women is having impact on social life domains as home life and work life

relations. The women adopting more socio-religious coping strategies have less social isolation. The women with stress involves in social activities which can ease the stress experienced at home. Also it is evident that home life stress and work life isolation are inversely related. The relationship between bio-medical strategies and work-life isolation is stronger and positive. The women with work life issues are opting for coping strategies as exercise, dietary modifications and medical assistance. The women with work life isolation are adopting less socio-religious activities or in other words, women who are not opting for socio-religious coping strategies are facing difficulties at work place. The path model establishes direct relationship between social involvement of women and socio-religious coping strategies. The women who are having more involvement in socio-religious activities find relief from the stress and strain of menopause. It is also found that more than bio-medical methods, women are adopting socio-religious coping strategies. On the whole, it can be concluded that most of the menopausal women are adopting socio-religious coping methods for adjusting the physical, psychological and social issues.

9.6 Suggestions

Kerala which has the highest life expectancy in India, care of the aged is very important. In that contest to provide better quality of life for the menopausal women is very relevant. Kerala menopausal women are aware about menopause and menopausal symptoms. But the awareness regarding the menopause and related bio-social issues and adjustment strategies are not given much importance. There are various kinds of 'stigma' attached with the female reproductive process and discourses. Even today menopause is kept hidden or women are ashamed to discuss the issues related with menopause. Especially in a State like Kerala the women need to be more alert about the issues and coping

methods related with menopause. To promote better understanding education and intervention activities can be provided for menopausal women. The findings of the present study shows that symptom severity and adjustment strategies vary according to menopausal status, hence educational intervention is required according to menopause status. The families as well as public should be made aware about the changes and difficulties of mid-life women during menopause. Forums for discussions will be beneficial for stress relief and to enhance knowledge regarding menopause.

During the research it was noted that there was no statistics of menopausal women in Indian context after National Family Heath Survey-2 which was conducted in the year 1998-99.This shows the negligence towards menopausal women and their problems. Hence government, health workers and health care providers should give more attention to identify physical and social issues of menopausal women. Government should take necessary steps to address menopausal women's health issues through health care programmes and policies. While formulating programmes women's physical, psychological and socio-cultural aspects need to be taken into consideration.

Health care professionals and sociologist should pay more interest to identify the problems of menopausal women in specific cultural context. Inter disciplinary research with an interactive bio-psycho-social model of menopause will be effective to analyze women's menopausal experience.

Qualitative studies can be conducted to explore the issues related with menopause; innovative coping methods to have a satisfactory life during menopause and after can be adopted on the basis research. Counseling of menopausal women can be popularized through Menopause clinics. Menopause discussion forums for menopausal women can be formed to promote discourses

about menopause and related aspects. Steps should be taken to make them feel they are productive. They should be encouraged to take part in social activities which are beneficial for the society.

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Appendices

Appendix - 1

Menopausal adjustment of married women in Kerala: A Sociological Analysis

Questionnaire

This questionnaire is only for research purpose .Your answers shall be kept confidential. Kindly answer all the questions.

Name:…….…….(Optional)

1. Place…… District……..
   (Rural/ Urban)
2. Marital Status : ☐ Married ☐ Widowed ☐ Separated
3. Socio-Economic Status of the respondent
   (Please fill the details of the present family. Kindly fill personal details and details of family head without fail.*)

Sl No	Details	Age	Religion	Education	Occupation	Monthly Income
	Respondent					
	Husband					
	Children 1. 2. 3.					
	Grand Children 1. 2. 3.					
	In Laws / Others					

a) Total Monthly Family Income

☐ Below 1000 ☐ 1000-6000 ☐ 6000-16,000

☐ 16,000-30,000 ☐ Above 30,000

b) Total Land area

☐ Below 5 cents ☐ 6-15 cents

☐ 16 -25 Cents ☐ Above 25 Cents

c) House Type

☐ Thatched ☐ Tiled ☐ Terraced

☐ Single Storied ☐ Mansion

d) Total Cost of household items

☐ Below 7,800 ☐ 7800-15,600

☐ 15,600-78,000 ☐ Above 78,000

e) Cost of Land / House

☐ No Land ☐ Below5lakh ☐ 5-12.5 Lakh

☐ 12.5-50 lakh ☐ Above 50lakh

f) Do you own land or material possession in your name?

