KNOWLEDGE AND PERCEPTION OF MENOPAUSAL SYNDROME AMONG MARRIED MEN IN OLUYOLE LOCAL GOVERNMENT AREA, OYO STATE

BY

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DEDICATION

This work is dedicated to the ALMIGHTY GOD, the only one who knows the end from the beginning.

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ABSTRACT

Menopause is a physiological event characterized by the cessation of menstrual cycles for 12 consecutive months. The event triggers off unusual experiences such as vaginal dryness and decreased libido in women, thus leading to sexual dissatisfaction for men and pain in women. Few studies have examined men's knowledge of Menopausal Syndrome (MS) and their perception of the phenomenon. This study was aimed to investigate knowledge and perceptions of MS among married men in Oluyole Local Government Area, Oyo State, Nigeria.

The study was a descriptive cross-sectional survey which involved the use of a three-stage sampling technique to select 427 consenting married men aged >50years from wards, communities and households. Data were collected using a pre-tested, interviewer-administered, semi-structured questionnaire and Focus Group Discussion (FGD) guide. The questionnaire included questions on the following: socio-demographics, 20-point knowledge scale on MS and 36-point perception scale. Knowledge score 0-7, 8-15 and >15 were categorised as poor, fair and good, respectively. Perception scores 0-15, 16-30, and >30 were categorised as poor, fair and good, respectively. The FGD guide was used to collect data relating to men's knowledge and perception of MS. Qualitative data were analysed using thematic approach. Quantitative data were analysed using descriptive statistics and Chi-square test with the level of significance set at $\alpha_{0.05}$.

Age of the respondents was 53.6±5.2 years, 69.6% were aged 50-59 years and 66.5% had one wife. Some (52.7%) were Christians and those who had primary education (40.3%) topped the list. Majority (86.2%) of respondents correctly stated the period when women stop menstruating as between 45-50 years. Respondents' knowledge was 13.0±5.4 and 44.0% had good knowledge of MS. Majority (64.6%) were of the perception that MS could lead to reduction in couples' intimacy. Some (47.3%) of respondents were of the view that, men do not like having sex with women who have reached menopause because of the perceived fear of becoming "blind". Few (32.6%) of respondents stated that MS does not reduce sexual urges in women. Respondents' perception of MS was 33.0±8.3 and 85.4% had good perception. All the FGD participants were of the perception that MS is a natural process. Also, almost all FGD participants stated that MS cannot be treated or

be prevented but could be well managed. Majority of FGD participants expressed mutual understanding and romantic communication with their spouses as a means to alleviate discord. Significantly, more respondents who were aged 50-59 years (64.3%) had better knowledge of MS than those aged ≥60years (35.7%).

The study population had good perception of menopausal syndrome but their knowledge was inadequate. Educational interventions such as public enlightenment and training are recommended to address the challenges associated with the condition.

Keywords: Menopausal syndrome, Ageing spouses, Cessation of menses
Word count: 443

CERTIFICATION

I hereby certify that this study was carried out by Adenlyl Tajudeen ODEDELE in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria.

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Abbreviations

BMI	-	Body Mass Index
EPT	-	Oestrogen plus Progestogen Therapy
ET	-	Oestrogen Therapy
FMP	-	Final Menstrual Period
FSH	-	Follicle Stimulating Hormone
HERS	-	Heart Oestrogen/Progestogen Replacement Study
HRQoL	-	Health Related Quality of Life
HT	-	Hormone Therapy
IQR	-	Inter Quartile Range
LH	-	Luteinizing Hormone
MWS	-	Million Women Study
QoL	-	Quality of Life
PGWB	-	Psychological General Wellbeing Index
RCT	-	Randomised Controlled Trial
STRAW	-	The Stages of the Reproductive Aging Workshop
SWAN	-	Study of Women's Health Across the Nation
WHI	-	Women's Health Initiative
WHO	-	World Health Organisation

Definition of terms

Climacteric: Refers to the aged related transition in women from the reproductive to the non reproductive condition. It is a process rather than a specific point in time. Climacteric is sometimes, but not necessarily always, associated with symptomatology.

Induced menopause: refers to the cessation of menstruation that follows either surgical removal of both ovaries or iatrogenic ablation of ovarian function.

Married man: male who are in consented marriage with matured female that are living together as a household.

Menopause attitude: Menopause attitude means evaluative opinions, communication, and mental changes about menopause, and includes expressed feelings and thoughts about certain matters and mental attitudes as readiness to respond to certain situations or objects.

Menopause knowledge: Menopause knowledge implies the degree of understanding changes in the body as a transition from a potentially reproductive to a non-reproductive state, and is an assessment scale that measures knowledge toward child-bearing potential, menopause symptoms, changes in menstrual cycle and flow, menstrual irregularity, menopausal age, ovarian hormone levels, estrogen treatment effect and others using menopause knowledge survey of Polit and LaRocco in 1980 (Kwak, Park and Kang, 2014).

Menopause management: Menopause management implies activities implemented by women themselves to alleviate menopausal symptoms and prevent chronic diseases related with menopause in physical, psychological, emotional, social and spiritual aspects for changes in lifestyle patterns in middle-aged women.

Menopause symptom: Menopause symptom is defined when menstrual bleeding was not been observed for a full 12 months without a specific cause such as pregnancy or breast-feeding according to the standards of the world health organization (WHO).

Menopause: Globally, the term menopause is more used than climacteric but, it should be considered that "menopause" is referring to a specific event, the cessation of menses while "climacteric" refers to gradual changes of ovarian function that start before menopause and continue for a while thereafter.

Perimenopause: Includes the period immediately prior to menopause and the first year after menopause.

Postmenopause: Refers to the years after the FMP resulting from natural (spontaneous) or premature menopause.

Premature menopause: refers to women who are aged 39 years or less when menopause first begins.

Premenopause: Encompasses the entire reproductive period prior to menopause. Menopausal transition: represents the period of time before the FMP when the menstrual cycle and endocrine changes occur.

Symptoms: The term "symptoms" refers to perceptions related to changes in the functioning of the body, presented as complaints by individual women.

Syndrome: a medical condition that has a particular set of effects on one's body or mind.

CHAPTER ONE
INTRODUCTION

1.1 Background to the study

Menopause is defined as the time in a woman's life, usually between age 45 and 55 years, when the ovaries stop producing eggs (ovulating) and menstrual periods end. The menopause is part of the natural ageing process for women (Maclennan, Broadbent, Lester and Moore, 2004). Menopause is associated with natural progressive alterationsin the hormonal production for both men and women and is not an illness (Ramakuela, Khoza and Akinsola, 2012; (Jahanfar, Abdul Rahim, Sha Reza, Nor Azura, Sharifah Nom, Siti Asma, 2006). Consequently, menopausal symptoms, that could have negative effects on the women, are often unquestionably accepted as "just getting old" by humans. Hence menopause sometimes does present overwhelming challenges. Commonly experienced symptoms of menopauseinclude among others vasomotor symptoms such as hot flashes and night sweats. Reproductive symptoms include changes in sexual behaviour as may be characterised by less interest in sex and changes in sexual responses: dry vagina, vaginal discharge/infection and discomfort/painful intercourse (Käthe and Kenneth, 2014).

Psychological symptoms such as: anxiety, depression, mood changes, forgetfulness, poor concentration and sleep disturbances are also common in menopause as well as physiological changes chamcterised by headaches, heart palpitations; weight gain; hair thinning or loss. Thus it demonstrates that menopause has comprehensive effects on all body systems (Nastri, Lara, Ferriani, Rosa-e-Silva, Figueiredo, Martins, 2013; Chuni & Sreeramareddy, 2011; Adewuyi & Akinade. 2010; Women's Health Queensland Wide. 2009; Discigill, Gemalmaz, Tekin, & Basak, 2009; Bauld & Brown, 2009).

In some women, symptoms are moderate. while in others they are severe (Clark, 2005). Consequently, Bauld & Brown, (2009) concurs with the report by Women's Health Queensland Wide, (2007) that 50% experience some menopausal symptoms varying from mild to moderate while the other 25% of women have more severe problems. However, the literature concludes that25% of women do not experience any problem with

menopause and therefore manage the transition without assistance (Bauld & Brown, 2009; Women's Health Queensland Wide, 2007).

The menopause typically occurs at challenging times in women's lives. They may also be managing chronic health conditions, the risk of which increases with age. Women also usually bear the greater share of domestic responsibilities, child care and care of disabled, chronically ill or elderly partners or parents. Nearly half of respondents in this research reported having children still living at home, and one in five caring for an elderly or disabled relative or person (The British Occupational Health Research Foundation (BOHRF), 2010).

After menopause, a woman can no longer get pregnant. Menopause does not happen suddenly; most women experience several years of changes in their menstrual periods before they stop completely (Utian, Archer, Bachmann, et al., 2008). During this time, many women also start to have menopausal symptoms. These result from declining levels of estrogen in the body and can include hot flashes, night sweats, mood changes. sleep problems, and vaginal dryness (Kathe and Kenneth, 2014). A woman is said to have completed menopause once she has gone a full year without having a period. The average age for a woman to stop having periods is 51 years. Menopause is a normal part of a woman's life and does not always need to be treated. However, the changes that happen before and after menopause can be disruptive (Utian, Archer, Bachmann, et al., 2008; National Institutes of Health, 2005).

More detailed information about menopause is available by subscription Menopause/post menopause is a naturally occurring process in a woman's life. Menopause is a physiological event that can be defined as the cessation of menstrual cycles for 12 consecutive months (Xu, Bartoces, Neale, Dailey et al., 2005). Many literatures have documented several symptoms of menopause most women started to experience even at the peri-menopausal periods. Symptoms most commonly associated with this time of life are vasomotor instability, sleep disturbances, urogenital symptoms, breast tenderness and changes in menstrual cycles (Contestabile & Derzko, 2002). Vasomotor instability, often called hot flushes, hot flushes and night sweats (vasomotor instability during sleep), vary

in number, frequency, duration and intensity (Ayers, Forshaw and Hunter, 2011; Dormire 2003). Other symptoms are: irregular and/ or heavy periods, depression, headaches, insomnia, anxiety and weight gain, chilliness and shoulder stiffness (Ayers et al., 2011). Interestingly, rural Greek women and women in the Mayan culture have been found to report few problems during the menopause transition other than monthly menstrual cycle changes (Ayers et al., 2011). In fact, menopause can be a positive event for some women, particularly when it comes with a positive change in social roles and status (Ayers et al., 2011).

1.2 Statement of problem

Menopause is an unspoken, unattended, reality of life, the cause of which is still undeciphered completely by man. Menopause is one such midlife stage which might be overcome easily or make a lady miserable depending on her luck. This phase of life is shrouded with lots of myths and taboos (Kulshreshtha and Ammini, 2008). Early recognition of symptoms can help in reduction of discomfort and fears among the women. World Health Organization (WHO) has defined post-menopausal women as those women who have stopped menstrual bleeding one year ago or stopped having periods as a result of medical or surgical intervention (Hysterectomy/Oophorectomy) or both.

With increasing life expectancy, women spend 1/3rd of life in this phase (Vaze and Joshi, 2010). It is estimated that by the end of 2015 there will be 130 million elderly women in India, necessitating substantial amount of care (Mishra, Mishra and Devanshi, (2011). Menopausal symptoms, though well tolerated by some women, may be particularly troublesome in others. Severe symptoms compromise overall quality of life for those experiencing them. There is under-reporting of symptoms among Indian women due to socio cultural factors (Sagar, Borker, Venugopalan and Shruthi, (2013).

According to literature, at least 60% of ladies suffer from mild symptoms and 20% suffer severe symptoms and 20% from no symptoms (Turnbull, 2010). The present study was undertaken in a village called Anjarakandy Field practice area (FPA) of Kannur Medical

college (KMC), located at Kannur district of North Kerala with a service approach to give health-care advice to the needy. So the current study was conducted to know the prevalence of post-menopausal symptoms at Anjarakandy village in year 2009.

Beyond the reproductive aspects, women's experience of sex itself, during and after the menopause is an important element of their midlife experiences. According to Jurgenson, Jones, Haynes, Green and Thompson, (2014), past research has found that during and after the menopause, some women experience negative changes such as vaginal dryness and decreased libido. Hence, there is a concern for sexual satisfaction of self and their spouse. Thus, either directly or indirectly, the menopause symptoms will affect the spouse of any woman undergoing this natural transitioning. Menopause, with its physical and emotional changes appears to be an inevitable road for women to travel. The moment of choice for women at menopause involves not only whether they will embrace the new self or try to cling to identify from earlier life but also how the society in which they live views women after menopause. Amongst other things, many African marriages face difficulties when the moment of menopause arrives. This situation is often characterized by a second marriage or situation where husband and wife no longer share a room (Baloyi, 2013). On the basis of the above knowledge, this study aimed to assess the knowledge and perception married men on menopausal syndrome in Oluyole Local Government Area, Oyo State.

1.3 Justification

This study focuses on the knowledge and perception of married men regarding menopausal syndrome among. It is therefore unique in that it will be a relevant research as little information is available on this subject matter. The approach of the current study is holistic as it borrowed from the tenets of both the biomedical and socio-cultural proponents of menopausal syndrome and the feminist ideology. This study however viewed menopause as not only affecting the women but also their spouses who may be directly or indirectly affected. Directly in the sense that he needs to meet the financial obligation of maintaining good health by proper management of symptoms and hormonal modification and needs to gain sexual satisfaction from their partner and indirectly in the

sense that the wife bears the biomedical, the physiological and the psychological burden of pre-menopause, menopause and post-menopause alone.

The outcome of this study will provide data and information that would encourage other researchers to explore this important and yet neglected aspect of bio-social health. Moreover, the data and the information can be further applied by those who are interested in the design and implementation of appropriate health education and intervention as well as policy formulation on menopause targeting the men as potential provider of support to their spouse to ensure less stressful transition from reproductive to non-reproductive phase of their lives, given the attendant complications.

1.4 Research questions

1. What is the level of knowledge of married men on menopausal syndrome?
2. What is the perception of married men on menopausal syndrome?
3. What are the sources of information available to married men on menopausal syndrome?
4. What are the perceived implications of menopausal syndromes on marital relationship?
5. What coping strategies are being adopted by men whose wife has reached menopause?

1.5 Broad objective

To investigate the knowledge and perception of menopausal syndrome among married men in Oluyole Local Government Area, Oyo State.

