

## **PSYCHOLOGICAL IMPLICATIONS OF MENOPAUSE AMONG WOMEN IN IDEMILI NORTH-LOCAL GOVERNMENT OF ANAMBRA STATE, NIGERIA**

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**ABSTRACT:** *Menopause is an age-related phase of physiological transition of females. It is the cessation of the menstrual cycle, which starts between ages 40-55 years due to decreased levels of feminine estrogen reproductive hormone. This physiological transition may be mild or severe with psychological implications that may hamper quality of life. The study aims at finding out the psychological implications of menopause among women in Idemili-North Local Government of Anambra State, Nigeria. The participants (120 women) were selected through simple random sampling technique. A semi-structured questionnaire was used to obtain data from the participants. The findings showed that women experience various psychological challenges and need to be educated prior to this menopausal period. Interventional strategies that target at reducing psychological distress and promoting the ability to cope with midlife transition among menopausal women need to be greatly encouraged.*

**KEYWORDS:** Psychological Implications, Menopause.

### **INTRODUCTION**

Menopause is from Latin words where “mono” means month and “pause” means to stop. It is the time when ovaries stop producing eggs any more. Menopause is an important life milestone in physical development. As a female grows old with passing years, she undergoes different phases of life, from childhood to adulthood. Her body keeps on changing at all level. It may be anatomical, psychological and hormonal with the years of aging. Menopause is a natural phenomenon which occurs in all women when their finite numbers of ovarian follicles are depleted as a result of a fall in estrogen and progesterone level with an increase in luteinizing hormone (LH) and follicle stimulating hormone (FSH) response (Lawrence, Chole & Haw, 2011). It is the end of the female reproductive period. During this stage menstruation becomes erratic and eventually stops and there are a number of secondary effects which are known as menopausal symptoms (Nelson, 2008).

All healthy women will transit from a reproductive or premenopausal to a post-menopausal state (Grady, 2006; Soules, 2005). But all women will not experience menopause in the same way in terms of their onset and symptoms. For many women, the menopause

transition is troublesome period of life. However, the popular belief that menopause (or ‘the change of life’) causes serious psychological mood swings, loss of sexual interest, and depression is not supported by current research (Hvas 2001; Matlin 2003; Morrison & Tweedy 2000). According to them, one large – scale study of post- menopausal American women found that almost two-thirds felt relief that their menstrual periods had stopped, and over 50% did not experience hot flashes (Brim, 19990). When psychological problems exist, they may reflect the social devaluation of aging women, not the physiological process of menopause itself. It is clear that some serious psychological problems can accrue from menopause (Mohamed, 2018).

Menopause does not happen in isolation from the social interpretations and psychological changes that may also occur in a woman’s life at the same time. It is important that any understanding of menopause is placed within the context of a women’s life and includes consideration of her psychological state, psychological influences, cultural and social background, and the ageing process. Psychological problems, particularly depression are one of the major problems affecting postmenopausal women in many communities.

Depression is a common and major complaint among some mid-life women. It adversely affects an individual's social relationship, capacity to work and learn, and is an indicator of the risk of self-harm and suicide. Anxiety is highly prevalent during the early postmenopausal stage, mainly due to hormonal changes. Therefore, this study aims at exploring the psychological implications of menopause among women in Idemili-North Local Government Area of Anambra State.

The purpose sought to determine:

1. The psychological implications of menopause among women.
2. How these psychological effects would be handled to reduce their negative impacts on the menopausal women?

The study was guided by the following questions:

1. Is there any psychological implication among menopause women in Idemili-North Local Government of Anambra state?
2. Is there a relation between menopausal symptoms, degree of anxiety and depression among middle age women?
3. Do societal attitudes to menopause affect menopausal women?
4. Are there remedies to these psychological problems?

## **LITERATURE**

### **Theoretical Review**

Evolutionary biologists classify theories of menopause as either adaptive or non-adaptive theories.

#### **Adaptive theories**

Adaptive theories suggest that female reproductive cessation results from its selective advantage, in that the increased risk of personal reproduction late in life makes it biologically more advantageous to rechanneled reproductive energy into helping existing descendants.