☐ Yes ☐ No

4. Total number of Pregnancies: ……...….

5. Age of first menstruation ……...

6. Did you had menstrual issues?

☐ Yes ☐ No

7. If Yes, what? …….....

☐ Severe pain ☐ Headache ☐ Ovary cyst

☐ Bleeding ☐ Other issues

Type of treatment: …….……

8. Have you had hysterectomy (removal of uterus)?

   ☐ Yes ☐ No

9. Did you adopt birth control measures? Permanent/ Temporary/Others……..….

10. Have you heard of the concept menopause?

    ☐ Yes ☐ No

11. Do you think you are menopausal?

    ☐ Yes ☐ No

12. At what age you became menopausal …….

13. Do you know the cause of menopause ?

    ☐ Yes ☐ No

14. If Yes, What is the cause according to you?

    ……..

15. According to you what is the average age for a woman to become menopausal……..…

16. Do you think menopause is due to decline in estrogen production?

    ☐ Yes ☐ No ☐ Don't Know

17. Have you heard of Hormone replacement therapy?

    ☐ Yes ☐ No

18. How did you gain knowledge about menopause?

    ☐ Family ☐ Friends ☐ Magazines

    ☐ Books ☐ Internet ☐ Others

19. Are you aware of the changes happening for you due to menopause?

    Aware / Not Aware

    Please read the following and mark in the appropriate columns according to the severity of symptoms that you experience during menopause. You are requested to mark ✓in the appropriate column.

20.

Symptoms	None	Mild	Moderate	Severe	Very Severe
a. Hot flushes **(sweating, episodes of sweating)**					
b. Heart discomfort **(unusual awareness of heart beat, heart skipping, heart racing, tightness)**					
c. Sleep problems **(difficulty in falling asleep, difficulty in sleeping through, waking up early)**					
d. Depressive mood **(feeling down, sad, on the verge of tears, lack of drive, mood swings)**					
e. Irritability **(feeling nervous, inner tension, feeling aggressive)**					
f. Anxiety **(inner restlessness, feeling panicky, tension)**					
g. Physical and mental exhaustion **(Forgetfulness, Loss of Memory)**					
h. Sexual problems **(change in sexual desire, loss of interest)**					
i. Vaginal Dryness (**sensation of dryness or burning in the vagina)**					
j. Bladder problems **(difficulty in urinating, increased need to urinate, bladder incontinence)**					
k. Joint and muscular discomfort **(Osteoporosis, pain in the joints, rheumatoid complaints)**					

21. Do you feel that these changes have affected your personal life

☐ Yes ☐ No

22. According to you what is the most severe issue due to menopause

☐ Physical ☐ Emotional ☐ Social

23. Did you consult doctor with physical issues related with menopause

☐ Yes ☐ No

24. If yes, how often do you visit a doctor?

☐ Always ☐ Sometimes ☐ Never

25. What type of treatment you prefer?

☐ Homeopathy ☐ Ayurveda

☐ Allopathy ☐ Others

26. Are you taking Hormone Replacement Therapy (HRT)?

☐ Yes ☐ No

27. Do you feel that HRT is good to reduce the issues related with menopause?

☐ Yes ☐ No

28. Are you aware of the side effects related with HRT?

☐ Yes ☐ No

29. Do you think there is a need to discuss the issues?

☐ Yes ☐ No

30. If yes, with whom? Family

☐ Friends ☐ Others

31. If no, Why?

☐ a) It is a taboo to discuss ☐ b) I felt no need to discuss

☐ Other reasons

32. Is there any change in the relationship with husband due to menopause

☐ Yes ☐ No

33. Are you concerned about how your husband will feel about you after menopause

☐ Yes ☐ No

34. Are you getting support from following persons? Please mark in appropriate box.

	None	Some	A Lot
a) Your Husband			
b) Your children/grand children			
c) Your parents/in laws			
d) Your sister/sisters in law			
e) Your friends/ Coworkers			

35. You are requested to respond to each statement by putting a circle around 1, 2,3,4 & 5 given against each item. 1 denotes 'Strongly Disagree'2 denotes 'Disagree' '3' denotes no opinion'4' denotes 'Agree ' 5 denotes 'Strongly Agree'