1.5.1 Specific objectives

1. Assess the level of knowledge of married men on menopausal syndrome
2. Determine the perception of married men on menopausal syndrome
3. Identify sources of information available to married men on menopausal syndrome
4. Examine the perceived implications of menopausal syndromes on marital relationship

5. Determine the coping strategies of menopausal syndromes on marital relationship

CHAPTER TWO

LITERATURE REVIEW

This chapter contained review of relevant literature on the subject matter of this study; emphasis will however be placed on certain concept as related to the current study, using the following sub theme: Differeat conception of menopause; The Biomedical conception; The socio-cultural conception; The feminist conception; Management of menopausal syndrome and treatment of certain physical or patho-physiological symptoms; Knowledge of men on menopause; Perception of menopause among men; Implication of menopausal syndrome on marital relationship; The chapter ended with an appraisal of "Theory of Planned Behaviour (TPB) and the associated Theory of Reasoned Action".

2.1 Concept of menopause

According to the North American Menopause Society, menopause is defined as a natural event whereby a woman has missed her menstrual period for 12 consecutive months (not explained by other medical factors) (North American Menopause Society, 2013). In general, menopause occurs around the age of 51 years (North American Menopause Society, 2013). Of course, there are variations across different countries, but in general, the mean age ranges between 47 and 51 years (Sievert, 2014).

According to the U.S. Census Bureau, there were nearly 157 million women in the United States in 2010, or slightly more than half (50.8%) of the total population (U.S. Census Bureau, 2011). Women 45 to 54 years of age compose 14.4% of the total population (U.S. Census Bureau, 2011). If the average age of menopause is around 50 years of age, approximately 10% of the female population at any time will be going through menopause. Contrary to popular myths, not all of these women will have a negative experience of menopause. Depending upon the perspective that one holds about this "change of life," it can be viewed as either negative or positive. Western medical establishments tend to describe menopause as a "deficiency disorder," resulting in a failure to produce "normal" levels of estrogen. Consequently, this perspective views rtenopause as a medical disorder and a negative event, one for which estrogen replacement therapy is needed (North American Menopause Society, 2013). For other

women, it can be either a positive or a neutral experience. Some view menopause as a natural developmental transition, symbolizing a new era characterized by more freedom. If this view is taken, then menopause is viewed as a positive event. For other women, menopause is simply a neutral experience with minimal significance attached (North American Menopause Society, 2013).

Whether the experience of menopause is positive or negative, it is influenced by many factors. Many of the meanings attached to menopause are influenced by cultural and social norms. Cultural meaning systems are cognitive structures that influence how individuals in society perceive or view social phenomena (Society of Obstetricians and Gynaecologists of Canada, 2009). Ultimately, health phenomena are impacted by an intricate network of meanings derived from a host of factors, including life circumstances, fears, expectations, the help-seeking experience, and social reactions of friends, family members, and authority figures (Society of Obstetricians and Gynaecologists of Canada, 2009).

However, it is important to note that the use of the term menopause in the present day research and textbooks combines both the biomedical as well as socio – cultural concepts of menopause. Biomedical models tends to take a disease-oriented approach, with declining ovarian function and decreased hormonal levels characterized as pathological (The Women's Health Council, 2008; Goldstein, 2000). Within this framework, the menopause is conceived of as an oestrogen deficiency disease, which is characterized by 'a cluster of symptoms' necessitating treatment with Hormone Replacement Therapy (HRT) (The women' Health Council, 2008). The socio-cultural model of menopause on the other hand is entwined with the view of the feminist that tries to discourage view of menopause as negative consequences of ageing in women.

Menopause is a process which typically occurs during the ages of 45 and 55 and is marked by a reduction in estrogen and progesterone levels and eventual cessation of menstruation (Njoku and Enock, 2013). The process is deemed complete after one year without menstruating. During the transitional, or perimenopausal period, women may experience symptoms which include: reduced frequency prior to cessation of menstrual

periods, when pregnancy is still possible); heart pounding or racing; hot flashes, with intense warmth, flushing and perspiration, usually worst in the first 1 - 2 years; night sweats; skin flushing; sleeping problems, including insomnia; decreased interest in sex and possibly decreased response to sexual stimulation; forgetfulness; headaches; mood swings including irritability, depression, and anxiety; urine leakage; vaginal dryness and painful sexual intercourse with thinning and loss of elasticity in the vaginal wall; vaginal infections; joint aches and pains and irregular heartbeat (palpitations) (Osaienren, Ubanghu, Nwadinigwe and Ogunleye, 2009).

The transitional phase of menopause is classified by (Harlow, Gass, Hall, Lobo, Maki, Robert, Rebar, Sluss and de Villiers, 2012) as Stage –2 (early) and Stage –1 (late) and the postmenopausal phase as Stages +1 (early) and +2 (late). Stage –2 usually involves variable menstrual cycle length and increased levels of follicle-stimulating hormone (FSH) and low antimullerian hormone (AMH) and antral follicle count (AFC). Stage –1 is characterized by the onset of skipped cycles or amenorrhea of at least 60 days and continued elevation of FSH (Harlow, et.al., 2012). Late transition is marked by the occurrence of amenorrhea of 60 days or longer, more variable cycle length, extreme hormonal fluctuations and increased prevalence of anovulation (late) (Harlow, *et al*, 2012).

Most women do not need treatment of menopausal symptoms. It is either the symptoms resolve on their own or their level is tolerable (Womenshealth.gov, 2010; Medical News Today (MNT), 2009). The treatments, when needed, include medications and lifestyle changes. Hormone Replacement Therapy (HRT) or Hormone Therapy (HT) helps to diminish symptoms such as vaginal dryness, itching, and discomfort, urinary problems, bonedensity loss, hot flashes and night sweats. However, HRT has risks as well as benefits. Other treatments include: Low-dose oral contraceptives to help stop or reduce hot flashes, vaginal dryness, and moodiness and either over the-counter or prescription remedies for vaginal discomfort, such as estrogen creams, tablets, or vaginal rings (Womenshealth.gov., 2010; Medical News Today (MNT), 2009).

2.2 Epidemiology of menopause

The average age of FMP varies between different ethnical groups. In Europeans and North American Caucasians the average age is about 51 to 52 years (Lindh-Astrand, 2009; Gold, Bromberger and Crawford, 2001) whereas in African Americans ((Lindh-Astrand, 2009). Hispanics and Mexican women26 the average menopause age is a few years earlier than in Caucasian women. Dnitva and co-workers (Dratva, Gomez, Schindler, et al., 2008) published data from a European cohort study showing that the mean age of menopause was 54 years and thus higher than previously reported but the results could have been affected by the high percentage of non-smokers in the cohort. Similar findings had previously been reported by Rödström and colleagues (Rodstrom, Bengtsson, Milsom, Lissner, Sundh and Bjourkelund, 2003). Among factors other than genetic constitution that affect the age at menopause, smoking is associated with earlier menopause whereas parity, BMI, nutritional factors, age at menarche, hormonal contraceptives, and socioeconomic factors have all been discussed as factors but none has been proved to definitely affect age at menopause (Kok, van Asseli, van der Schouw, Peeters and Wijmenga, 2005). A recent study (He, Recker, Deng and Dvornyk, 2009) showed that alcohol consumption significantly predicted the age of menopause with women who consume alcohol having menopause one year earlier, on average, than women who did not consume alcohol.

2.3 The endocrinology of menopause

At birth the ovaries contain approximately 1-2 million primordial follicles, each consisting of a single oocyte surrounded by a single layer of granulosa cells. At puberty there are about 400 000 follicles remaining and each month a number of spontaneously developing follicles are further stimulated by FSH. Approximately two weeks after menstruation one of these follicles has developed into a dominant, mature follicle which, by means of negative feedback, makes the others go into atresia. This mature follicle produces the main part of the oestradiol and ovulates as a reaction to the midcycle Luteinizing Hormone (LH) surge after which the follicle is transformed into a corpus luteum, now producing not only oestradiol but also progesterone (Lindh-Astrand, 2009).

About one week after the ovulation the corpus luteum reaches its peak and thereafter starts to involute and hormone production deceases again, leading to a menstrual hleeding about two weeks after ovulation. As women age the ovarian follicle number falls due to continuous recruitment of primordial follicles of which some reach ovulation but the majority goes into atresia. The low activity of follicles after 40 to 50 years of age contribute to increased FSH and decreases in oestradiol and inhibin (Speroff and Fritz, 2005)

During the last four years before menopause on the average the cycles are usually irregular. Some ovulatory cycles become shorter and others longer because some follicles are of lower quality and do not reach ovulationleading to irregular, an ovulatory cycles (Lindh-Åstrand, 2009). Finally oestradiol production is insufficient to stimulate the endometrium and the bleedings cease and menopause has been reached.

Women's fertility declines significantly in the perimenopause but as long as ovulation can occur some risk of pregnancy persists. In 40 year old women the monthly chance to conceive is about 8% and thereafter decreases continuously. Use of contraceptive methods is therefore recommended for two years after amenorrhea in women below 50 years of age and for one year in women above 50 years of age, i.e. when menopause may be confirmed (The ESHRE Capri Writing Group, 2009).

2.4 Perception of women menopausal syndrome

Menopause is a physiological event which characterized by apparently falling levels of estrogen and can lead to the development of symptoms such as hot flashes, night sweats, vaginal dryness, mood swings, libido decline, insomnia, lethargy, fatigue, irritability, anxiety, depression, heart palpitations, and joint pain (Sevil, Masoumeh and Fahimeh, 2014). The symptoms of menopause are typically multifactorial in nature (Rohde, 2008), and are different regarding women's culture, society, education and economic condition (Delanoë, Hajri, Bachelot, Mahfoudh Draoui, Hassoun, Marsicano, et al., 2012; Ayrainci, 2010). In fact, the experience of menopause is unique to each individual, and its meaning differs among women (Mahadeen and Halabi, 2008).

Menopausal symptoms have shown differences among women in different countries, among women of different origins living in the same country, and among women born in the same place living in different countries (Delanoë, et al., 2012). For example, the frequency of hot flashes ranges from 80% among American women, to 12% in Japanese, with none at all among the Mayans (Sevil, et.al., 2014). In the Western part of the world the menopause is often considered as the negative part of life, and described as a deficiency syndrome (Sevil, et.al., 2014). Furthermore, the medical literature is mostly dominated by biomedical opinions about symptoms and loss of well-being.

Some women experience a profound sense of loss at menopause (e.g. loss of maternal role, youth or beauty) which may lead them to feel that life has lost its purpose (Sevil, et.al., 2014). A qualitative research in Turkey showed that getting old, loss of sexual interest and vasomotor symptoms were negative experiences in menopausal women. Emotional instability or irritability is among the prevalent complaints and lack of family support seemed to worsen mood swing (Cigcili, 2008).

Understanding these concerns might contribute to the enrichment of the existing literature by providing evidences from a different culture, and helping to design effective supportive strategies and appropriate infrastructures for women to improve their lives during the menopausal period. Overall menopausal symptoms are found to be less common in societies where menopause is viewed as a positive rather than a negative event (Saeed, 2008). Women with negative attitudes towards the menopause experience more frequent and severe symptoms during the menopausal transition (Ayers, et.al., 2010).

A quantitative research to address specific aspects of the menopausal transition showed that Iranian women consider menopause as a natural event. But exposure to a new situation and deal with the phenomenon depends on their attitudes. Iranian women's concerns are about complications such as osteoporosis, sexual problems and aging (Jamshidi and Behboodi, 2011). They also experience positive and negative changes during the menopause, and their negative experiences are associated with the severity of symptoms (Alidoosti, Abbaszadeh and Hosseininasab, 2012).

In spite of extensive research on menopausal symptoms and its psychosocial aspects, little is known about the personal meaning or view of the menopausal transition as experienced by Iranian women. Furthermore, there is not any exclusive study about concerns of menopausal women regarding their culture. The current phenomenological study explored the lived experienced concerns of menopausal Azeri women (Sevil, Masoumeh and Fahimeh, 2014).

2.5 The feminist conception

The feminist have challenged the prevailing biomedical model of menopause, objecting not only to the definition of middle-aged women as 'deficient' (Hunter, O'Dea & Britten, 1997; The Women's Health Council, 2008) but also to the "equation of women with their reproductive capacities" (The Women' Health Council, 2008; Dillaway, 2005). Feminist approaches therefore seek to supplant this pathological approach to the menopause, asserting instead that it is a normal life change (Goldstein, 2000). Within this feminist discourse, the menopause is reconstructed as a positive, significant 'rite of passage' that provides space for re-evaluation and new-found freedom. Moreover, the end of menstruation is redefined as gain, as opposed to the discourse of loss which predominates in the medicalised menopause (Coupland and Williams, 2002). This has led to a new wave of research undertaken by feminists seeking a broader understanding of what the menopause means for women. Hvas (2006) notes that more than simply being conceived of as a deficiency syndrome, the menopause can be viewed as a complex transition involving biological, psychological, social and cultural factors. Hvas, Thorsen & Sondergaard (2003) note that doctors most frequently encounter women with more significant menopausal symptoms, thereby serving to create a bias among doctors, casting the menopause in an overly negative light. Hvas (2006) argues that to simply focus on the severe symptoms of the menopause and on the diseases which women may experience in later life, serves to create a negative picture of middle – aged women, a picture which is often at variance with their own experiences. This study will adopt a more holistic view of menopause and menopausal syndrome in women.

In spite of the fact that men experiences progesterone loss due to ageing and suffers what is described as male menopause (Andropause). There is a progressive reduction in

testicular function in men between the ages of 25 and 75 years. with peaks in incidence between 45 and 50 years. During this time the concentration of bio-available testosterone can fall by almost 50%. although there is a great deal of variation between individual men (Charlton, 2004). In women oestrogen production by the ovaries drops suddenly at the menopause (Charlton, 2004). Thus, leading to the view that menopause is a condition peculiar to women and this may be due to many symptoms that accompany the women's experiences of menopause. Although some studies have mentioned, care giver and family support as basics in a successful sail through the stages of menopause (Ozumba, Obi, Obikili & Waboso, 2004). This idea is yet to be streamlined for health benefits of the women during menopause.

In his book feminine forever, Brooklyn gynecologist Robert Wilson (1966) argued that the menopausal woman was 'an unstable oestrogen starved' woman who is responsible for 'untold misery of alcoholism, drug addiction, divorce and broken homes'. This belief might seem extreme to 21st century minds, but western biomedical science still promotes a view of menopause symptoms affect many women approaching menopause. Typical menopause symptoms, such as hot flashes or night sweats, are caused by changing hormonal levels in the female reproductive system. Almost all women notice early symptoms while still having periods. This stage of gradually falling and fluctuating hormone levels is called peri-menopause, which often begins in the early 40s.

During the time in a woman's life when menopause occurs, other changes, unrelated to the cessation of menstruation occur. Despite a large number of epidemiological studies, there is still conflicting information concerning the direct effects of menopause as opposed to effects of aging itself and related psychological changes (Rodstrom, 2003). Researches have showed that an unprecedented number of women will experience menopause in the next decade, although the timing of menopause affects long term disease risk, little is known about factors that affect this timing (Gold, Bromberger, Crawford, Samuels, et al., 2001).

