QUALITY OF LIFE AMONG A SAMPLE OF MENOPAUSAL WOMEN: PREDICTIVE ROLES OF LOCUS OF CONTROL AND LIFESTYLES

¹Nwonyi, Sampson K. PhD., ¹Okoye, Chidera F., ¹Oginyi Ronald, C. PhD., ¹Ofoke Sunday M., ¹Nwankwo Francisca C., and ¹Oketa Chibugo M. PhD

¹Department of Psychology and Sociological studies, Ebonyi State University Abakaliki.

Author Note: Correspondence concerning this article should be addressed to Dr Sampson Kelechi Nwonyi, Department of Psychology/Sociological Studies, Ebonyi State University, Abakaliki. Email: kelechinwonyi@gmail.com

Abstract

This study examined predictive roles of locus of control and life styles on quality of life among a sample of menopausal women. Self-determination theory of quality of life was adopted in the study. Participants were one hundred and fifty (150) menopausal women selected from Federal Medical Center Jalingo, Taraba State Nigeria. Participant's ages ranged between 44 to 78 years with a mean age of 51.11 years (SD = 5.26). Cross sectional design was adopted. Three instruments were used for data collection. Menopause-Specific Quality of Life Questionnaire, Locus of Control Behaviour Scale, and Healthy Lifestyle Behaviors Scale (HLBS). Two hypotheses were tested. Hierarchical multiple regression was the main statistic used for data analysis. Result of a hierarchical Multiple Regression analysis showed that locus of control is a positively significant predictor of menopausal women quality of life. Life style is a significant predictor of menopausal women quality of life. One good nascent implication of the findings is that engaging in behaviours that are healthier and having higher locus of control increases quality of life of menopausal women. It is recommended that menopausal women be given orientation on the need for healthy living to overcome challenges associated with menopause; and that they should be made to understand the need for developing and maintaining high internal locus of control.

Key Words: Quality of Life, Locus of control, Life style and Menopause

Introduction

Menopause is a unique event in women's life which occurs from 44 years and proceed through the age of 50 and it is a stage that all women would experience (Ghazanfarpour, et al., 2015). It is the time in women's life when her ovaries stop producing Estrogen and Progesterone, the deficiency of these hormones elicit various somatic, psychological, vasomotor and sexual symptoms that affect the overall quality of life of women. Assessment of quality of life during menopause deserves special attention as with increase in the life expectancy women lives about one third of their lives with hormone deficient state (Nisar & Sohoo 2010). In human life span development, menopausal phase signifies the normal aging process that subject women from the reproductive to the non-reproductive state. The menopausal process may extend for a longer period before and after the physiological cessation of menstruation and last many years after that, subjecting women into a complex biophysiological and psychosocial change (Doubova, et al., 2011). Menopause marks an extensive period of hormonal changes in women which establishes the end of fertility (Mishra & Kuh, 2005). Menopause affects the quality of life through alterations in hormones, moods, health, and overall physical condition (Chiu, et al., 2008). The transition through menopause is a life event that can profoundly affect quality of life. More than 80% of women report physical and psychological symptoms that commonly accompany menopause, with varying degree of severity and life disruption (Mohamed, et al., 2014). Menopause is an adaptation process during which women go through a new biological state. This process is accompanied by many biological and psychosocial changes. Menopause is a normal physiological process which is characterized by the permanent cessation of menses in women as a result of reduced ovarian hormone secretion usually between the ages of 45 and 55 years. During this period, women can experience many symptoms including hot flashes, night sweats, sleep and mood disorders, impaired memory, lack of concentration, nervousness, depression, insomnia, bone and joint complaints, urinary tract infections, vaginal infections, and increased risk for osteoporosis and cardiovascular diseases, and reduction of muscle mass.

Apart from these physical symptoms, such women are also inclined to experience several vasomotor, somatic, sexual, and psychological symptoms, thereby affecting their quality of life (QOL). The duration, severity, and impact of these symptoms vary extremely from person to person, and population to population. Some women have severe symptoms that greatly affect their personal and social functioning. Some studies have shown that psychological and physiological changes usually occur with aging and entering into a menopause stage, which cause concerns about weight and nutrition (Aminkhou 2008). Schneider, et al., (2008) revealed that menopausal status and related conditions could affect women's health, suggesting that age could affect the quality of life.