	1	**2**	**3**	**4**	**5**
a) Menopause is a medical condition	1	2	3	4	5
b) Menopause is a natural process	1	2	3	4	5
c) Menopause can be a time of change and growth	1	2	3	4	5
d) Menopause is an unpleasant experience	1	2	3	4	5

36. How do you perceive about yourself related with menopause. Based on your perception about yourself you are requested to respond to each statement by putting a circle around 1, 2,3,4 & 5 given against each item. 1 denotes 'Strongly Disagree'2 denotes 'Disagree' '3' denotes no opinion'4' denotes 'Agree ' 5 denotes 'Strongly Agree'

a) I am depressed about things that didn't troubled me earlier	**1**	**2**	**3**	**4**	**5**
b) I feel cheerful and confident	1	2	3	4	5
c) I feel good about my appearance	1	2	3	4	5
d) I am not satisfied with life	1	2	3	4	5
e) I feel my woman hood and youthfulness is lost	1	2	3	4	5
f) I experience freedom and better status in society	1	2	3	4	5

37. Do you follow any of the below mentioned activities in order to cope with the menopausal difficulties ? Based on the frequency of adoption of coping strategies you are requested to respond to each statement by putting a circle around 1, 2, 3, 4 & 5 given against each item. The following statements are to be rated on five point rating scale as5 - Always 4 - Often 3 - Sometimes 2 - Rarely 1 - Never

	5	**4**	**3**	**2**	**1**
a) Physical Activities ***(Yoga, Exercise, Walking etc)***					
b) Dietary Changes ***(Avoiding certain food or Adding certain food)***					
c) Medical Help ***(Visiting doctor,Vitamins, HRT etc)***					
d) Social Activities ***(Gatherings, Hangouts etc)***					

e) Talking with friends or relatives					
f) Indulging in Hobbies ***(Reading, Gardening etc)***					
g) Religious Activities **(Meditation, Prayer etc)**					
h) Other activities					

38. (b) If following, please explain the activities

……

39. Do you feel that the coping strategies adopted are helpful to reduce menopausal discomforts

☐ Ineffective ☐ Uncertain ☐ Effective

40. Which feeling you associate with menopause?

☐ Unhappy ☐ Unstable ☐ Depressed

☐ Freedom ☐ Relaxed ☐ Relief Happy

41. Given below are certain statements related to your experiences related with menopause. You are requested to indicate your agreement or disagreement with the statement by putting a mark around 1,2,3,4 and 5 given against each item.

1 Strongly Disagree	**2 Disagree**	**3 No Opinion**	**4 Agree**	**5 Strongly Agree**

a)	**HOME LIFE/EVERYDAY ACTIVITIES**					
b)	I get very irritable with people at home	1	2	3	4	5
c)	I lose my temper over small things	1	2	3	4	5
d)	I scream and shout at people at home	1	2	3	4	5
e)	I find housework easy	1	2	3	4	5
f)	Because of my symptoms, I sometimes have to get out of places, e.g. supermarket, bus	1	2	3	4	5
g)	I have a good appetite	1	2	3	4	5
WORK ACTIVITIES (this includes working at Home, voluntary, paid and unpaid work)						

h)	I am finding it increasingly difficult to do my work	1	2	3	4	5
i)	I'm afraid to tell anyone at work how I feel	1	2	3	4	5
j)	My symptoms do not interfere with my work	1	2	3	4	5
k)	At times I want to lock myself away at work	1	2	3	4	5
l)	I can work hard if I want to	1	2	3	4	5
m)	I worry about missing work because of my symptoms	1	2	3	4	5
n)	I worry that I might snap at friends or at people at work	1	2	3	4	5
SOCIAL LIFE & LEISURE ACTIVITIES						
o)	I enjoy talking as much as I did early.	1	2	3	4	5
p)	I am more isolated than I would like	1	2	3	4	5
q)	Because of my symptoms, I miss out on leisure activities	1	2	3	4	5
r)	Things I used to enjoy have become a bit of a chore	1	2	3	4	5
	I can concentrate on hobbies for as long as I used to	1	2	3	4	5
	I feel enthusiastic always	1	2	3	4	5