Previous studies have reported incidence and prevalence relative to the number of people who participated in such study. Moreover age of target population also plays a significant

role in epidemiological classification of menopause, likewise socio-cultural and environmental constructs. For instance, result of a study showed that ages of menopause ranged from 44-56 years with the mean and median ages of 49.4 ± 3 and 49 years respectively. Of these 18.95% of women were found to have reached menopause at 49 years and 14.9% at 48 years. Only 1.9% years and 1.5% of women became menopausal at 44 and 56 respectively out of the total number of 402 women sampled (Ozumba. Obi, Obikili, & Waboso, 2004).

However, aside the epidemiological issues and the burden of menopause, there is a very important issue of relationship since human by nature are social animal. Borrowing from this view, Dillaway (2005a) notes that an important contribution of feminist literature has been a growing recognition that women experience the menopause within specific social contexts. The menopause then is not simply a biological process. There exists a social components also, for this reason, Dillaway (2005b) describes the menopause as a 'biosocial' experience. Billard, Kuh, and Wadsworth (2001) agree noting that the menopause is often just one of the multitudes of changes which occur during women's midlife. They argue that a bio-medical construction of the menopause underestimates the significance of the social context in which individual women experience the menopause. They collected data from women ages 47 and 50 years. 65% percent of whom made comments in relation to other events, ranging from caring for elderly relatives and changing relationships, to changing employment and financial circumstances that framed women's experience of the menopause. For many women, the menopause was perceived to be of less importance than the social and other health experiences which occurred concurrently in their lives (Billard, Kuh, and Wadsworth, 2001).

The significance of non-menopause related health issues also arose in Dillaway's (2005a) research. For example, one participant experienced more trauma over the deterioration of her experience of chronic back pain than over the menopause. Apart from these, Dillaway's (2005b) research with 61 women found that gendered beauty ideals created the context where, for some women, menopausal bodily changes proved problematic (The Women's Health Council, 2008). To maintain a feminine body therefore, is to preserve an unchanging body. Consequently women perceive bodily change negatively

In her study, the vast majority (92%) described the menopause in terms bodily change. Moreover, 85% of participants attributed the changes in the physical appearance to the menopause, and 67% defined these changes as negative (The women' Health Council, 2008).

Research on menopause has long been polarized (Collins, 2011). The medical model of menopause has focused on identifying symptoms of the climacteric syndrome. Endocrinologists have defined menopause as a deficiency disease requiring treatment, with symptoms believed to be directly linked to the lack of oestrogen. Social scientists, on the other hand, have emphasized the social and cultural construct of menopause, holding that whether and how climacteric symptoms are experienced is influenced by that meaning. There is evidence, for instance, that negative attitudes and beliefs before menopause may predict depressed mood or other symptoms at menopause (Hunter, 1990; Olofsson and Collins, 2000). Recent trends in epidemiological research have highlighted the need to integrate these opposing views into an interactive model. Flint suggested a psycho-bio-cultural model of menopause for interdisciplinary research and for a better understanding of the different aspects of women's health (Flint, 1994).

- A study found that few participants stated that the changes associated with the menopause have caused their partners to worry about their health and welfare, especially in the period before these changes were established as menopausal. Accounts of unsupportive or controlling relationships tended to be confined to narratives about a previous marriage or relationship (The Women's Health Council, 2008). Many of these were directly associated with menopausal symptoms – in the case of night sweats and hot flushes, irritations were reported over the management of bed covers and the opening and closing of windows. While most participants presented episodes of conflict as transient (though often frequent) features of an otherwise stable relationship, the following participant describes it more in terms of a steady state of tension (The Women' Health Council, 2008). Thus the knowledge and the support of such spouse is required for successful and less complicated transitioning.

- According to a study by Ozumba et al., (2004), although menopause is a universal experience, perception among women differs. While 25% of women categorize menopause as a natural event and had positive attitudes towards it, majority 70% felt frustrated and were apprehensive about it. Stable home and good counseling were predictors of positive attitudes towards menopause. A negative attitude towards menopause on the other hand was associated with more vasomotor symptoms, low level of family support, limited information about menopause and professional careers. Professional women reported more menopausal symptoms, and were often apprehensive about diminishing abilities to cope with their jobs, changes in their body, loss of feminity and their husband losing interest in them. The situation was worsened by lack of family support as the children got emancipated and started their own homes.

The typical African extended family system, where distant relatives offer support is rarely practised in the cities (Ozumba et al., 2004). Hence in most cases the most readily available family member to render the needed support is the husband of a woman undergoing the stages of menopause, the knowledge and perception of men thus became very important if they will provide adequate support using the right approaches. However, there is dirt of information on knowledge and perception of men on menopausal syndrome the basis upon which the current study derives its immediate value.

2.6 Menopause symptoms

Menopause is sometimes, but not necessarily always, associated with the appearance of several symptoms. The presence of sporadic symptoms cannot be considered as a strong impact over the woman, is not clinically relevant and does not indicate the need for treatment (Hoga, Rodolpho, Gonçalves and Quirino, 2014). The female's negative social attitudes towards menopause can influence the way in which its symptoms are experienced and, similarly, the way in which menopause is experienced influences women's attitudes towards the menopause symptoms (Nosek and Kennedy, 2012, Ayers, Forshaw and Hunter, 2010).

The symptoms related to menopause, especially the meanings attributed to this female condition, can vary across cultures (Avis and Crawford, 2008). Especially in western societies, menopause has been largely considered as a pathology and as a phenomenon associated with negative and long-term consequences on women's health. This vision reflects the lack of specialized literature focusing on the encouragement of quality of life during menopause. Furthermore, there are no precise parameters to compare whether the experience of women living with menopause is within the "normal" range (Hoga, et.al., 2014). The psychosocial factors modulating the menopausal symptoms, highlighted in scientific literature, influence women's selfcare behaviors (Binfa, 2004). Although the woman's body is strongly shaped by the reproductive biological cycle, menopause cannot be reduced to only the human physiology. The healthcare providers need to comprehensively assess women living with menopause, taking into account their psychosocial and cultural backgrounds, as well as their personal and subjective perspectives (Hoga, et.al., 2014).

Researchers have found that the current care for women experiencing menopause has not included the provision of comprehensive support, including the need for education on bodily and emotional changes and approaches to selfcare. To change health practices, some authors have assigned the need to develop health promotion actions, focused on the physical, psychosocial and cultural aspects related to menopause (Ayers, et.al., 2010; Brazil Health Ministry, 2008). Therefore, the potentialities of health education activities as a successful strategy to promote emancipatory and therapeutic processes towards menopause, through raising their awareness and autonomy regarding attitudes towards health have been addressed (Meyer, Mello, Valadão and Marcos, 2006).

While essential for provision of the appropriate support to women experiencing menopause, no systematic reviews have been conducted that focus on the experiences of menopause lived by women worldwide. A preliminary search for primary studies focusing on this issue revealed that this topic has been investigated qualitatively by researchers from different countries around the world.

This systematic review will consider the experiences of women during the transition between the reproductive years, through menopause and beyond - women who are living the menopausal transition and women who have reached menopause. Several aspects will also be considered, such as physical, emotional, social and cultural perspectives involving the experiences of menopause. All of the selfcare activities performed to improve wellbeing as well as quality of life, by the women who are living or have lived the experience of menopause will be investigated in this systematic review.

An initial search of the secondary databases was conducted to establish whether a review about the questions in this review has already been conducted. The Joanna Briggs Institute and the Cochrane Library databases were examined to verify whether a systematic review about this theme had previously been conducted or was in progress. Two systematic reviews on the topic of menopause were found, but concerned the experience of symptoms (Tao, Teng, Shao and Wu, 2011; Ayers, et.al., 2010). It was highlighted that many women view hormone therapy (HT) favorably for symptom relief; although, there are clear hazards associated with long-term HT use. The high value attributed by women to the media as a source of information equivalent to health providers has also been shown. The other one, which examined the relationship between attitudes towards menopause and symptom experience, highlights that women with more negative attitudes towards menopause report more symptoms during the menopausal transition (Ayers, et al., 2010).

Accordingly, the healthcare professional should consider the current challenge concerning the needs toward the implementation of evidence-based practice (EBP) in menopause related health services. EBP is a process which assembles many steps, considering the best appraised and compiled international evidence as part of the daily decision making of health professionals. This process starts with generating knowledge, followed by the synthesis of the best evidence and concluded when the best evidence is implemented in healthcare. Developing EBP in health services presumes the association among clinical expertise, background factors involved in the health issues and patients' choices. Today, only a small proportion of healthcare practices are based in evidence (Pearson and Field, 2007).

2.7 Determinants of menopausal experience

Age

As stated above, the menopausal experience can vary from women to women. The literature suggest that age at natural menopause, attitude, symptoms and knowledge of menopause vary among different ethnic groups, culture and population, which supports conclusions of other investigators that it is not possible to generalize from one population of women to another population about menopausal issues (Tschay, Mulatie and Sellakumar, 2014).

There are possible reasons, which may be responsible for observed difference in menopausal experience. To mention some of the factors: socioeconomic status, educational background, marital status, medical care, age women . There is variability in determining the exact age of natural menopause, the average onset of menopause in the study of (Tschay, Mulatie and Sellakumar, 2014) in Mexico women, was 46.5 years. Other studies also show variations in reported age at menopause: 50.9 years among Norwegian women, 44.3 years among Mayan women and 48 years among the African women of Nigeria (Al-Sejari, 2005).

Marital status

Studies have shown that in Saudi there is a significant difference based on marital status, i.e. married women had almost four times more symptoms than unmarried women. This may be because married women have a different life history, such as sexual activity, use of birth control and the context of the culture (Al-Sejari, 2005). Inconsistent with the above research finding, (Tschay, Mulatie and Sellakumar, 2014) reported no significant differences were observed based on marital status and the experience of menopausal symptoms.

Education

Past research (Gold, Sternfield, Kelsey, Brown, Mouton, Reame, Salamone and Stellato, 2009) among Indonesian women found out that educated women reported more frequent menopause symptoms than non- educated women. As opposed to the above, (Gold, et.al 2009) studies showed that less educated women reported more menopausal symptoms than highly educated women.

Attitude

Regarding menopausal attitude, research conducted by (Leon, Chedraui, Hidalgo and Ortiz, 2007) in Ecuador revealed that married women were not more concerned about the menopause compared to the married men. Other researcher from Bahrain (Jassim and Al-Shboul, 2007) found out that, divorced and widowed women had the most positive attitude towards menopause. The widowed and divorced women do have positive attitude since no longer have worry about the spouse view of menopause (Jassim and Al-Shboul, 2007), it is also indicated that wives express positive attitude towards menopause than their husbands (Tsehay, Mulatie and Sellakumar, 2014; Jassim and Al-Shboul, 2007), explained that attitude towards menopause significantly differ based on education, with the university group having the least positive attitude and the illiterate having the most positive attitude. However, the findings of (Tsehay, Mulatie and Sellakumar, 2014) in their study of the influence of demographic characteristics on women's attitude towards menopause did not find a significant relationship between women's attitude and their educational level.

Attitude towards menopause is highly related with the experience of menopausal symptoms (Dennerstein, Col, Guthrie and Politi, 2009). Reported that positive attitude is associated with positive experience of menopause whereas negative attitude is associated with both negative symptoms and negative experiences.

Different women will experience menopause at different times but if it arrives early then some women can feel quite cheated, and have many questions. Some may never have

even considered that this could be a possibility which would make it even more difficult for them to seek help or talk to their partner (George, 2015).

There is an expectation for women between 45 and 55 to go through the menopause, and at last it is being spoken about publicly but it still remains a 'taboo' subject for many women and their partners. If a women doesn't go through the menopause in this 'normal' time frame then she can often become fed up, tired and agitated, feeling odd.

Many women, more so now, struggle with the idea of ageing. We are a society that values youth, supple, smooth skin and fitness above experience, slightly less elastic skin and maybe a bit slower to run the 'Race for Life.' Body shape alters with age and women need to be able to accept this rather than fight it, I'm not suggesting they give into it and stop exercising, having a healthy diet etc. But not to pressure themselves with unrealistic expectations. The pressure to remain young comes from both inside and outside the person and being able to share her thoughts with a non-judgemental, supportive partner really helps. However, no matter how many times she hears "you look lovely", she has to believe it for herself.

Many perimenopausal and menopausal women experience a loss of sexual desire and this can be the result of multi-hormonal problems related to oestrogen as well as androgens. This combination of oestrogen deficiency leading to vaginal atrophy and reduced clitoral sensitivity, and androgen deficiency leading to loss of libido, can obliterate sexual satisfaction and cause the woman to feel she is no longer sexually attractive (Drupal website, 2015; Dalrock, 2011).

Attitude to menopause

These days most women can expect one third of their life to be post-menopausal. So it's essential for them to be able to explore attitudes and their own beliefs regarding menopause if they are to enjoy a full, healthy and respectful relationship. The idea that the menopause signals the end of women's sexually active years is losing ground. The notion of sex as a purely procreative activity has all but disappeared from society but many women can still feel that sex is only about procreation and the idea of indulging in a purely recreational sex life is alien to them (Dalrock, 2011).

Vaginal dryness, atrophy, fear, hot flushes

Biological problems account for the majority of sexual problems in menopausal women. It is important to recognise that these problems hardly ever exist in isolation. Psychological, sociocultural, and/or relationship issues may also contribute to difficulties experienced by women and therefore it's important that a thorough assessment is made to address these and other nonphysiological factors.

Effects on men/partners

Knowledge of menopause and Hormone Replacement Therapy

Some men may feel that the menopause is 'women's business' and that there is no need for them to be informed or even involved. This is insensitive, not even trying to understand can isolate both partners and a mutual protection racket can exist. One partner may collude with the other not to address the changes that are happening at this meaningful time in a woman's life (Dalrock, 2011).

Women may want sex more/less often

For some women, the menopause brings with it a sense of sexual liberation, not having to concern themselves with unwanted pregnacy, or worries about when they can have sex (due to menstruation). More than 50% of menopausal women report no decrease in desire at all in sexual desire, and fewer than 20% report a significant decrease. For other women, the declining levels of oestrogen result in less vaginal lubrication which can result in intercourse becoming painful (dyspareunia) and in anticipation of pain some

Dyspcrunia is relatively easy to treat but vaginismus is more difficult to correct and often a sex therapist must be consulted. These conditions could cause a woman to want sex less, coupled with a low appreciation of her body image, or the perception that her partner is less interested. Partners can feel rejected and this can cause them to give up initiating sex, thus creating a physical distance between them. It's also possible that situations where one partner has had a higher need for sex than the other is also feeling the effects of age, beginning to suffer performance, age related problems and sometimes in these cases libido levels can become more equal (Dalrock, 2011).