**Grandmother hypothesis:** The grandmother hypothesis first suggested by Williams (1957) states that the fitness of offspring depends on maternal care. In addition, it states that increased mortality risk of reproduction leads to increased advantage in cessation of reproductive and

investment in already born offspring, rather than prolonged reproduction with increased mortality for both mother and offspring. The cessation of reproduction enables female to increase their fitness at two levels as regards the mother hypothesis. The first level is being the survival of immature offspring, and the second being the fertility of mature offspring. The first level of the mother hypothesis refers to the fact that offspring is dependent on maternal care in order to survive and the mother needs to stay alive in order to care for the offspring. The survival of the mother is essential for the survival of her offspring.

The grandmother hypothesis suggests that as females age, investing in grand offspring increases fitness through inclusive fitness more than if they were to continue to reproduce themselves. This is because there are increased hazards with child birth with increased age and the offspring is dependent on the mother during the juvenile period and since she might not survive long enough for the offspring to survive until maturation the investment might be lost. (Hawkes 1988, Hill & Hurtado 1991; Williams 1957). The grandmother hypothesis is widely used to explain the occurrence of females living beyond their reproductive life, likely due to the fact that the theory is consistent with modern evolutionary theories as well as being logical (Hill & Hurtado 1991). This theory is based on inclusive fitness benefits gained from increasing the productive success of kin at an advanced age, when prospects of successfully raising additional offspring is reduced. Alternatively, the mother hypothesis suggests that increased investment in already produced offspring at late life explains menopause.

**Reproductive conflict hypothesis:** A factor which is not considered in the previous adaptive theories, which might shed some light on the evolution of menopause, is that of inter-generational reproductive conflict. According to theories, the cost of reproductive conflict by females of different generations of shared social units is a missing component in classical inclusive fitness (Cant & Johnstone, 2008; Johnstone & Cant, 2010). The reproductive conflict is to a great extent affected by the age-specific relatedness among females which differs

depending on the social structures of mating patterns (Johnstone & Cant, 2010; Lahdenpera 2012).

### **Non-Adaptive Theories**

Non-adaptive theories indicate that menopause is an artifact of the relatively recent dramatic increase in human longevity.

**Antagonistic pleiotropy theory:** According to theories of antagonistic pleiotropy, the menopause is the product of physiological trade off of enhancing early life reproduction by the cost of disadvantageous late life reproduction. (Peccie, 2001a, 2001b; wood et al., 2000). The theory has it that menopause is a product of antagonistic pleiotropy included as a factor in the grandmother hypothesis (Peccei, 2001a) as well as other hypothesis. Contrary to this some claim that antagonistic pleiotropy is a theory of its own. Wood (2000) suggests that menopause has evolved by antagonistic pleiotropy.

### **Conceptual Review**

Before or during menopause women often experience hot flashes. These typically last from 30 seconds to ten minutes and may be associated with shivering, sweating, and reddening of the skin. Hot flashes often stop occurring after a year or two. Other symptoms may include vaginal dryness, trouble sleeping, and mood changes. The severity of symptoms varies among women. In some women, problems that were present like endometriosis or painful periods will improve after menopause. While typically not needed, a diagnosis of menopause can be confirmed by measuring hormone levels in the blood or urine. Menopause is the opposite of menarche, which is the time when a girl's periods start.

### **Signs and Symptoms**

The changes involved in peri-menopause and menopause include:

**Lower fertility:** As a female approaches the end of the reproductive stage, but before menopause begins, estrogen levels start to fall. This reduces the chances of becoming pregnant.

**Irregular menstruation:** The first sign that menopause is approaching is usually periods occurring less regularly. They may come more or

less frequently than usual, and they may be heavier or lighter.

**Vaginal dryness and discomfort:** Vaginal dryness, itching, and discomfort may start during perimenopause and continue into menopause. A person with any of these symptoms may experience chafing and discomfort during vaginal sex. Also, if the skin breaks, this can increase the risk of infection. Atrophic vaginitis, which involves thinning, drying, and inflammation of the vaginal wall, can sometimes occur during menopause. Various moisturizers, lubricants, and medications can relieve vaginal dryness and associated issues.

**Hot flashes:** Hot flashes are common around the time of menopause. They cause a person to feel a sudden sensation of heat in the upper body. The sensation may start in the face, neck, or chest and progress upward or downward. A hot flash can also cause sweating and red patches to form on the skin. Some people experience night sweats and cold flashes, or chills, in addition to or instead of hot flashes. Hot flashes usually occur in the first year after menstruation ends, but they can continue for up to 14 years after menopause.