42. Do you have any suggestions?

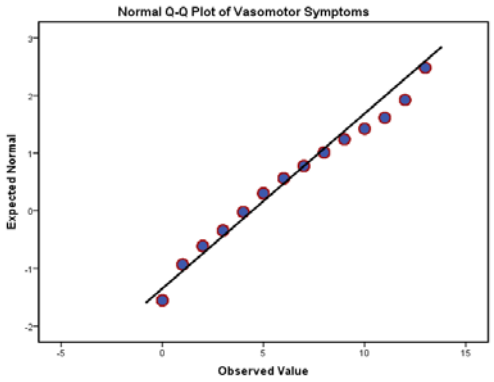
……

……

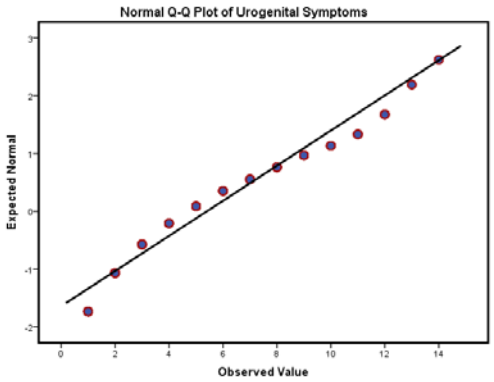
Appendix – 2
Normality Plots
Q-Q plots and Box Plots

Appendix 2.1

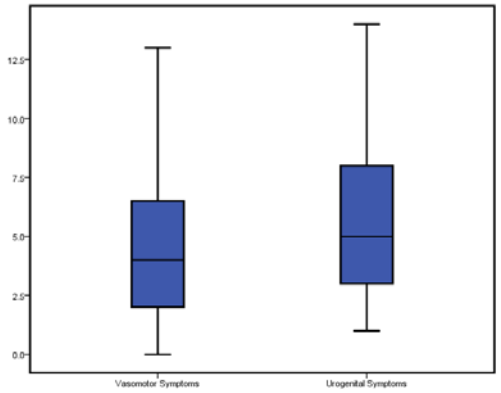
Q-Q Plot showing distribution of variables related with vasomotor symptoms and urogenital Symptoms