The menopause can mask other sexual problems. If a man is experiencing difficulty with his erections he may have withdrawn from sexual contact and could feel relieved that his partner requires less sex than before - more collusion.

Shy conversations and secret fears may not get talked about. So if there are any other sexual, marital or relationship problems they can get ignored leading to assumptions being made and misunderstandings becoming more common, which in turn can lead to arguments. Low self-esteem then becomes a problem as neither partner feels supported or able to give voice to their emotions.

Coping with mood swings and other menopause symptoms

This is a time when real amounts of understanding and patience can be tested. It's useful for partners to recognise that the mood swings, distress, anxiety etc are not really anything to do with them. Being there emotionally is a skill that requires individuals to suspend their own emotional needs, not to try and 'fix it' but to simply be there. It's more than empathy.

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Sleeping apart

Many couples enjoy going to bed together at the end of the day and for many couples it is a time to catch up, chat and cuddle, it may be the only time they have to be close and physical. If night sweats or insomnia have become problems, then sleeping apart may be an option that the couple take. This can mean that a physical distance develops and couples can feel isolated if there isn't any other form of physical intimacy in the relationship (Miller & Perhnan, 2008).

Effects on family/friends

Coping with mum/friend and how she feels

It's useful if friends and family can be supportive at this time, and to do this they need to be informed, sympathetic and supportive.

Is it different for sons and daughters?

Daughters may be able to demonstrate more understanding and learning, as they will experience this for themselves later and therefore may be able to feel more empathetic. Sons may not want to acknowledge their mother's sexuality, not even the end of it, and they may be less able to empathise, but could support dad. Neither sons or daughters may be able to cope with mum changing as she has always been there for them and to let go of their perception might be challenging for them, they also have to acknowledge that mum is getting older and this causes questions of mortality.

Impact of menopause on couple relationships

Day to day/sexual relationships

The daily relationship can be adversely affected by lack of sleep and intimacy, a lack of understanding and no little or no communication. This will have a knock-on effect to the sexual relationship. It is hard to get close to someone who is being moody, anxious, sort tempered and non-communicative.

Talking about menopause

It's important for women and their partners to remember that menopause is natural and normal. It is an important milestone in a woman's life which can mark the beginning of a fascinating new era. Each woman will experience menopause differently and it is important not to use comparison to other women at this time.

Fear and anger... Life stages

These are just two of the emotions felt by both partners at this time in a relationship. There may be other contributory factors adding to these emotions. such as empty nest. retirement, ill-health and also many women may be looking after elderly parents as well as dealing with their own fears.

"I didn't know what was happening to me....I wanted to get out of my skin.".

Renegotiating the daily and sexual relationship

The couple may have to re-negotiate who does what as energy levels and motivation alter - especially if depression is an issue. The couple may also have to discuss and experiment with different sexual positions that would make intercourse more comfortable.

"I was on HRT and because of all the scares I came off it- my life became a total misery with mood swings, night sweats and depression. I tried all sorts of natural remedies, checked my diet and continued to exercise, but just felt really down. Recently I went back to my GP and he put me back on HRT. I've got my life back." *(Quote from Drupal website. 2015).*

Other areas for discussion and ongoing communication

Dual dysfunction

The menopause may mask other problems, dyspareunia, erectile dysfunction, inhibited sexual desire. Many women (and men) feel that their hormones must be responsible for the things that are going wrong in their sexual/daily relationships - this isn't necessarily the case, but it's easier to look at the menopause rather than at the underlying issues.

Knowledge of the menopause and its affects makes it easier for them to offer support at a time when their partner may need more reassurance(Robert, 2010).

Be aware of other influences that may need to be explored, such as; Cost HRT/natural remedies, hysterectomy and menopause, disability and menopause.

Busting myths

My sex life is over-complete and utter nonsense.

There is no reason why you can't continue to have a full and enjoyable sexual relationship.

I'm no longer attractive to my partner.

This is unlikely to be the case, this may be more about you feel about yourself rather than a partner finding you less attractive.

Menopause means I'm aging and being post-menopausal means that I'm old-not any more. Most women experience the menopause between 45 and 55, but women can look forward to an average of another 30 years of living, so enjoy, life isn't over!

How you manage this 'phase' of your life together will colour how your relationship will be once the menopause is over (Oakrock, 2011).

Things to do

- Listen to concerns, fears and frustrations; be there for your partner.
- Research together the menopause. You may find tips on diet that will help.
- Be patient, with your partner and yourself, if mood swings occur or if forgetfulness is an issue.
- Exercise can help reduce some symptoms of menopause so why not join an exercise class together, go for a swim or walk together more often?
- Develop your sensual relationship
- Talk about concerns and changes - it's not just the woman who's changing at this time of life (Dalrock, 2011).

The Effects of stress on the menstrual cycles of perimenopausal women

A review of the cohort studies on the perimenopause, demonstrate a relationship with symptoms and stressful events. However although menstruation changes during this transition (Mackey, 2009), few of the studies attempt to examine the relationship between menses and stress during midlife (Barsom, Kenoff, Mansfield, Bartholow, Koch, Gicrach & West, 2004). Stress can be defined as a factor or event that adversely affects normal functioning or health (Marcovitch, 2005). The Oxford English Dictionary (1995) describes stress as physical or mental strain or tension.

Crocket, (2009), suggests that stress may have an important effect on the hormonal profiles of perimenopausal women, affecting levels of oestrogen, cortisol and prolactin (Edwina, 2013). Barsom et al (2004), attempts to study the effects of psychological stress on the menstrual cycle and observes that in previous studies on younger women, the effects of stress on the menses are also typically found as part of the natural menstrual changes found in older women. In a crosssectional study, it was found that stressful events did not significantly affect the length and duration of the cycle itself, although changes in stress levels did shorten menstrual cycles slightly as compared with non stressed women whose cycles were lengthening. The authors acknowledge the limitations of the study as reporting of stressful events was retrospective and hard to link to the

menses. They felt that any impact on the menstrual cycle was short term and did not have a lasting effect. There was also no consideration of lifetime stress and the subject's innate ability to cope with the stressful events.

2.9 The use of adaptogens as part of a herbal prescription for perimenopausal symptoms

Most of the cohort studies on women in midlife, clearly demonstrate a relationship between perimenopausal symptoms and stress. Crocket (2009), feels that long term stress can cause depletion in the health of the adrenal gland, which is of major importance during the perimenopause. This is due to its vital role in taking over the production of oestrone at a time of ovarian oestrodial decline. The production of cortisol by the adrenal gland helps the body respond to stress. Extreme or long term stress can cause high levels of cortisol, which can affect hormonal imbalance, increasing oestrogen and testosterone levels and reducing levels of progesterone (Edwina, 2013). Crocket argues that long term stress can subsequently deplete cortisol levels resulting in adrenal exhaustion. This can limit the function of the adrenal gland in its ability to produce oestrone, thus resulting in more severe perimenopausal symptoms (Crocket, 2009).

When treating perimenopausal women with herbal medicine, it is important to have a holistic perspective of that woman. Although changing hormonal levels can be defined by science, it is important to consider the wider aspects of change in a woman's life, causing varying degrees of stress.(Lindb-Astrand, *et al*,2007)

In herbal medicine, adaptogens can be considered as having a major role to play in symptom management. According to Hoffman (2003) Soviet scientists coined the word adaptogen in 1964 to describe herbs that produced an increase in vitality and resistance to stress. In defining adaptogens, Green (2007) comments that they produce a state of non specific resistance to long term stress and modify the underlying imbalances caused by stressors, regardless of their specific nature, helping the body to adapt to stress by normalising physiological processes. Hoffman (2003) suggests that many adaptogens seem to alter the endocrine functions of the pituitary adrenal gland axis and this could, as Trickey (2003) argues, stabilise hormonal production and helping the body to adapt to the

emotional and physical changes of the perimenopausal transition. As previous work in this dissertation illustrates; symptoms can be influenced by the stress and challenges experienced in a woman's life. It is therefore recommended that adaptogens form a major part of a herbal prescription.

Whilst other commonly used adaptogens may be appropriate to use, current literature searches indicate the usefulness of Rhodiola roseaL, with research demonstrating its efficacy in reducing cortisol levels, anxiety, depression, and burnout. Brown, Gerbarg & Ramazanov, (2002) comment on Rhodiola being extensively researched, with over 180 clinical trials. Although they are published in Scandinavian and Slavic, they remain unknown in the west. Medicines Complete (2010) comments; that despite the wealth of studies on Rhodiola, these are limited to a small number of single dose and short term trials involving healthy individuals.

Rhodiola rosacea or rose root has a long history of use in Siberia, Scandinavia and other countries to enhance mental and physical performance and has been included in official Russian medicine since 1959 (Winston & Maimes, 2007).

Most of the literature on Rhodiola focuses on its the current usage of enhancing alertness, improving memory, reducing fatigue and depression (Winston & Maimes, 2007; Olsson, Von Schéele & Panossian, 2009). Brown et al (2002), comments on its neuroendocrine benefits and although most of the relevant studies have been performed on animals and in vitro there is some suggestion of Rhodiola as being thyroid modulating and having strong oestrogen binding properties. Studies on forty women with amenorrhoea, showed that after a ten day treatment with Rhodiola extract (SHR-5), twenty-five of the women had normal menses restored, resulting in pregnancy for eleven of the women (Edwina, 2013).

In a randomised placebo controlled trial of sixty men and women who were selected with a diagnosis of fatigue, depression and burnout (Olsson et al, 2009). Thirty individuals were given standardised extract of SHR-5 (see appendix), and thirty were given a placebo. Subjects were assessed on day one and day twenty eight of medication. Daily Salivary cortisol levels were done upon waking and subjects were assessed using

questionnaires. Hypersecretion of cortisol on waking is indicative stress related fatigue, and is a marker for depression (Mommersteeg, Heijnen, Kavelaars & Van Doornen 2006). The research indicated that in the treatment group, early morning cortisol levels were lower, compared with the placebo group. The subjects treated with Rhodiola felt less fatigued and demonstrated an improvement in cognitive function. The authors concluded that the use of Rhodiola as an adaptogen, increases the body's ability to cope with stress by modulating the effects of cortisol (Edwina, 2013).

Other studies also help demonstrate the use of Rhodiola extract; SHR-5 in mild to moderate depression. A study by Darbinyan, Aslanyan, Amroyan, Gabrielyan, Malmström & Panossian (2007) show significant improvements in depression when compared to placebo. This study also showed evidence of enhancement of cognitive and sexual function. Other studies (Shevtsov, Zholus, Shervarly, Volskij, Korovin, Khristich, Roslyakova, & Wikman, 2003) demonstrate the anti-stress effects of Rhodiola extract in healthy young men under conditions of stress and fatigue.

Brown hypothesises that Rhodiola increases serotonin in the hypothalamus and midbrain, and cites research demonstrating that Rhodiola reduces the activation of several components of the stress response system including the release of serum beta endorphin and reducing the secretion of corticotrophic releasing factor (CRF) under stress as well quoting animal studies which demonstrate enhanced thyroid and adrenal function.

A search of journal databases showed no evidence for the use of Rhodiola in the perimenopause. Existing studies help to support its use as an adaptogen in optimizing adrenal function, whilst reducing the effects of depression, stress, fatigue and enhancing sexual function. Although there is some suggestion of improving thyroid function and the oestrogen binding properties of Rhodiola, evidence is based on animal and in vitro studies. Despite the oestrogen modulating effects of Rhodiola never having been investigated in clinical studies, the research quoted by Brown on women with amenorrhoea, does demonstrate some hormonal involvement (Edwina, 2013).

2.10 Distress during the menopausal transition and their impact on the quality of life (QoL) of women

Menopause is a natural transition encompassing not only the biological changes but also the social and cultural changes associated with the aging process (Zöllner, Acquadro, & Schaefer, 2005; Hunt, 2000; Schneider, 2002). It usually occurs sometime between 40 and 60 years and marks the end of the reproductive phase of a women's life (Mishra & Kuh, 2012).

Menopause is defined as the permanent cessation of menses resulting from reduced ovarian hormone secretion that occurs naturally or is induced by surgery, chemotherapy, or radiation. Natural menopause is recognized after 12 months of amenorrhea that is not associated with a pathologic cause (Rahman, Zainudin, and Kar Mun 2010). While most women traverse the menopausal transition with little difficulty, others may undergo significant stress(Pilliteri, 2007). And with increasing age, emerging physical health problems can cause significant changes in the woman's lifestyle, leading to social withdrawal, avoidance and curtailment of physical activity.

According to the definition by the Stages of Reproductive Aging Workshop-2001(STRAW), the time from beginning of irregular menses through the first 12 months of amenorrhea as perimenopause and the period from the last menses to death as postmenopause; the first 5 postmenopausal years are defined as early postmenopause, which is followed by late postmenopause. During menopause, approximately 85 percent of women report experiencing symptoms of varying type and severity.

In longitudinal studies, during the early postmenopausal period the prevalence of vasomotor symptoms among women ranges from 30 to 80 percent, depressed mood occurs in approximately one third, and sleep disturbance in more than 40 percent; diminished sexual function and vaginal Especially, it has been found to have the most negative influence on QOL during the perimenopausal and early postmenopausal periods (Jacobs, Hyland, & Ley, 2000; Li, Holm, Gulanick, & Lanuza, 2000; Utian, 2007). Symptoms experienced at menopause are quite variable, and the etiology of the symptoms is multi factorial. Also, menopausal

symptoms can affect women's health and wellbeing. As the women's age increases, their health becomes multidimensional issue influenced by factors such as career, changes in domestic life, physical activity, economy, society and the environment. These changes, together with the natural process of ageing and hormonal changes affect the well being of women (Daley-Harris, 2007; Sievert, 2014).

The health care of women during this stage requires special attention to the identification of their health needs in order to provide competent care (Gharaibeh, Al-Obeisat, and Hattab 2010). Although not every woman experiences symptoms other than cessation of menstruation (Umland, 2008), menopausal symptoms may be an important issue for midlife women because menopause has been associated with impaired quality of life (Nappi & Lachowsky, 2009) as well as poor physical and mental health (Svartberg, von Mühlen, Kritz-Silverstein, & Barrett-Connor, 2009; Matthews & Bromberger, 2005). Also, women incur significantly more health care costs during their years of menopause than do men in the same age group (Owens, 2008). Menopausal health demands priority in the world scenario due to the increasing life expectancy and growing population of menopausal women. However, the achievements made in terms of longevity stand diminished owing to the lack of specialized health care that addresses the health needs of the aged. These facts illustrate the need to assess the menopausal symptoms of midlife women accurately and to develop successful culturally focused preventive and control strategies for menopausal problems to have an easy and smooth midlife transition and to improve their quality of life.