**Sleep disturbances:** Sleep problems can arise during menopause, and they may stem from anxiety, night sweats, and increased need to urinate. Getting plenty of exercise and avoiding heavy meals before bedtime can help with managing these issues, but if they persist, contact a healthcare provider.

**Emotional changes:** Depression, anxiety, and low mood are common during menopause. It is not unusual to experience times of irritability and crying spells. Hormonal changes and sleep disturbances can contribute to these issues. Distress about low libido or the end of fertility can contribute to depression during menopause. While feelings of suicidal tendency, sadness, irritability, and tiredness are common during menopause, they do not necessarily indicate depression.

### **METHOD**

**Participants:** The participants were 120 women from Idemili-North local Government area of Anambra State. These participants were selected

using cross-sectional design. The age range of the participants is 40-55 years.

**Instrument:** Data was collected using a self-developed questionnaires structured in such a way as to elicit information aimed at meeting the criteria and purpose of the study. The validity of the instrument was ascertained from the supervisor.

**Procedure:** A written letter was sent to the community leader requesting permission to conduct the study. The researcher was invited for an interactive meeting with the chiefs and

compound heads. Thereafter, approval to conduct the study was given by the community ruler (king). Informed consent to participate in the study was obtained after the purpose of the study was explained to the participants and confidentiality was assured before issuing the questionnaire.

**Design/Statistics:** The design of the study is cross-sectional. This is because it focused on a naturally existing population and gathered data from their environment of domicile. The statistics was a descriptive analysis.

## RESULTS

**Table 1: Descriptive Statistics of the Participants**

Demographic Data	Options	Frequency	Percentage (%)
Age Range	40-44 years	16	13.3
	45-49 years	22	18.3
	50-54 years	38	31.7
	> 55 years	44	36.7
	<b>Total</b>	<b>120</b>	<b>100%</b>
Marital Status	Single	9	7.5
	Married	68	56.7
	Cohabitation	10	8.3
	Windowed	33	27.5
	<b>Total</b>	<b>120</b>	<b>100%</b>
Education Qualification	No formal	28	23.3
	Primary	47	39.2
	Secondary	40	33.3
	Tertiary	5	4.2
	<b>Total</b>	<b>120</b>	<b>100%</b>
Type of Marriage	Polygamy	86	71.7
	Monogamy	24	20.0
	Not married	10	8.3
	<b>Total</b>	<b>120</b>	<b>100%</b>

Analysis of the socio demographic data obtained revealed that out of 120 sampled respondents 13.3% were within 40-44 years of age, 18.3 were between 45-49 years old, 31.7% were between 50-54 years old, while 36.7 are >55 years old and above. 7.5% were cohabited, 56.7 were married, 8.3 were divorced and 27.5% were widowed. Also, 23.3% of the respondents had no formal education, 39.2% had primary education as their highest educational attainment, 33.3% have secondary education, while 4.2% had tertiary education. Polygamy 71.7% are from polygamous marriage, 20.0% are from monogamy and 8.3 were not married.

## DISCUSSION

Women go through various stages of life that is influenced by specific aspect. Menopause

has been considered a major transition point in women's reproductive and emotional life. Psychological problems affect physical wellbeing resulting to chronic fatigue, sleep problems and changes in appetite. It affects mood, with feelings of sadness, emptiness, hopelessness and dysphoria which interfere with concentration and decision making. It is believed that a cause of depression and anxiety results from a change in estrogen levels which occur during menopause.

From the study conducted, about 89% of the population confirmed that they experienced premenopausal symptoms like hot flashes, vaginal dryness, discomfort during sex, lower sex drive, fatigue, irregular periods, and urine leakages when coughing or sneezing, while 21% had cessation of menstruation as the prominent symptom that begged their attention. Again, the

average percentage of the population that experienced menopause between 40-45 years of age is 30.1%. From 45 years and above is 86% this finding is similar to urban females of other communities in Nigeria (Ade 2011, Osinowo, 2003) and compares favorably with studies that suggest women worldwide attain menopause aged 50 years (National Institutes of Health, 2005; Ayranci 2010).