Q-Q Plot



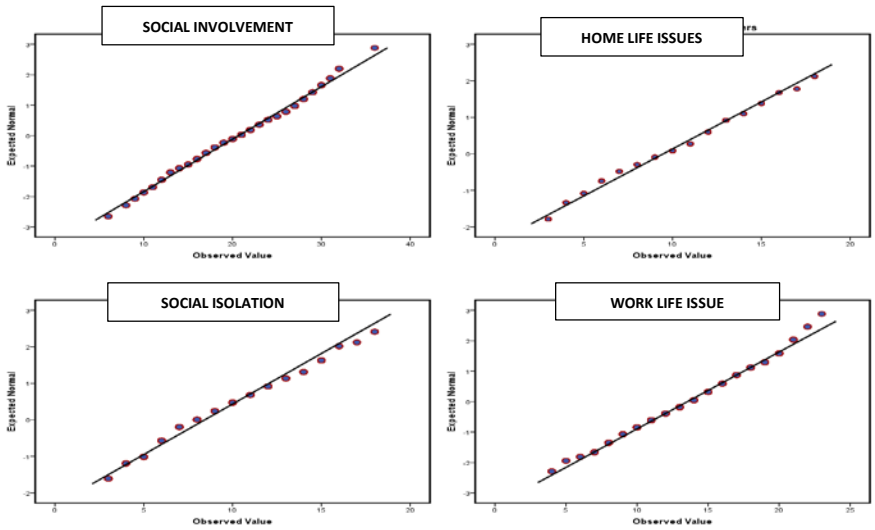
Q-Q Plot



Box Plot

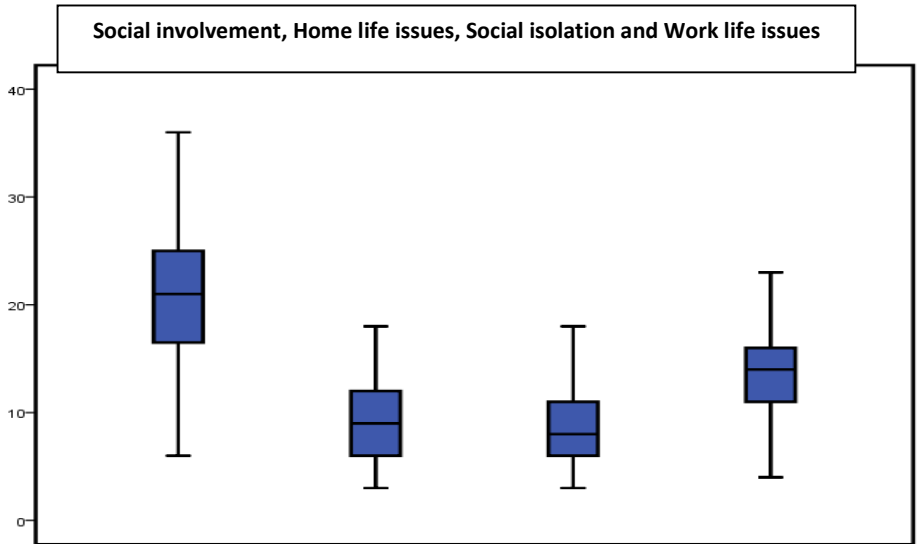
Appendix 2.2

Q-Q Plot showing distribution of variables related with social involvement, home life issues, social isolation and work life issues



Normal Q-Q Plot

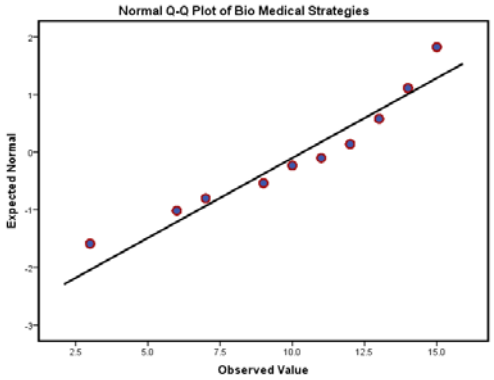
Box Plots showing the evaluation of Social –Life during Menopause



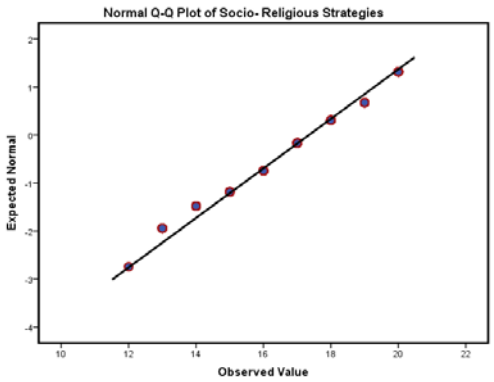
Box Plots

Appendix 2.3

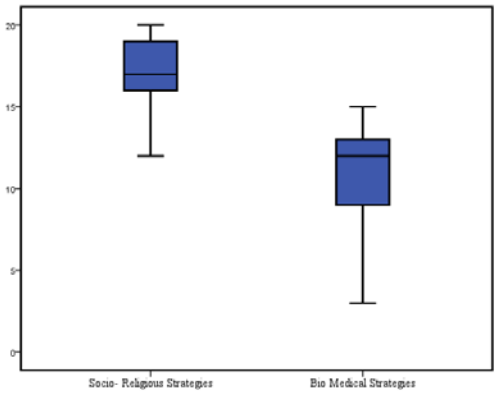
Q-Q Plots showing the variable distribution of coping strategies



Q-Q Plot



Q-Q Plot



Box Plot

Appendices 2 (2.1, 2.2, 2.3) explains about the normality data regarding symptom severity, social life factors and adjustment strategies of menopausal women. Here normality of data is assessed using Q-Q plots and Box plots. The Q-Q plots are used to find whether the distribution of a variable matches a given distribution. From the Q-Q plots it is evident that the points are almost clustering around the straight line so the selected variables are matching the test distribution.

A box plot is a highly useful visualization which indicates the distribution of data. It is often used in exploratory data analysis. The picture produced consists of the most extreme values in the data set (maximum and minimum values), the lower and upper quartiles, and the median. This is also used to find the outliners which are the extreme values. Here, the box plot diagrams show that, there are no outliers in the data and hence there are no extreme values to influence the mean. Since the evidence of normality is found, the researcher has the freedom to apply parametric methods of data analysis.