2.11 Culturally competent menopausal management

Several culturally competent menopausal management interventions have been identified (Im, 2010). Although originally developed for Asian immigrants, some or even many may be applied to other racial/ethnic minority groups.

- Hormone replacement therapy: White women tend to use hormone replacement therapy (and desire its use) more frequently than ethnic minority groups. The choice of whether or not to use hormone replacement should be individualized.

- Complementary and alternative medicine: Racial/ethnic minority women tend to use herbal and other complementary approaches to address menopausal symptoms (e.g., soy products, acupuncture, and other herbs in Asian cultures).
- No management: Because of cultural values of persevering and remaining silent and the belief that menopause is a normal developmental transition, some racial/ethnic minority women will be less likely to employ specific management interventions for menopausal symptoms.
- Counseling and self-help: Cultural values of persevering, relegating individual needs to the needs of the family, and lack of trust in the medical system, racial/ethnic minority women are less likely to seek mental healthcare. However, they may be getting informal support and information from peers and family members.(Carpenter-Song, *et al* 2007)

Some of the women had negative perceptions of menopause while others welcomed it, especially in Sub-Africa and among Indian and Japanese women. In India, male dominance is strong in their society, until women reach a certain age. The social roles of the women were emphasized. For example in Rajasthan, Rajput, women had to live in pariah (veiled & secluded), but after menopause, they had the opportunity to come down stairs from their women's quarters where the men talked and had drinks (Kelly and Fnircloth, 2011). The women could now publicly visit and joke with men after attaining menopause, vastly changing their gender roles. Flint (1975) argues that these women experienced no symptoms with the menopause transition because menopause was associated with positive role changes(Dalal and Agarval, 2015). An argument can be made that the healthy longevity of Japanese women can be attributed to the wealthin the Japanese society and equal access to good health and social benefits, as well as education, all-important cultural influences.

Myths about menopause will always plague women. Their reservations and anxiety about "the change" vary by society. Literature shows that Arab women believe that menopause will cause the loss of their husband's sexual desires because they will not be able to have children anymore. American women are often afraid of becoming a bi-polar emotional "train wreck." Eastern Jewish women are more concerned with their bodily health, while

Western European women are concerned about their mental health. No matter what part of the world a woman is from, she will experience menopause. Society and cultural beliefs and practices dictate a woman's self-esteem and self-perception. In societies where aging is considered a loss, handicap, or journey toward death, menopause has proven to be a rather stressful time for women. On the other hand, in cultures where menopause is a life-attaining goal, fewer worries exist for the menopausal woman (Kelly and Faircloth, 2011).

Many cultures tend to view menopause as a natural and normal process, usually as a time of freedom. Menopause proves to be a rather easy time of transition for some. Culturally, transitions into the next phase of life can be welcoming to some while a disaster to others. Menopause provides us with a perfect exemplar of this and the aging process, especially for women and their accompanying gender roles because of its Western bio-medicalization and its cross-cultural variation in everyday experience and treatment (Dalal and Agarwal, 2015).

While previous studies have focused on single cultures, this paper aims to bring these insights into the cultural and social construction of menopause. This provides opportunities to see both the commonalities and, perhaps most importantly, differences that exist among and between cultures. Lastly, by focusing on the seminal concept of social construction as the point of analysis, we are able to closely critique the actual mechanisms utilized in each culture to construct discursively the experience of menopause by women (Kelly and Faircloth, 2011).

2.12 Psychosocial adjustment needs of menopausal women

Menopause is a period in the life of women who have experienced cessation of menstruation for one year or more. It is also a new phase in their life cycle, characterized by several symptoms brought about by decreased hormonal activity in the body system. Hence, women at this stage need to make suitable adjustments that will enable them cope with the new challenges successfully. The period is similar to retirement from active service, whereby the retiree feels a sense of loss because job has been taken out of her hands (Dimkpa, 2011).

Thus, it represents limitation in terms of the woman transiting into another phase of life where her 'pride' has been taken away. Menopause although a natural phenomenon among women past childbearing age was not considered a problem in Africa many years ago. This could be attributed to the simple life style which mothers of those days lived as well as the low level of education, whereby women were only meant to play the roles of child bearing and house keeping. According to Southin (2010), due to their nurturing roles as mothers and wives, many women had faced a lot of economic hardships in their struggles to cater for their families, which explains why the average age of menopause has risen since the industrial revolution. Menopause has become a cause for concern due to the sophisticated life styles of the modern day African and indeed Nigerian women who value aesthetics more now, than before. To this end, some perceive it as 'the end of the road' to their ability to remain attractive to their spouses, which is a major need for counselling women who have attained menopause. For example, this idea is supported by the submission that regardless of their roles, women are worried that menopause might mean the end of being useful and productive members of their communities (Southin, 2010). Moreover, cultural attitude of the people is a very deep seated cause for concern because even though menopause is a natural occurrence, the attitude of spouses and others could make the symptoms worse for the women. Most researchers in previous studies focused on attitude of women towards menopause; problems associated with menopause and types of symptoms experienced by pre-menopausal and post-menopausal women (Osarenren, Ubangha, Nwadinigwe & Ogunleye, 2009; Olaolorun & Lawoyin, 2009).

2.13 Conceptual framework

2.13.1 The Health Belief Model (HBM)

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals .The health belief model (HBM) is commonly used theory in health education and promotion (Glanz, & Lewis, 2002). It should be noted that the underlying concept is that health behavior is determined by personal beliefs or perception about disease and the strategies available to decrease its occurrence .Personal perception is influenced by the whole range of intrapersonal factors affecting health behavior.

Theoretical constructs

There are four perceptions which serve as the main constructs of the model: perceived seriousness perceived susceptibility, perceived benefits and perceived barriers

Perceived seriousness

This construct speaks to an individual's belief about the seriousness or severity of a syndrome.it may also come from the beliefs a person has about difficulties a particular syndrome would cause and its effects on quality of life of such person

Perceived Susceptibility

This is one of the prominent perception in prompting people to adopt healthier behaviors. The greater the perceived risk, the greater the likelihood of engaging in behaviors to decrease the risk. It has been observed that a perception of increased susceptibility is linked to healthier behaviors and decreased susceptibility to unhealthy behaviors

Perceived benefits

This construct deal with personal opinion of the value or usefulness of a new behavior in reducing the risk of developing a disease. It should be noted that the perceived benefits play a vital role in the adoption of secondary prevention behaviors, such as Screening

Perceived benefits

The constant event in life is change which is something that does not comes easily to every person. Therefore, perceived barriers are the most significant in determining behavior change

Concepts

Perceived Susceptibility: One's opinion of chances of getting a condition. It helps to determine population(s) at risk, risk levels; personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low.

Perceived Severity: One's opinion of how serious a condition and its consequences .It effective in specifying consequences of the risk and the condition

Perceived Benefits: One's belief in the efficacy of the advised action to reduce risk or seriousness of impact . It help to define action to take; how, where, when; clarify the positive effects to be expected .

Perceived Barriers: One's opinion of the tangible and psychological costs of the advised action. It help to identify and reduce barriers through reassurance, incentives, assistance

Cues to Action: Strategies to activate "readiness" It provides Provide details information promote awareness, reminders.

Self-Efficacy: Confidence in one's ability to take action. It provide training, guidance in performing action.

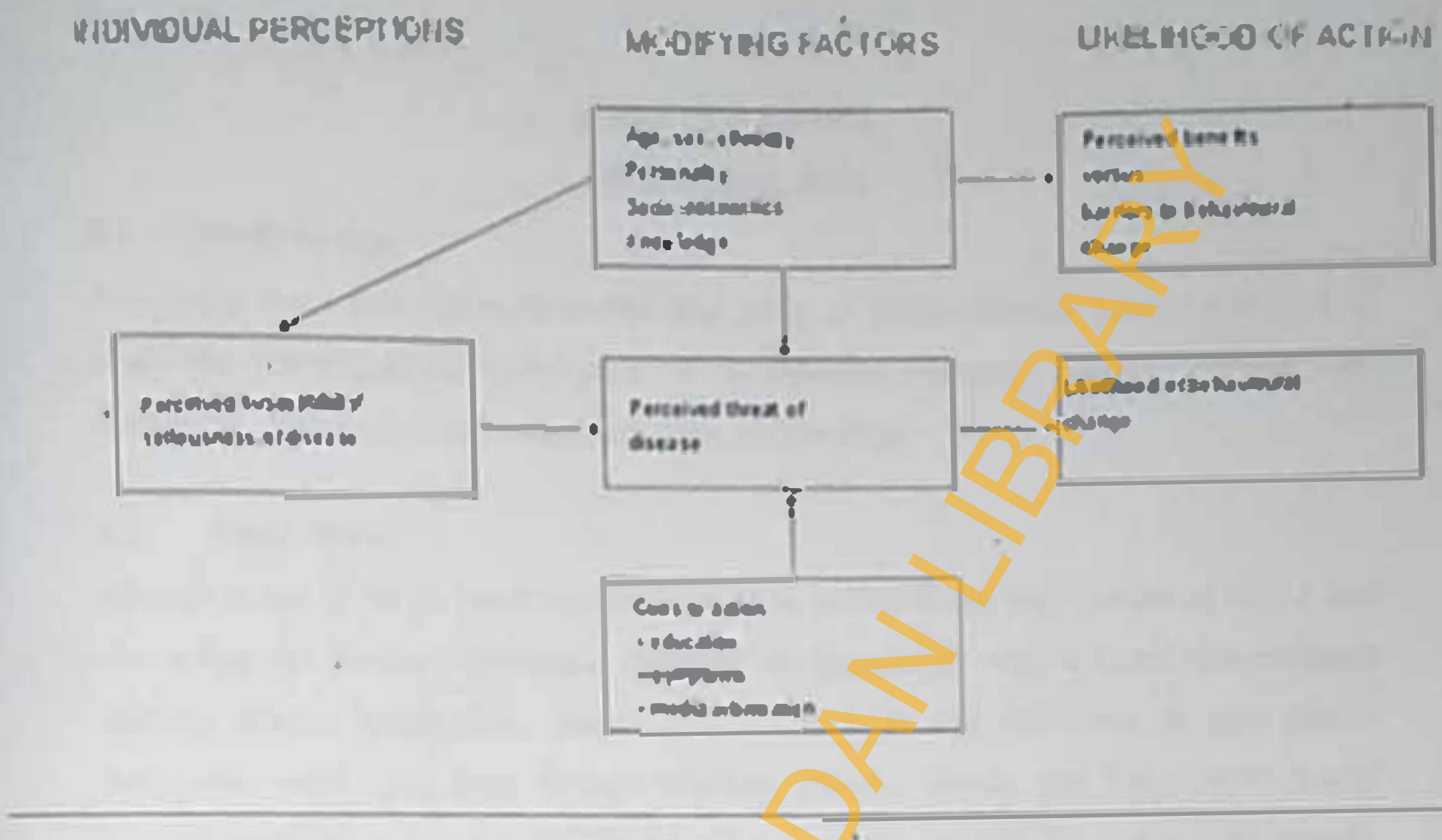

Fig 2.1 Health Belief Model

(source: Glanz, K., Rimer, B.K. & Lewis, F.M. (2002). *Health Behavior and Health Education: Theory, Research and Practice* San Fransisco: Wiley & Sons.)

CHAPTER THREE

METHODOLOGY

3.1 Study design

This study was a descriptive cross-sectional study. A cross-sectional design was used to study the knowledge and perception of menopausal syndrome among married men resident in Oluyole Local Government Area of Oyo State.

3.2 Study Area

Oluyole is one of the 33 Local Government Areas in Oyo State, and one out of the 11 that are within the Ibadan Metropolis, it shares its boundaries with 4 Local Government namely, Ibadan South East, Ibadan South West, Ido and Ona Ara. it also shares boundaries with Ogun State through Obafemi, Owode, Odeda, and Ijebu North Local Governments. It has an area of 629K/m^2 and a population of 202,725 at the 2006 census. The headquarters of the Local Government is at Idi-Ayunre in the outskirts of Ibadan town. It plays host to rural, sub-urban and urban settlement and thus like its counterparts it also harbour some of the urban slums within Ibadan. Oluyole Local Government presently have 10 wards is being managed by a caretaker committee headed by an interim chairman.

3.3 Study population

The population for this study was married men above 50 years residing at Oluyole Local Government Area of Oyo State.

3.3.1 Inclusion Criteria

Only the married men who are above 50 years residing in Oluyole Local Government Area of Oyo State.

3.3.2 Exclusion Criteria

- Not married
- Not willing
- Married men, lesser than 50 years of age

- Non consenting

3.4 Sample size determination

The desired sample size was obtained using Leslie Kish's formula for estimating required sample size i.e.

$n = \frac{Z^2pq}{d^2}$ (Leslie Kish Formula)

Where z = 1.96, (level of significance of 5 % (1.96)

P = 50% (Assuming prevalence for study of men's knowledge of and perception of menopausal syndrome)

q = 1 - p = 1 - 0.50 = 0.50

d = 5% (Degree of accuracy i.e. precision)

n = minimum sample size

$n = \frac{1.96^2 \times 0.50 \times 0.50}{0.05^2}$

n = 384.16

$\text{Final n} = \eta \times \frac{1}{1 - \text{Non response}} = 384.16 \times \frac{1}{1 - 0.1}$

Final n = 427

3.5 Sampling technique

Respondent was selected using multistage sampling techniques.

Stage 1

Oluyole Local Government Area out of eleven was selected through balloting and randomly picked 5 wards from the 10 Wards in Oluyole Local Government Area of Oyo State.

Stage 2

A simple random sampling technique was used to select one community each from the 5 selected wards see stage 1

Stage 3

A systematic sampling technique was used to select the number of houses holds that was included in the study from each community

Stage 4

An household which represent individual participant was selected in each of houses selected and where there were more than one eligible households (that is, households where more than one married man resides), one respondent was randomly selected to avoid oversampling of any given household. In the same vein, where the household(s) was/were not found or eligible, the next house/household was considered.

3.6 Validity of instrument

Validity of the instrument was ensured through a comprehensive review of related literatures. The salient variables of interest were teased out from the literature relating to knowledge and perception of ageing men on menopausal syndrome for measurement. The result of the literature review was used to develop the questionnaire for the study. The instrument was subjected to peer and expert review by authorities in the field of public health and my supervisor. In addition, the instrument was translated and back-translated to Yoruba Language.