Moreover, the women experienced depression and anxiety the most while 18.9% experienced either of them. About 49.5% of the population had the moderate type of depression followed by mild 92.4% and severe depression 97.8%. In the same line, in the study about depression and anxiety in Idemili-North, it was reported that the levels of depression and anxiety was found to be 86.7% and 88.9% respectively. Then, more than half of the total population confirmed the following as the psychological effect. They experienced altogether irritability, feeling of sadness, nervousness, anxiety, depression, stress or distress while one quarter negate the experiences sequentially. The most commonly cited psychological symptoms associated with the menopausal transition include irritability, nervousness stress or distress, and depression (Bauld & Brown, 2009).

Some studies have found that while vasomotor symptom seemed more consistent, varying by genetic or lifestyle factors, psychological symptoms had greater inter-group variability among races, and showed greater variability of region (Avis 2001; Ayers Forshaw & Hunter, 2010, Bromberger & Kravitz, 2011). Finally, more than one third of the population affirmed that there are disadvantages associated with menopause while 25% negate the assertion.

### **Psychological Implications of Menopause among Women**

**Personal psychological vulnerability:** Years usually associated with natural menopause, that is 45-55, are not associated with increased psychiatric morbidity or more utilization of health services by women. Various personal factors of a woman may affect her menopausal experience. They include past experience of mood disorders, negative attitude to menopause

and aging, women with more negative attitudes toward the menopause in general report more symptoms during the menopausal transition, life events, personality, and coping. Women with a low self-esteem used to have more severe menopausal experience.

**Life stressors:** They may include lack of social support, unemployment, surgical menopause, and poor overall health status.

**Interpersonal relationships:** Social interpersonal relationships also have their impact on a person's life and general well-being. They constitute a major social support in a woman's life and help her in managing stressors and problems in life with influential effect on psychological health. They may include the relationship with a partner, relationship with children, and relationship with friends/social support

Menopause could be a stressful transition due to various beliefs related to fertility and a gradual diminishing role or role shifts in society. Depression at menopause has been attributed to the Empty Nest Syndrome. A phenomenon observed with depression that occurs in some men and women when their youngest child is about to leave home. Many women, however, report an enhanced sense of well-being and enjoy opportunities to pursue goals postponed because of child rearing

**Social-cultural factors:** The influence of education, economic and psychological factors, as well as lifestyle, body image, interpersonal relationships, role, and socio-cultural factors in predicting levels of depression and anxiety in the menopause cannot be ignored. Variations across cultures may reflect differences in beliefs and expectations regarding menopause and aging, status and roles of women in a particular society, sensitivity to specific symptoms, and biology, diet, and health behaviors. In developing countries where there is low literacy rate, it has been observed that females expect conception even after menopause, and this may be because the success of woman was considered to be related to production of more children, particularly males.

The factors that must be considered while dealing with menopausal women are the following: The variation in reproductive period, i.e., from onset of menses (also termed “menarche”) to menopause; and variation in life expectancy among different countries. Therefore, loss of fertility or reproductive life may be a source of stress especially among tribes, where long reproductive age period is desired on the cultural belief that this will lead to a large family size that is considered as a symbol of success.

### **Solution to Psychological Implication of Menopause among Women**

The art of assessing menopausal symptoms and menses may be threatening in some culture. Therefore, reaching this condition needs proper working and skills which are less cumbersome. In general, females are sensitive about aging process and loss of fertility.

### **Pharmacological Interventions**

#### **1. Hormone Replacement Therapy:**

Estrogen and androgen alone or in combination of both are more effective in improving symptoms in non-clinically depressed premenopausal and menopausal women according to meta-analysis of various studies on effects of hormone replacement therapies on mood. Progesterone had a much smaller effect, and when combined with estrogen, reduced the positive effects of the estrogen. The most robust effect was noted with androgen, either alone or in combination with estrogen.

#### **2. Antidepressants:** Depression during perimenopause and menopause is treated in much the same way as depression that strikes at any other time. Although symptoms of depression are relieved by a majority of antidepressants including SSRIs such as Fluoxetine, Paroxetine, SNRIs, e.g., venlafaxine, desvenlafaxine, and TCA as amitriptyline, but desvenlafaxine (the dual serotonin and norepinephrine reuptake inhibitor) is used popularly, off label, for symptoms of depression with menopause. The

number of nighttime awakenings because of hot flashes was also significantly decreased.