Appendix 3

Reduction Method of factor analysis

Appendix 3.1

Symptom severity of menopausal women

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.864	44.219	44.219	4.864	44.219	44.219	3.367	30.611	30.611
2	1.310	11.909	56.127	1.310	11.909	56.127	2.807	25.517	**56.127**
3	1.015	9.226	65.353						
4	.866	7.877	73.230						
5	.578	5.254	78.484						
6	.507	4.607	83.091						
7	.465	4.231	87.323						
8	.448	4.070	91.393						
9	.385	3.499	94.892						
10	.300	2.724	97.616						
11	.262	2.384	100.000						
Extraction Method: Principal Component Analysis.									

Here all item loaded on two factors (F1 and F2) with total variance explained being 56.12 percent.

Appendix 3.2

Social life factors of menopausal women

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.083	21.491	21.491	4.083	21.491	21.491	2.790	14.685	14.685
2	2.774	14.600	36.091	2.774	14.600	36.091	2.684	14.125	28.810
3	1.659	8.729	44.821	1.659	8.729	44.821	2.221	11.688	40.498
4	1.369	7.206	52.027	1.369	7.206	52.027	2.191	11.529	**52.027**
5	1.015	5.342	57.369						
6	.885	4.656	62.026						
7	.845	4.446	66.472						
8	.781	4.113	70.585						
9	.712	3.748	74.333						
10	.635	3.344	77.677						
11	.603	3.173	80.850						
12	.583	3.067	83.916						
13	.567	2.986	86.902						
14	.524	2.756	89.658						
15	.488	2.568	92.227						
16	.430	2.265	94.492						
17	.416	2.187	96.679						
18	.342	1.801	98.481						
19.	.289	1.519	100.000						

It is seen that 52.03 % variation in the responses on 19 variables can be reduced to 4 different factors using the standard procedure to consider those factors having Eigen values greater than 1.

Appendix 3.3

Adjustment Strategies of menopausal women

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.461	43.260	43.260	3.461	43.260	43.260	2.636	32.950	32.950
2	1.077	13.458	56.718	1.077	13.458	56.718	1.901	23.768	**56.718**
3	1.001	12.516	69.233						
4	.707	8.837	78.071						
5	.690	8.629	86.700						
6	.420	5.251	91.951						
7	.343	4.292	96.243						
8	.301	3.757	100.000						

It is seen that 56.71 % variation in the responses on 8 variables can be summarized to 2 different factors using the standard procedure to consider those factors having Eigen values greater than 1.

Appendix 4

Assessment of Model Fit

Appendix 4.1

The practical indices of fit include Comparative Fit Index (CFI), Goodness of Fit Indices (GFI), Adjusted Goodness of Fit Indices (AGFI), Minimum value of Discrepancy between model and the data against degrees of freedom (CMNI/DF), normed and non-normed fit indices (NFI/NNFI). The values of NFI, NNFI and CFI can range from 0 to 1. The Root mean square error of approximation (RMSEA) is an absolute measure of fit which is used to measure the non-centrality parameter. The acceptable values of fit indices and observed values are mentioned below.

Goodness of fit indices for the structural model

Model Fit Indices	Critical Values		Observed Values
CMIN			42.349
Df			11
CMIN/Df	Good fit Acceptable fit	: <3 : between 3 and 5	3.850
CFI	Poor fit Exact fit *CFI* >.95	: close to 0 : 1 : very good fit	0.934
GFI	Poor fit Exact fit *GFI* >.95	: close to 0 : 1 : very good fit	0.979
AGFI	Poor fit Exact fit *AGFI* >.95	: -∞ : 1 : very good fit	0.932
RMSEA	*RMSEA*<0.05	: very good fit	0.076

	RMSEA≤0.08 *RMSEA*>.08	: good Fit : poor fit	
NFI	*NFI*> 0.95	: good fit	0.916

In the present study the scores indicate that the hypothetical model fits the data well. CMIN/DF is reported as 3.850 is significant ($p < 0.05$). The values of NFI, GFI, AGFI and CIF were close to 1 and indicated good fit. If RMSEA is less than or equal to 0.08 it considered as good fit, here the RMSEA is 0.076 which indicates that model is good fit. All the above estimated parameters were significant at 5% level. Thus, it can be concluded that the hypothesized framework shows good model of fit.