3.7 Reliability of instrument

To ensure reliability, the instruments were pre-tested among married men in Ona-Ara Local Government a place with similar socio-demographic characteristic as the study area. The exercise was carried out in collaboration with trained research assistants. The pre-tested questionnaire were coded, entered into a computer and analyzed. Reliability coefficient was used to test for the statistical reliability of the instrument. A Cronbach's Alpha score of 0.70 was obtained given that the instrument was reliable.

Corrections were effected based on the comment of the supervisor and the experts' advice. Coping strategies of men towards their spouses' menopausal condition was also included in the final draft of the research instruments based on the outcome of the pretest.

3.8 Data Collection Instrument

FGD guide

A focus group discussion guide was designed to explore the knowledge and the perceptions of the married men of menopausal syndrome as this will allow their full expression and enable them to provide more quality information. This was done in the selected communities that were used for the survey with the quantitative instrument (questionnaire). The findings from the FGD was useful in fine-tuning the questionnaire before they are subsequently administered.

Questionnaire

For quantitative data, a semi-structured questionnaire was designed first in English Language, which comprises of 5 different sections which include; socio-demographic section, Knowledge of married men on menopausal syndrome, their perception of menopause and sources of information as well as a section on the perceived implication of menopausal syndrome on marital relationship. The questionnaire was then translated to Yoruba and then back to English language for validity. It was pre-tested in Ona Ara Local Government Area due to similarity of the Local Government to the study settings and amendments and corrections were made where necessary.

In order to measure the knowledge and perception of the respondents, the questionnaire contains questions that was structured in such measures were completed.

Training of research assistants

Four research assistants were trained on the instrument to be used and method of data collection to help facilitate the entire study.

3.9 Method of data collection

The administration of questionnaires was done by the researcher and four trained research assistants. The questionnaire was interviewer-administered using de-facto approach (i.e. eligible men physically seen during the administration). The questionnaire was given to each man after explanation was given on purpose of the research, that participation was voluntary.

Visits were made to all the wards in company of three research assistants to establish rapport with community heads/opinion leaders found/mentioned by the people in such

community to intimate them with the study objectives prior to data collection. The questionnaires were administered by the trained four research assistants to men that consented to research ethics read to them at the point of questionnaire administration. Some of the questionnaires that were not fully completed or answered correctly were sorted out. In all 440 questionnaires were administered but only 427 were filled correctly, giving a response rate of 97.1%. Altogether, it took the researcher three weeks to administer and sorted out the entire questionnaires used for the study. The researcher painstakingly went through completed questionnaires daily for the purpose of data management.

The validated Focus Group Discussion instrument was used in FGDs sessions that were coordinated by the three trained research assistants among consented participants that were different from questionnaire respondents in each of the wards visited. This was done in order to have good sampled opinions.

3.10 Data management and analysis

The data collected were checked for completeness in the field. Serial number was assigned to each questionnaire for easy identification, daily cleaning, sorting and coding of data collated from the field was done. A coding guide was developed to code and enter each question into the computer for analysis. Analysis was done using the Statistical package of IBM/SPSS Version 20. The data entered into the computer were subjected to descriptive (i.e. mean and standard deviation).Finally information obtained were summarised and presented in tables and chans.

Focus group discussions series were translated and transcribed and analyzed through the use of thematic approach

Computation of knowledge and perception of menopausal syndrome

The questionnaire included 20-point knowledge scale on MS, 36-point perception scale and adopted coping strategies for MS. Knowledge score of <7, 7-13 and >13 were categorised as poor, fair and good, respectively. Perception scores of <15, 15-30 and >30 were categorised as poor, fair and good, respectively (see table 4.4 and 4.5).

3.11 Ethical approval

Ethical approval was sought from the Oyo State Ethical Review Committee. The respondents' consents were obtained with provision of adequate complete and clear information about aim, objective as well as the purpose of the study.

- Non - maleficence to participants: The research does not involve invasive materials or collection of samples that may cause harm or injury to the participant.
- Voluntariness: The participants had full knowledge pertaining to the research before taking part in it in order to ensure better their understanding and their willingness to take part.
- Beneficence of participants: The outcome of the research was of benefit to the participant in particular their community and to the entire society.
- Confidentiality: Since confidentiality is necessary in any research, respondents' names were excluded from the request/items of questionnaire and they were told not to write their names on the questionnaires. Appellation/nickname was use instead of real name of FGDs participants. Code and identification numbers were applied on the questionnaire for effective detailing.

3.12 Limitations

This study has a few limitations. First is that the subjects were selected from the metropolitan area of Oyo State, Nigeria. This makes the results less generalizable. Second is the fact that the actual number of men in the metropolis could not be ascertained due to unavailability of records. Thus, only an estimate provided by the National population census was used. Within the estimated population, only those who consented to participating in the research were selected, giving unequal number of respondents since getting those who fit into the requirements of this study was difficult to come by.

Lastly, the responses may not truly represent the actual view of the respondents since the less educated ones were assisted by research assistants. There is also the likelihood of faking in their responses, especially due to the secretive nature and fear of unknown of men which is associated with the culture of Africans.

CHAPTER FOUR

RESULTS

4.1 Socio-demographic characteristics of the respondents

The mean age of the respondents was 53.6±5.2 years and 69.6% were within the 50-59 years age range and 66.5% had one wife. Above half (52.7%) of respondents were Christians and 97.7% were Yoruba by tribe. Approximately (53.0%) were self-employed and respondents who had primary education (40.3%) topped the list of educational qualification (Table 4.1).

The qualitative data were obtained from married men who have menopausal wives. Most of the discussants were aged 50-59years, and majority was also in polygamous marriages, but most of them were Muslims and Yoruba by tribe. Almost all the participants in the Focus Group Discussions were self-employed and had primary education.

Table 4.1: Socio-demographic characteristics of respondents (N=427)

Variable	Frequency	Percentage (%)
Age		
50-59	297	69.6
≥60	130	30.4
Type of marriage		
Monogamy	284	66.5
Polygyny	143	33.5
Religion		
Christianity	225	52.7
Islam	202	47.3
Ethnicity		
Yoruba	417	97.7
Igbo	10	2.3
Occupation		
Civil servant	25	5.8
Artisan	173	40.5
Self employed	227	53.2
Unemployed	2	0.5
Highest educational qualification		
No formal education	70	16.4
Primary	172	40.3
Junior secondary	21	4.9
Senior secondary	127	29.7
OND	5	1.2
First degree	32	7.5

4.2 Knowledge of menopausal syndrome among married men

All of the respondents 427(100.0%) acknowledged that menopause is a state of a woman when menstruation ceases and 86.2% established the fact that women stops menstruation from 45-50 years. Infections (11.0%) and early child bearing (10.1%) were common mentioned factors that predisposes women to early menopause than usual. All respondents (100.0%) affirmed that menopause could not be treated. Among the mentioned problems associated with MS were; insomnia (21.9%), abdominal pain (14.3%) and headache (10.5%). Some of the recognised signs of menopause included; Pain (Body, joint, abdominal and menstrual) (35.6%); Stomach pain (9.2%) and Headache (8.0%). Common perceived effects of menopausal syndrome mentioned by the respondents were; Unable to conceive and fibroid growth in their womb (18.2%) and Sickness/weakness (16.4%).

All the respondents (100.0%) were of the opinion that surgical removal of reproductive organs could not predispose women to MS. At the same time the whole respondents supported that parity and regular sex are not predisposing factors to MS. Old age was said by the whole respondents to be a predisposing factor to MS. Majority (63.9%) of respondents admitted that illness is not a predisposing factor to MS and 65.3% indicated that infertility could not be a predisposed factor. Other perceived predisposing factors to MS were; irregular menstrual flow (57.1%), under nutrition (60.2%), early menarche (79.4%) and STI (76.3%).

Respondents' mean knowledge score was 13.0±5.4 and 44.0% had good knowledge relating to MS (Table 4.5).

Table 4.2: Knowledge of menopausal syndrome among married men

Variable		No.	%
Understanding about menopause	(N=427)		
When menstruation ceases•		427	100.0
Age at which spouse stopped menstruating	(N=427)		
45-50•		368	86.2
51-55		59	13.8
Factors that predispose women to early menopause than usual	(N=427)		
Early child bearing		43	10.1
Infection•		47	11.0
I don't know		337	78.9
Sign of menopause	(n=87)		
Pain (Body, joint. abdominal and menstrual) •		31	35.6
Stomach pain•		8	9.2
Headache•		7	8.0
Rejection of sexual intercourse•		5	5.7
Sweating•		3	3.4
Mood swing•		3	3.4
Swelling of the stomach•		3	3.4
Others++		27	31.0
Effects of Menopausal Syndrome	(n=55)		
Unable to conceive and fibroid growth in their womb		10	18.2
Sickness/weakness		9	16.4
No effects		5	9.0
Sleeping problem•		4	7.3
Abdominal pain•		3	5.5
Others+++		24	43.6

• *Correct response*

++ *Tiredness, Fibroid, Mild depression, Old age, Infertility, sleeping disorder, Reduction of breast size, Dry skin, Early Menstruation, Hair Loss, Breast tenderness and Increase body weight.*

+++ *Vagina dryness, Mood swing, Loss of body weight, Joint pain, low desire for sex, Body becomes shrink, Unhealthy, Prompt to death, old age, headache, Unable to discharge the toxic blood which can lead to infection, behavioural disorder, Psychological effect, feel less attractive, tiredness, Stomach pain, Insomnia, Increase blood pressure and Wrinkle face*

Table 4.2b: Health problems associated with menopause

Health problem	No.	%
Stomach ache	3	2.9
Loss of appetite	3	2.9
Reduces men sperm count	3	2.9
Heart disease	3	2.9
Pain (Body, abdominal, joint and menstrual)	5	4.8
Sickness	6	5.7
Increase heart break	8	7.6
Infertility	8	7.6
Fibroid	8	7.6
Others+	9	8.6
Headache	11	10.5
Abdominal pains	15	14.3
Insomnia (Sleep disorder)	23	21.9
Others	9	8.6
Total	105	100.0

* *Body, abdominal, joint and menstrual*

\+ *Old age, Weight gain, Early menstruation, Memory loss, Dizziness, Abortion, High blood pressure and Drug administration*

Table 4.3: Predisposing factors to menopausal syndrome

Variable	Yes	No
	Freq.(%)	Freq.(%)
Surgical removal of reproductive organs	0(0.0)	427(100.0)*
Parity	0(0.0)	427(100.0)*
Regular sex	0(0.0)	427(100.0)*
Illness	154(36.1)	273(63.9)*
Old age	427(100.0)*	0(0.0)
Infertility	148(34.7)	279(65.3)*
Irregular menstrual flow	183(42.9)*	244(57.1)
Under nutrition	170(39.8)	257(60.2)*
Early menarche	88(20.6)	339(79.4)*
STI	101(23.7)	326(76.3)*

* *Correct response*

Table 4.4: Knowledge grade on menopausal syndrome

Knowledge score	No	%
Poor knowledge	239	56.0
Good knowledge	188	44.0
Total	427	100.0

FGDs report

The qualitative data also revealed FGD discussants' knowledge of menopausal syndrome which also supported the quantitative results above, as every discussant established that menopause is when menstruation, which is a regular natural process in women stops eventually and all of them also admitted that it begins from age 45 and above, though some still expressed that it could come earlier or late in some women. Most of the participants believed that it is a natural process but they did not really know what makes it happen earlier than usual, though few still have other opinions as regards this. Some of the quotes are these:

> *"It might be as a result of the type of industrial foods that the civilization has brought to the world, this may affect their general body systems and be the factor (Babanee)."*

> *"Women who had any form of infections may also experience menopause earlier because it would have affected their reproductive organs (Baba Elesin)."*

Many of the discussants were able to give even more than one health problems associated with menopause which include; profuse sweating, insomnia, general body pains among others. Also, they all mentioned many signs of menopausal syndrome. All of them also said it cannot be treated as it is a process made by God.

4.3 Perceptions of married men on menopausal syndrome

On the perceptions of the respondents on MS, All (100.0%) respondents agreed that menopausal syndrome is culturally acceptable, and it is a natural occurrence respectively. Contrarily, they all refuted that menopausal syndrome is a disease. One-third of respondents (32.6%) agreed that MS reduces sexual urges, above half (55.3%) agreed that MS makes women feel less feminine and 100.0% disagreed that MS is a result of past active sex. All (100.0%) respondents disagreed that MS is contagious, a method of family planning and that MS makes women feel proud respectively. Few (12.4%) agreed that MS makes women feel tired after sex. All (100.0%) respondents opposed that MS indicates nearness to death and that MS is a spiritual attack. Less than half (47.3%) agreed that men do not like having sex with women who have reached menopause. Majority (69.6%) contracted that women who have reached menopause have lost their youthfulness. Approximately 49.0% agreed that regular menstruation is a sign of good health. All (100.0%) of them also agreed that MS cannot be prevented but can be managed respectively.

Respondents' perception of MS was 33.0±8.3 and 85.4% had good perceptions of MS (Table 4.5).

Table 4.5: Perceptions of married men on menopausal syndrome

(N=427)

Statement	Agree Freq.(%)	Disagree Freq.(%)
MS is culturally acceptable	427(100.0)*	0(0.0)
MS is a natural occurrence	427(100.0)*	0(0.0)
MS is a disease	0(0.0)	427(100.0)*
MS reduces sexual urges	139(32.6)*	288(57.4)
MS makes women feel less feminine	358(83.8)	69(16.2) *
MS is a result of past active sex	0(0.0)	427(100.0)*
MS is contagious	0(0.0)	427(100.0)*
MS is a method of family planning	0(0.0)	427(100.0)*
MS makes women feel proud	0(0.0)	427(100.0)*
MS makes women tired after sex	53(55.0)	192(45.0)*
MS indicates nearness to death	0(0.0)	427(100.0)*
MS is a spiritual attack	0(0.0)	427(100.0)*
Men do not like having sex with women who have reached menopause	202(47.3)*	225(52.7)
Women who have reached menopause have lost their youthfulness	297(69.6)*	108(30.4)
Engaging in sex after menopause makes women sick	161(37.7)	266(62.3)*
Regular menstruation is a sign of good health	209(48.9)*	218(51.1)
MS can be prevented	0(0.0)	427(100.0)*
MS can be managed	427(100.0)*	0(0.0)

* *Good perception response*

Table 4.6: Perception grade on menopausal syndrome

Knowledge score	No.	%
Poor perception	62	14.6
Good perception	365	85.4
Total	427	100.0

FGDs report

The qualitative information also revealed that many discussants believed that MS has no risks while some still believed that it has some risks. All FGD discussants also expressed that MS is culturally acceptable in our societies, it is a natural process and that it is not a form of diseases at all. Some expressed that MS does not reduce sexual urges as some said with confidence that:

> *"I still have regular sex with my wife and she also performs actively whenever we are in bed (Emperor)."*

> *"Though the frequency at which we have sex nowadays has reduced but the urges are still there and we are satisfied with it (BJ right)"*

But contrarily a man expressed as thus:

> *"Since my wife has reached menopausal stage, she has been complaining about sex, she daesn't desire it as before and whenever she accepts to have it, she feels uncomfortable and restless, in short she doesn't enjoy it anyhow (Mfeko)"*

Many discussants utterly expressed that MS is not a result of past active sex, not contagious, and that it can never be a spiritual attack. But they have different issues as regards the feelings of the women who have reached menopause.