### **Non-Pharmacological Interventions**

#### **Lifestyle Modifications**

A healthy lifestyle can help to reduce symptoms of menopause, which includes:

**Exercise:** Being physically active helps with hot flashes, stress, and mood. Exercise has beneficial effects on hot flashes, well-being, Body Mass Index (BMI) and Coronary Heart Diseases risks. Activities that stimulate the brain can help rejuvenate memory such as doing crossword puzzles, longhand mathematics, and reading books.

**Diet:** A nutritious diet helps with fatigue and moodiness. A healthy diet, low in fat, high in fiber, with plenty of fruits, vegetables, and whole-grain foods. Intake of foods with phytoestrogen. Phytoestrogens are estrogen-like substances found in some cereals, vegetables, legumes (including soy), and herbs. They might work in the body like a weak form of estrogen. The first widely attributed health benefit of phytoestrogen consumption was relief from vasomotor perimenopausal symptoms, including hot flashes and night sweats.

Moderation is a likely key and the incorporation of real foods, as opposed to supplements or processed foods to which soy protein is added, is probably essential for maximizing health benefits. Ensure enough calcium and vitamin D intake on regular basis, and a multidisciplinary look at menopause. Avoid smoking and alcohol, as it is known to make hot flashes worse. Foods that should be avoided in menopause are caffeine and spicy foods

**Social support:** Social interactions with family and community, nurturing relationship, and healthy emotional support from friends are very effective means. A professional help from a counselor and mental health professional is quite effective and must be readily available. Misconception as described by individuals as potentially difficult, embarrassing, and stigmatizing leading to fear and avoidance in some individuals.

## Conclusion

This study found that the majority of the middle aged women in our study viewed the menopausal transition as a natural process, and it is affected by both hormonal changes and by ageing. Each woman seems to experience a set of psychological and physical symptoms that are in some sense unique to her experience. Women during menopause experience psychological implications ranging from depression, anxiety, irritability, lack of motivation, feeling of sadness, aggressiveness, difficulty in concentration and social isolation. Therefore, reassurance, care, support, counseling and health education are important during this period to prevent serious psychological, medical and mental health issues associated with the transition, thereby improving quality of life.

## Recommendation

Based on the results of the study the following recommendations were suggested:

1. Women should be enlightened and prepared for the possible psychological health and other symptoms that may arise during menopause
2. Regular medical checkup is recommended for middle aged women.
3. Proper nutrition and dietary practices should be encouraged to ensure healthy living during this period. As healthy food improves good mood.
4. Mild exercise should be encouraged.
5. Again, the avoidance of a sedentary lifestyle or living in isolation should be discouraged to help the one concerned in coping with the challenges of the periods.
6. An in-depth qualitative study is recommended for psychotherapists and clinical doctors to help explore the management and treatment of the psychological implications of menopause among women.

## REFERENCES

Adekunle, O., Fawole, A.O., & Okunlola, M.A. (2000). Perception and attitudes of Nigerian women about menopause. *J. Obstet. Gynaecol.* 20, 525-529.

- Adelmann, P.K. (1994). Multiple roles and psychological well-being in a national sample of older adults. *Journal of Gerontology: Social Sciences*, 49, S277-S28S. 67.
- Agwu, U.M., Umeora, O.U.J., & Ejikeme, B.N. (2008). Patterns of menopausal symptoms and adaptive ability in a rural population in South-east Nigeria. *J. Obstet. Gynaecol.* 28(2),217-221.
- Ande, A.B., Omu, O.P., & Olagbuji, N.B. (2011). Features and perceptions of menopausal women in Benin City, Nigeria. *Ann. Afr. Med.* 10(4), 300-304.
- Anderson, D., Yoshizawa, T., Gollschewski, S., Atogami, F., & Courtney, M. (2004). Menopause in Australia and Japan: Effects of country of residence on menopausal status and menopausal symptoms. *Climacteric*, 7(2), 165-174.
- Avis, N.E., Colvin, A., Bromberger, J.T., Hess, R., Matthews, K.A., Ory, M., & Schocken, M. (2009). Change in health-related quality of life over the menopausal transition in a multiethnic cohort of middle-aged women. *Study of Women's Health across the Nation. Menopause*, 16(5), 860-869.
- Avis, N.E., Stellato, R., Crawford, S., Bromberger, J., Ganz, P., Cain, V., & Kagawa-Singer, M. (2001). Is there a menopausal Syndrome? Menopausal status and symptoms across racial ethnic groups. *Soc. Sci. Med.* 5, 345-356.
- Bahri, N., Afat, M., Aghamohamadian, H.R., & Delshad, A. (2013) Investigating the relationship between severity of menopausal symptoms with depression, anxiety other Menopausal symptoms. *Iran J Obstet Gynecol Infertil* 16, 14-20.
- Bansal, P., Chaudhary, A., Soni, K., Sharma, S., Gupta, V., et al . (2015) Depression and anxiety among middle-aged women: A community-based study. *J Family Med Prim Care* 4, 576.
- Bener, A., Saleh, N.M., Bakir, A., & Bhugra, D. (2016) Depression, anxiety and stress symptoms in menopausal Arab women: Shedding more light on a complex relationship. *Ann Med Health Sci Res* 6, 224-231.

- Boyle, G.J. & Murrhy, R. (2001). A preliminary study of hormone replacement therapy and psychological mood states in peri-menopausal women. *Journal of Psychological Reproduction, 88*, 160-170.
- Bromberger, J.T., Kravitz, H.M., Chang, Y., Randolph, Jr, J.F., Avis, N.E., et al. (2013). Does risk for anxiety increase during the menopausal transition? Study of women's health across the nation (SWAN), *Menopause, 20*, 488-495.
- Charmchi, N., & Khalatbari, J. (2011). A review on depression and anxiety during women's menopause *Int J Sci Adv Technol, 1*, 152-156.
- Chedraui, P., Perez-Lopez, F.R., Morales, B., & Hidalgo, L. (2009). Depressive symptoms in climacteric women are related to menopausal symptom intensity and partner factors. *Climacteric, 12*, 395-403.
- Collins, A. (1997). A psychological approach to the management of menopause. In Wren BG (ed ) Progrps; in rhp *Management of Menopause*, pp 94-98, London: Parthenon Publishing Group.
- Collins, A., Hanson, U. & Eneroth, P. (1983). Postmenopausal symptoms and response to hormonal replacement therapy: Influence of psychological factors. *Journal of Psychosomatics and Obstetrics, 2-4*, 227-233.
- Dawlatian, M., Bakhteh, A., Vellaii, N., & Afshar, F. (2006). Prevalence of menopausal related depression and its relative factors. *Behbood Sci Quart 10*, 89-176.
- Decks, A.A. & McCabe, M.P. (2001). Menopausal stage and age and perceptions of body image. *Psychology and Health, 16*, 367-379.
- Delavar, M.A., & Hajiahmadi, M. (2011). Factors affecting the age in normal menopause and frequency of menopausal symptoms in northern Iran. *Iran Red Crescent Med J, 13*, 192-198.
- Dennerstein, L. & Burrows, G.D. (1978). A review of the studies of the psychological symptoms found at menopause. *Maturitas, 1*, 55-64.
- Effects of menopause, vasomotor symptoms and depressive symptoms. *Menopause, 21*, 1217-1224.
- Freeman, E.W. (2010). Associations of depression with the transition to menopause. *Menopause, 17*, 823-827.
- Freeman, E.W. (2015). Depression in the menopause transition: Risks in the changing hormone milieu as observed in the general population. *Women's Midlife Health, 1, 2*.
- Freeman, E.W. Sammd, M.I., Lu, I, Gr, .K.U., C. R., Nelson, U.B. & Hollander, L. (2004). Hormone and menopausal status as predictors or" depression in women in transition to menopause. *Archive of General Psychiatry, 61(1)*, 62-70.
- Grady, D. (2006). Clinical Practice: Management of menopausal symptoms. *N. Engl. J. Med. 355(22)*, 2338-2347.
- Karaoulanis, S.E., Daponte, A., Rizouli, K.A., Rizoulis, A.A., Lialios, G.A., et al. (2012). The role of cytokines and hot flashes in peri-menopausal depression. *Ann Gen Psychiatry, 11, 9*.
- Lampio, L., Polo-Kantola, P., Polo, O., Kauko, T., Aittokallio, J., et al. (2014) Sleep in midlife women:
- Laurence, K., Chole, B., & Haw, T. (2011). Menopause and its management. *Document, 10*, 735 version 24 ©Emis <http://www.patient.co.uk/doctor/menopause-and-its-management>
- Moustafa, M., Ali, R., Elsaied, S., & Taha, M. (2015). Impact of menopausal symptoms on quality of life among women's in Qena City. *Egypt Nurs J 10*, 1.
- National Institutes of Health (2005). State-of-the-science conference statement: Management of menopause-related symptoms. *Ann. Intern. Med. 142*, 1003-1013.
- Nelson, H.D. (2008). Menopause. *Lancet 371*:760–770. Nkwo P, Onah H (2008). Positive attitude to menopause and improved quality of life among Igbo women in Nigeria. *Int. J. Gynecol. Obstet. 103(1)*, 71-72.
- Nkwo, P.O. (2009). Suboptimal management of severe menopausal symptoms by Nigerian Gynaecologists: a call for mandatory continuing medical education for physicians. *BMC Women's Health, 9(1)*, 30.
- Nunez-Pizarro, J.L., Gonzalez-Luna, A., Mezones-Holguin, E., Blumel, J.E., Baron, G., et al. (2017). Association between anxiety and