One man said *"they feel tired sincerely after sex, sometimes my wife will sleep off from it and do complain of body pains after"*

Also, another man in the group said:

> *"My wife feels too tired after having sex with her and that have been discouraging me from having sex with her regularly (Baba Elesin)"*

A man from another group said:

> *"Such women feel as if they have lost their youthfulness, and sincerely, many of them can never do as they were doing in the past again, this is due to the oging process which connot be questioned as it is God ordained factor (Baba Asoa)."*

As regards men desire to have sex with the women who have reached menopause, one man said:

> *" It's not that men don't like having sex with them like that but it's because of the discomfort and the unwilling expressions by the women to welcome the intercourse (Baba Jojojoo). "*

All of the discussants also expressed that MS cannot be treated, cannot be prevented but that it can be well managed and affirmed that regular menstruation is a sign of good health.

4.4 Frequency distribution of menopausal syndrome on marital relationships

More than half (56.7%) of the respondents said MS has no effect on marital relationships while 43.3% said it has effect on marital relationships. Majority (62.8%) of respondents admitted that MS reduces sexual urge and all (100.0%) respondents declared that MS does not cause hatred and cannot lead to separation of rooms. Meanwhile, some of them (35.4%) supposed that MS can reduce couple intimacy and 37.7% said MS can make men to be unfaithful to their spouses. All of the respondents said MS cannot lead to divorce (Table 4.7).

Table 4.7: Menopausal syndrome on marital relationships

(N=427)

Variables	Yes Freq.(%)	No Freq.(%)
Reduction in Sexual urge	268(62.8)	159(37.2)
Hatred	0(0.0)	427(100)
Separations of rooms	0(0.0)	427(100)
Reduction in couple intimacy	151(35.4)	276(64.6)
Unfaithfulness	161(37.7)	266(62.3)
Divorce	0(0.0)	427(100)

FGDs report

The FGDs report revealed different views of men on the effects of MS on the marital relationships as below:

"It doesn't have any effect on our marriage because I have been expecting it before, so due to the love that has been existing between us before, we keep relating as usual with understanding (Bigg-Bigg)"

"Which effect will it have when I myself have changed, my sexual urge have also reduced drastically, it happens with aging process. So, according to my own experience we are still doing well in our marriage (Baba Jojoo)"

"I won't deceive you my brother, since my wife reached menopause, and I still remain active, I have been looking for many younger ladies outside that will be satisfying me, though I don't marry them legally to my house and that doesn't mean I don't love my wife but that I must still satisfy myself sexually (Baba pupa)."

"That's the exact reason why I married my second wife, as I observed that my wife has reached menopause and we had only two children, and I still desire to have more children, I have to go for a younger lady now, will you blame me for that? (Baba Afoo)

"Sincerely, this made me to start extra marital affairs her complaint and rejection is so much and I can't bear nor endure that, I instantly began to have extra marital affairs because I am a very active man as you see me old (Baba Egba)"

"My husband noticed and he said I know, it's menopause and he left me alone ... he understands it he avoids talking to me .... he gave me attention and tried to distract me ... when he notices it he avoids making a mess, they are very understanding ...he respected he is coring and he said Is there anything I can do to help you? (A participant in Hogo et al, study)"

Though none of the discussants expressed any form of separation or divorce as a result of the menopausal stage of their wives

4.5 Coping mechanisms adopted by men whose wives have reached menopause

Majority 343(80.3%) of respondents' confirmed that their wives have reached menopause. Among respondents whose wives had reached menopause, 58.3% knew it through wives' self-report and followed by 30.6% who perceived wife's physiological change. In the same manner, 58.3% of respondents were stable at initial response because they have been expecting it. However, on the account of the effect of the MS on their sexual health, 53.8% of them experienced reduction in their sexual interest. Approximately, sixty percentage (59.8%) maintained that they opened a discussion with their wives as a means of coping strategy and 94.2% assumed that they were highly satisfied with the strategy they adopted.

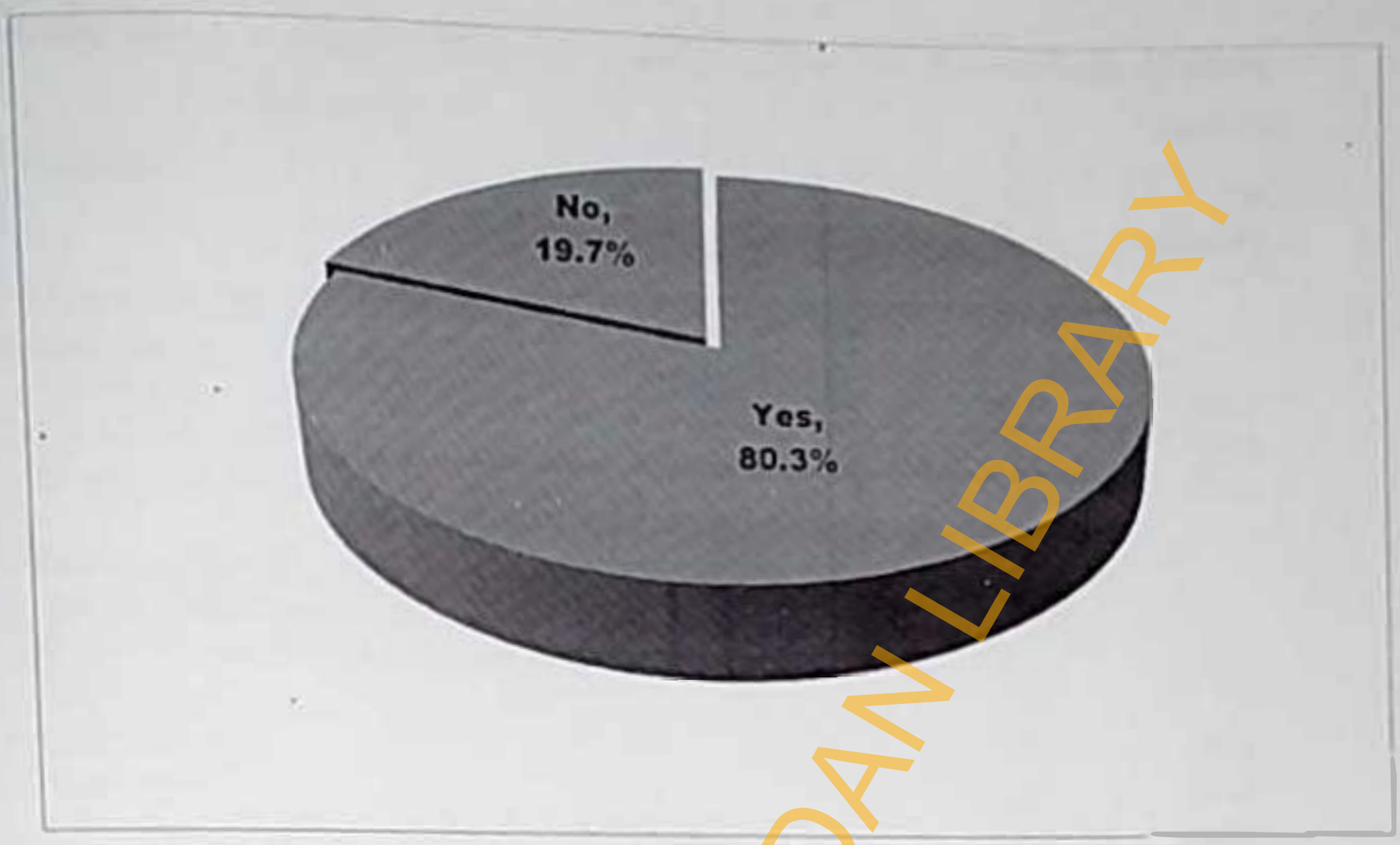

Figure 4.2: Respondents' awareness of wife' menopause

Table 4.8: Coping mechanisms adopted by men whose wives have reached menopause (n=343)

Variables	Yes Freq.(%)	No Freq.(%)
Means of information about wife's menopause		
Self report	200	58.3
Physiological changes	105	30.6
Observation of ceased menstrual flow	38	11.1
Initial response when perceived that wife has reached menopause		
Stable because of pre-knowledge (have been expecting)	200	58.3
Accepted fate	87	25.4
Was afraid	39	11.4
Overreacted (because of lack of owareness)	17	5.0
Effect of wife's menopausal stage on spouse' sexual health		
Reduction in sexual urge	185	53.9
Loss of sexual interest completely	50	14.6
Extra marital affair	14	4.1
No effect	94	27.4
Coping strategy adopted as wife reaches menopause		
Discuss with the wife	205	59.8
Accept fate of the situation	78	22.7
Visit hospitals	36	10.5
Seek advice from friends	24	7.0
Satisfied with the strategy adopted		
Yes	323	94.2
No	20	5.8

FGDs report

Report obtained from FGDs buttressed the quantitative result on coping mechanisms adopted by men whose wives have reached menopause as almost all of married men in the FGD sessions had wives who had reached menopause, majority of discussants said that their wives made self-confession to them as she reached menopause but that though they both have been observing the irregularity of the menstrual flows before it finally stops. Also that they did not exhibit any form of reaction as they have been expecting it. As a coping strategy, almost all discussants confessed that they choose to be having a mutual understanding in having discussions with their wives on the matter and coping strategy, though very few said they discuss with their friends in the same conditions so as to learn how they have been coping as well.

The contrary view emerged on traditional and cultural beliefs of men in respect of their sexual health.

One man clarified that as thus:

> *"Ah! Our fore fathers told us that if any man has sex with any woman at that stage, the erection and the manhood might be lost, the fruitful and good will of life can be encountered and that some strange incurable diseases can be the result in men. Therefore we were trained to desist from having sex with such women (Boba pupa)."*

Although, some men also expressed that though they were aware of such beliefs but they believe it is a superstition because they have been having sex with their wives at the menopausal stage and they never experienced such consequences, therefore debunking the said facts.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

Knowledge of menopausal syndrome among married men

This study shows that the good knowledge of menopausal syndrome demonstrated by most respondents both in quantitative and FGD discussants may be because their wives have reached menopause and they were full of experiences, the discussants expressed a very good depth of knowledge of menopausal syndrome. Confirming this, in a study of Nigerian women, Southin (2010) was reported that average age of menopause among the set of people in the study was 49years and above,, which was slightly lower than the typical age of menopause experienced by women from North America, Australia and Western Europe. This finding is consistent with previous research on menopause (Kathe and Matengu, 2014; Jassim and Al-Shboul, 2008).

Common mentioned symptoms and predisposing factors to menopausal by the respondents. in this study were also identified in many of previous literatures. Such included vaginal dryness, headache, insomnia and pain were in line with a study carried out in western countries, where menopausal symptoms such as hot flushes. night sweats and vaginal dryness are considered as the main climacteric complaints (Mishra et al., 2012; Green et al., 2009). These may be reported more frequently in modern culture because women are aware that these symptoms are associated with menopause. African and Asian women reported more of somatic symptoms like fatigue, head ache and joint pains (Jansirani, Vidya & Muliira, 2013; Abedzadeh-Kalahroudi et al., 2012; El-Shafie et al., 2012, Rahman et al., 2011 & 2010). This is similar to several studies which demonstrated reduced frequencies of menopausal symptoms among Asian women (Green & Santro, 2009; Thurston et al., 2008). Physical symptoms such as hot flashes were relatively uncommon in many studies of Asian populations. The next prevalent symptoms among the menopausal women are the Vaginal symptoms such as dryness, discomfort, itching, dyspareunia and Urologic symptoms like urgency, frequency, dysuria and incontinence and similar findings were reported in the previous studies by El Shafie, Al Farsi, Al Zadjali, Al Adawi, Al Busaidi and Al Shafaee, (2011).

All the respondents that were of the opinion that surgical removal of reproductive organs could not predispose women to MS was an evidence to their good knowledge of MS and at the same time the whole respondents strong conviction that parity and regular sex are not predisposing factors to MS buttressed their assertion on MS and for the fact that majority of the respondents in quantitative and participants in FGDs were the right target population for the study who were rooted in both socio-cultural and medical knowledge of maternal and reproductive health. All study participants attested that old age was the main predisposing factor to MS justified their good understanding. Likewise, other unacceptable predisposing factors to MS reported in this current study were not also found in the previously reviewed literatures (Abedzadeh-Kalahroudi, Mahboubeh, Zohreh, Farzaneh and Zahra, 2012; Olaolorun and Lawoyin, 2009) (Table 4.4 & 5).

Perceptions of married men on menopausal syndrome

On the perceptions of the respondents on MS, all respondents that agreed that menopausal syndrome is culturally acceptable and that it is a natural occurrence respectively explained the unity in cultural diversity. Despite that cross-cultural research is difficult to carry out but there is increasing evidence that a range of culture-related factors, such as lifestyle (smoking, diet, exercise and reproductive history), socio-economic status, body mass index, mood, climate and cognitions (attributions of symptoms to the menopause, beliefs and attitudes towards menopause) might explain cultural uniformity and variations as it was reports in the previous studies (Andrikoula & Prevelic, 2009; Hunter, Gupta et al., 2009; Freeman & Sherif, 2007; Avis et al., 2001). All participants that refuted that menopausal syndrome is a disease confirmed their true knowledge about the phenomenon and this was consistent with previous study conducted on menopause symptoms Bromberger, Schott, Kravitz, et al. (2010); Ayers, Mann & Hunter, (2011).

Sources of information on menopausal syndrome available to married men

Responses from questionnaire and FGDs that indicated that many men got information on menopausal syndrome through self-reporting and physiological changes of their wives were contrary to sources information of women that had been previously reviewed by different researchers. The most common sources of information acquiring in countries

studied on women knowledge perception and experience of menopausal syndrome are doctors and news media (Madiha, Alsaeed and Shokria 2014; Noroozi, Dolatabadi, Kasiri Eslami, Hassanzadeh, and Davari, 2013). This previous result was also in line with the results reported in the study conducted by Adebajo, Odeyemi, Oyediran, Anorlu and Wright, (2007). Nowadays, in other countries, particularly developed countries, the key role of mass media, health training associations and health care personnel on informing about various issues such as menopause is emphasized, while in developing countries, yet, the role of education and informing public for empowering individuals is slight.