- severe quality-of- life impairment in postmenopausal women: Analysis of a multicenter Latin American cross-sectional study. *J North Am Menopause Society*, 24, 645-652.
- Obadeji, A., Oluwole, L.O., Dada, M.U., Ajiboye, A.S., Kumolalo, B.F., et al. (2015). Assessment of depression in a primary care setting in Nigeria using thePHQ9. *J Family Med Prim Care* 4, 30-34.16.
- Osinowo, H.O. (2003). Psychosocial factors associated with perceived psychological health, perception of menopause and sexual satisfaction in menopausal women. *West Afr. J. Med.* 22(3), 225-2.
- Rasooli, F., Hajamiry, P., Mahmoudi, M., & Shohani, M. (2004). Evaluation of the mental problems of menopausal women referred to the health care centers of Ilam University of Medical Sciences. *J Hayat* 10, 5-14.
- Reed, S.D., Ludman, E.J., Newton, K.M., Grothaus, L.C., LaCroix, A.Z., et al. (2009). Depressive symptoms and menopausal burden in the midlife. *Maturitas*, 62, 306-310.
- Soules, M.R. (2005). Development of staging system for the menopause transition: A work in progress. *Menopause*, 12, 117-120.
- Vann-Rackley, J., Warren, S.A. & Bird, G.W. (1988). Determinants of body image in women at midlife. *Psychological Reports*, 62, 9-10.
- Walters, C.A. (2000). The psychosocial meaning of menopause: women's experiences. *Journal of Women and Ageing*, 12, 117-131,
- Whiteley, J., DiBonaventura, M.D., Wagner, J.S., Alvir, J., & Shah, S. (2013). The impact of menopausal symptoms on quality of life, productivity and economic outcomes. *J. Women's Health* 22, 983-990.
- WHO Reports (2002). *APA press release*. Public Affairs Office, Pam Willenz: 336-5707.
- Zang, H., He. L., Chen, Y., Ge, J., & Yao, Y. (2016). The association of depression status with menopause symptoms among rural midlife women in China. *Afri Health Sci* 16, 97-104.
- Ziaghham, S., Sayhi, M., Azimi, N., Akbari, M., & Davari, N., et al. (2015). The relationship between menopausal symptoms, menopausal age and body mass index with depression in menopausal women of Ahvaz in 2012. Jundishapur. *J. Chronic Dis Care*, 4, e30573.

## APPENDIX

### SECTION B

1. What are the symptoms you observed that made you suspect that transition from productive to menopausal period has set in?
2. At what age did you observe the changes or symptoms: 40-44 years, 45-49 years, 50-54 years, above 55years.
3. Were you fearful when you observed the symptoms? Yes No
4. What are the physiological symptoms you observed? Lower fertility, Irregular menstruation, Vaginal dryness and discomfort, Hot flashes
5. Tick the psychological effect you felt during the period: Feeling of sadness, Irritability Nervousness, Anxiety, Depression, Stress or distress
6. Are you happy to transit to menopausal period? Yes No
7. Is there any stigma or negative attitude attached to menopause from the social or cultural background you came from? Yes; No
8. From your own assessment, is there any disadvantage associated with menopause? Yes No
9. Did you receive any enlightenment on menopause before you experienced it? Yes, No
10. Do you think there is need for enlightenment? Yes No
11. On severe cases of psychological and physiological effect, do you consult a doctor or handle them locally? Yes; No