However, psychological symptoms such as: anxiety, depression, mood changes, forgetfulness, poor concentration and sleep disturbances are also common in menopause as well as physiological changes characterised by headaches, heart palpitations; weight gain; hair thinning or loss were in support of the current findings. Thus it demonstrates that menopause has comprehensive effects on all body systems (Nastri, Lara, Ferriani, Rosa-e-Silva, Figueiredo, Martins, 2013; Bauld & Brown, 2009; Adewuyi & Akinade, 2010; Chuni & Sreeramareddy, 2011; Women's Health Queensland Wide, 2009; Discigil, Gemalmaz, Tekin, & Basak, 2009).

Perceived implications of menopausal syndrome on spouses

Perception that MS could not reduce sexual urges contradicted the quantitative result of majority of respondents admitted that MS reduced their sexual urge. This result confirmed the report of some participants in the previous study conducted by Hoga, Vulcano, Miranda and Manganiello, (2010) as some women realized that their partners try to pretend everything is fine when they are affected by the syndrome. This makes women frustrated and creates an unpleasant environment.

Perceived implication that MS could not make men to be unfaithful to their spouses and responses that MS cannot lead to divorce expressed in both quantitative and qualitative reports were supported by the view of women previously studied in some literatures. From the results of the study conducted by Ramakuela, Khoza and Akinsola, (2012); Adewuyi and Akinade, (2010) (Table 4.8).

Coping strategies of men towards spouses' menopausal syndrome

Majority of the participants that maintained that they opened a discussion with their wives as a means of coping strategy to MS is an evidence that spouses could endure with themselves and stay together if there is transparency and openness in their relationship. This will also without iota of doubt strengthen their marriage bond. Ability of men to manage their wives' menopausal condition was reflected in their conclusion that they were highly satisfied with the strategy they adopted. Some of the respondents who said they accepted fate and few who said that they visited hospitals during the period of menopausal condition of their wives might have gotten education or information on menopausal syndrome prior to their time of experiencing it. This result supported the findings of the study conducted by Madiha, Alsaeed and Shokria (2014); Noroozi, Dolatabadi, Kasiri Eslami, Hassanzadeh, and Davari, (2013) and Adewuyi & Akinade, (2010) where they indicated that men and women who have some information about MS gained them from friends, doctors, TV/radio and reading materials in respective order. This supports the idea that friends are the most useful source of information in this study.

5.2 Conclusion

The present study found that men's knowledge of menopausal syndrome was inadequate despite that they had good perception of menopausal syndrome. It was also shown that believed that menopause was a natural process that could not be avoided. The number and types of menopausal symptoms varied among the men with the most common being pain, sweats, headache, rejection of sexual intercourse, mood swings flashes, vaginal dryness etc.

The study also expressed some of the FGD groups' participants, in order to share their concerns, attending social functions with spouse, getting closer to spouse, giving encouragement from spouse and giving reassurance from fears and worries. The study also found similarities in quantitative and qualitative data on menopausal men's psychosocial adjustment and coping mechanisms on the basis of marital status, educational level and socio-economic level, but they were different in terms of religion.

The results of this present study suggest that health education interventions and training to boast men's understanding of menopausal syndrome so as to be able to cope with the new changes in their lives.

5.3 Recommendations

In the light of the findings from this study, the following recommendations are made:

1. The public health care system in Nigeria should mobilize resources to improve the awareness and knowledge of both older men and women about menopause and should promote active and healthy living during this stage of life.
2. Primary health care personnel should be prepared to educate older women alongside with their spouses on changes that occur during menopause and available management modalities.
3. There is need to organize seminars, workshops and enlightenment programmes for spouses of menopausal women, aimed at educating men on the psychosocial adjustment needs of their women which includes love, closeness to spouse etc, which will enable the women to make better adjustment to menopause and so live happily.
4. Individual and group counselling should be planned for menopausal men and women, aimed at helping them to understand themselves better and share their concerns with other young ones who are yet to experience menopause and those men and women who experience similar problems in order to find solution to such problems. Psychological counselling enables men to adjust better to the situation and grants them the assurance that menopause is a natural phenomenon.
5. The medical experts should help to dispel fears, anxieties and worries in menopausal men by letting them understand that menopause is a natural phenomenon, as well as giving them information on how to cope with it in addition to administering treatment for severe cases.
6. Husbands should encourage their wives during menopause and take them to social functions regularly so as to build up their self-confidence.
7. There is need for Christian and Muslim leaders to introduce training workshops/seminars through medical experts so that men and women will be

sufficiently enlightened on problems and coping strategies before and during menopause. This will prepare both ahead of time instead of allowing them to learn in a hard way.

8. Husbands should also be advised on how to assist their wives during the period. by showing concern and making the women feel loved.

5.4 Implications of the findings to health promotion and education

The research has implications for healthcare providers, family members and the society as a whole. This is necessary in providing information, social and emotional support for menopausal women and their spouses, which will assist them in making better adjustment to the challenges they are faced with. In this study, the respondents were not significantly different in their perception of psychological and social support needs probably due to their similar cultural background such as what they hold true or value most as regards beliefs, which may have influenced their perception. Hence, culture may have been responsible. Therefore, such men require psychological counselling to enable them see their wives' needs in the actual context of what they are, and not because of culture. The instrument could have played a part also in their response patterns. This means that their responses could have been different if other instruments similar in purpose were administered on the respondents.

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APPENDIX I

DRAFT FOCUS GROUP DISCUSSION GUIDE ON THE KNOWLEDGE AND PERCEPTION OF MENOPAUSAL SYNDROME AMONG MARRIED MEN IN OLUYOLE LOCAL GOVERNMENT ARE OF OYO STATE

Dear Respondent,

I am ODEDELE Adeniyi Tajudeen, a postgraduate student of Health Promotion and Education Education in the Faculty of Public Health, College of Medicine, and University of Ibadan. This study is being conducted as a part of the requirements for the award of (MPH) degree.

This study is designed to investigate the *knowledge and perception of menopausal syndrome among married men in Oluyole Local Government Area of Oyo State.* Your participation in this study will enable me to know your knowledge, perceptions, sources of information, the perceived implications and your coping strategies on menopausal syndrome. Please note that your participation in this interview is voluntary; this implies that you may agree to participate or decline participation and that there are no wrong nor right answers. Also, if you will permit me, I will like to capture the interview in a recorder in order to avoid loss of any part of the interview during data analysis.

Thanks for your co-operation.

Would you like to participate? Yes ☐ No ☐

Odedele Adeniyi Tajudeen

08039099528

S/N	QUESTIONS	PROBE
1.	What do you know about menopausal syndrome?	i. Can you describe what menopausal syndrome is? ii. Can you explain the causes of menopausal syndrome? iii. At what age or among which class of women does menopausal syndrome occurs?
2.	What are your perceptions towards menopausal syndrome?	i. Do you see menopausal syndrome as a disease or just a natural occurrence? ii. Do you feel menopausal syndrome is a spiritual attack? iii. Do you see menopausal syndrome as a method of family planning? iv. What is your general view towards menopausal syndrome?
3.	Where do you get information on menopoustil syndrome?	i. What is the source of your information on menopausal syndrome? a, friends b, relatives c, colleagues at work d, media (radio, television, newspapers, magazines etc.) e, seminars and conferences f, wife ii. Do you have any other source of information asides from those mentioned earlier?
4.	What are your perceived implications of menopausal syndrome on nuritial relationship?	i. Can you explain the implications that the menopausal syndrome cause to marital relationships? a, separations of rooms

		b. unusual hatred c. divorce and separation d. any other perceived implications?. please explain .
5.	What are the coping strategies you adopt as a result of menopausal syndrome occurrence in your wife?	i. How do you cope with the menopausal syndrome in your wife? ii. What steps do you take on the menopausal syndrome of your wife? a. discuss and listen to friends advice b. visit a spiritual homes for help c. visit hospitals d. accept fate e. do you have any other coping strategies apart from the ones mentioned earlier? Please explain

APPENDIX II

QUESTIONARESON KNOWLEDGE AND PERCEPTION OF MENOPAUSAL SYNDROME AMONG MARRIED MEN IN OLUYOLE LOCAL GOVERNMENT AREA OF OYO STATE

INFORMED CONSENT FORM

Good day Sir/Ma,

This study is being conducted by a Masters of Public Health student from the Department of Health Promotion and Education in the Faculty of Public Health, College of Medicine, and University of Ibadan.

The study is aimed at investigating the knowledge and perception of menopausal syndrome among married men in Oluyole Local Government Area of Oyo State. Your sincere response to the questions asked will be highly appreciated. Moreover, any information provided will be treated with confidentiality, since this study is majorly for the purpose of academic and advancement of knowledge. I also wish to inform you that participation in this study is voluntary. This implies that you may agree to participate or decline participation. Necessary ethical approval has also been obtained from the Oyo State Ethical review committee. Please kindly indicate by ticking the appropriate box below to indicate or show your willingness to participate or not.

Thank you.

Can we start now? Yes ☐ No ☐

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Please tick any of the response that apply to you in the boxes ☐ provided or complete the blank space provided.

1.How old were you in your last birthday? _____

2.Type of marriage 1. Monogamy ☐ 2 Polygamy ☐ 3. Others please specify_____

3.Religion 1. Christianity ☐ 2. Islam ☐ 3.Traditional ☐ 4.Others please specify_____

4.Ethnicity 1. Yoruba ☐ 2.Igbo ☐ 3.Hausa ☐ 4. Others _____

5.Occupation 1. Civil servant ☐2.Artisan ☐ 3.Self-employed ☐ 4. Unemployed ☐

5. Others, please specify_____

6.Highest Educational level 1. No formal education☐2. Primary ☐ 3. Junior secondary ☐

4. Senior secondary ☐ 5. Technical school ☐6.OND ☐ 7.HND ☐ 8. First degree ☐

9. Masters ☐ 10. Ph.D. ☐ 11. Others please specify_____

SECTION B: LEVEL OF KNOWLEDGE OF MARRIED MEN ON MENOPAUSAL SYNDROME

7. What do you understand by menopause? _____

8. At what age should a woman's menstruation stops? _____

9. What causes a woman's menstrual period to stop?

1. Illness ☐ 2. Supernatural attack ☐ 3.Old age ☐ 4. No idea ☐ 5.Infertility☐

10. How do you know if a woman has reached menopause?

_____

11. What can make a woman reach menopause earlier than usual?

1. Operation on the uterus ☐ 2.Early child bearing ☐ 3. Early menstruation ☐

3.Regular sex ☐ 4. Nutritional status ☐

Which of these can cause menopausal syndrome? (Tick the right options)

S/N	Statement	Yes	No
12	Under nutrition		
13	Early menarche		
14	Infertility		
15	Advancement in age		
16	Hysterectomy		
17	Normal physiological change		
18	Sexually transmitted infections		

19. Give two health problems associated with menopause?

i. _____

ii. _____

For each of the statements below, indicate Yes or No

S/N	Statements	Yes	No
20	Menopausal syndrome affects all women who have passed their reproductive age		
21	Menopausal syndrome can be managed		
22	Menopausal syndrome occurs among children		
23	Menopausal syndrome is a disease of old women		
24	Menopausal syndrome can be prevented		

25. Give two signs of menopausal syndrome

1. _____

2. _____

26. Can menopause be treated? 1. Yes ☐ 2. No ☐

What are the predisposing factors to menopausal syndrome? (Tick the right options)

S/N	Statement	Yes	No
27	Surgical removal of reproductive organs e.g. ovaries		
28	Number of children had (parity)		
29	Regular sexual intercourse		
30	Irregular menstrual flow		

31. Score obtained =

32. 0 - 7 = Poor = code 1

> 7 – 15 = Fair = code 2

> 15 = Good = code 3

SECTION C: THE PERCEPTIONS OF MARRIED MEN TOWARDS MENOPAUSAL SYNDROME

33. What do you think is the cause of menopause?

34. Are there any risks associated with menopause? 1. Yes ☐ 2. No ☐

Due to the opinions of some men in the past, please indicate the level of your agreements toward the statements below. Agree (A), Undecided (UD), Disagree (D). Tick as apply.

S/N	Statements	A	UD	D
35	Menopausal syndrome is culturally acceptable			
36	Menopausal syndrome is a natural occurrence			
37	Menopausal syndrome is a disease			
38	Menopausal syndrome reduces sexual urges and satisfaction			
39	Menopausal syndrome makes women feel less feminine			
40	Menopausal syndrome is a result of past active sex			
41	Menopausal syndrome is contagious			
42	Menopausal syndrome is a method of family planning			
43	Menopausal syndrome makes women feel proud			
44	Menopausal syndrome makes women tired after sex			
45	Menopausal syndrome indicates nearness to death			
46	Menopausal syndrome is a spiritual attack			
47	Men do not like having sex with women who have reached menopause			
48	Women who have reached menopause have lost their youthfulness			
49	Engaging in sexual intercourse after menopause make women sick			
50	Regular menstruation is a sign of good health			

51. What are the effects of sexual practices on the health of women who have reached menopause?

_____

_____

_____

52. Which other personal opinions do you have concerning menopausal syndrome?_____

SECTION D: THE PERCEIVED EFFECTS OF MENOPAUSAL SYNDROME ON MARITAL RELATIONSHIPS

53. Do you think menopausal syndrome has effects on marital relationships?

1 Yes ☐ 2.No ☐

Please tick the right options for the following statements on the perceived effects of menopausal syndrome on marital relationships.

S/N	Statements	Yes	No
54	Reduction in sexual urge		
55	Hatred		
56	Separations of bed rooms		
57	Reduction in couple intimacy		
58	Unfaithfulness		
59	Divorce		
60	Nagging family issues		

SECTION E: THE COPING STRATEGIES ADOPTED BY MEN WHO PERCEIVED THEIR WIVES HAVE REACHED MENOPAUSAL AGE

Now, I will ask you questions on how you cope with the menopausal syndrome of your wife.

61. Has your wife reached menopause? 1. Yes ☐ 2. No ☐

62. How did you know when she reached menopause?

_____

_____

63. What was your initial response when you perceived that your wife has reached menopausal age?

_____

64. What has been the effect of your wife's menopausal stage on your sexual health?

_____

65. What coping strategy will you adopt if your wife reaches menopause?

1. Seek advice from friends ☐ 2. Visit hospitals ☐ 3. Visit spiritual homes ☐
4. Accept fate of the situation ☐ 5. Discuss with the wife ☐
6. Others (Specify) _____

66. Are you satisfied with the strategy you adopted? 1. Yes ☐ 2. No ☐