Menopause has different stages namely, pre-menopause, peri menopause and post menopause.Pre-menopause is a term used to mean the years leading up to the last period, when the levels of reproductive hormones are becoming more variable and lower, and the effects of hormone withdrawal are present. Pre-menopause starts some time before the monthly cycles become noticeably irregular in timing (Harlow, & Signorello, 2000). The term "perimenopause", which literally means "around the menopause", refers to the menopause transition years before the date of the final episode. The Centre for Menstrual Cycle and Ovulation Research describes it as a six- to ten-year phase ending 12 months after the last menstrual period.During perimenopause, estrogen levels average about 20–30% higher than during pre-menopause, often with wide fluctuations. These fluctuations cause many of the physical changes during perimenopause as well as menopause, especially during the last 1-2 years of perimenopause (before menopause). Some of these changes are hot flashes, night sweats, difficulty sleeping, mood swings, vaginal dryness or atrophy, incontinence, osteoporosis, and heart disease. During this period, fertility diminishes but is not considered to reach zero until the official date of menopause. The official date is determined retroactively, once 12 months have passed after the last appearance of menstrual blood. The menopause transition typically begins between 40 and 50 years of age (average 47.5). The duration of perimenopause may be for up to eight years. Women will often, but not always, start these transitions (perimenopause and menopause) about the same time as their mother did.In some women, menopause may bring about a sense of loss related to the end of fertility.

Post menopause describes women who have not experienced any menstrual flow for a minimum of 12 months, assuming that they have a uterus and are not pregnant or lactating. In women without a uterus, menopause or postmenopause can be identified by a blood test showing a very high FSH level. Thus, postmenopause is the time in a woman's life that takes place after her last period or, more accurately, after the point when her ovaries become inactive. The reason for this delay in declaring postmenopause is because periods are usually erratic at this time of life. Therefore, a reasonably long stretch of time is necessary to be sure that the cycling has ceased. At this point a woman is considered infertile; however, the possibility of becoming pregnant has usually been very low (but not quite zero) for a number of years before this point is reached. A woman's reproductive hormone levels continue to drop and fluctuate for some time into postmenopause, so hormone withdrawal effects such as hot flashes may take several years to disappear.

During menopausal transition, there is a lot of fluctuation in the hormone levels making the premenopausal and postmenopausal women susceptible to various psychological challenges. Till today, there is not enough of considerable awareness about the effects of the menopausal symptoms in women quality of life. More worrisome, studies on issues relating to menopause, especially among rural women, are also lacking. With this background, the current study will apart from women in the cities cover rural areas of Taraba State Nigeria with the objective to assess the quality of life (QOL) of menopausal women.

Quality of life is the degree to which an individual is healthy, comfortable, and able to participate in or enjoy life events (Britannica, 2016). It is inherently ambiguous, as it can refer both to the experience an individual has of her own life and to the living conditions in which individuals find themselves. Hence, quality of life is highly subjective. Within the arena of health care, quality of life is viewed as multidimensional, encompassing emotional, physical, material, and social wellbeing; i.e., having the ability to live a good life in terms of emotional and physical well-being. Academic interest in quality of life grew after World War II, when there was increasing awareness and recognition of social inequalities (Britannica, 2016). This provided the impetus for social indicators research and subsequently for research on quality of life. One may say that the quality of life consists of subjective and objective indexes. Subjective indexes would include, for example, satisfaction or feeling of pleasure as the result of an individual evaluating her life. Objective indexes would include environmental conditions that affect the quality of life (Afzalan 2002).

Understanding the impact of menopause on quality of life is a critically important part of the care of symptomatic postmenopausal women (Col, et al., 2009). The study of quality of life in the post-menopausal women has become an essential component in clinical and counselling practices. Very little information exists about quality of life of postmenopausal women in

developing countries (Nisar, & Ahmed 2009), which Nigeria is inclusive. Quality of life (QOL) includes six domains: physical health, social relationships, psychological state, spiritual concerns, environmental features, and level of independence (Davis, Young, Waters, &Gold, 2017). Improving and maintaining a good quality of life (QOL) is a very important health goal not only for menopause-related medicine but also for governments and health care authorities. Some have described the experiences of women and the positive aspects of menopause, including having more freedom, personal growth, achievements, and gaining competency. On the other hand, there are negative aspects of an existential nature and negative physical changes (Hvas, 2006), which include psychological factors, lifestyle changes, and body image concerns. Inter-personal relationships and roles and social-cultural factors should not be ignored (Deeks, 2003).

One variable indicated to play a role in quality of life is locus of control. It is a psychological concept capturing whether or not the person perceives a causal relationship between his own behavior and the reward (Rotter, 1966). Locus of control refers to the extent to which a menopausal woman feel that she has control over the events that influence her life. For example, when a menopausal woman is dealing with a challenge in her life, does she feel that she has control over the outcome? Or doesshe believe that she is simply at the hands of outside forces? A distinction is often made between individuals with an internal versus external locus of control. The individuals who have firm believe that what happens in in their lives comes primarily due to their own actions belong to category called as internal locus of control.

Those with an internal locus of control believe that life's outcomes and the events they encounter are consequences of their own actions. In contrast, those with an external locus of control believe that life's outcomes are largely encountered by external factors such as fate, luck or other people (Heckman et al., 2006; Cobb-Clark & Schurer, 2013; Schultz & Schultz, 2016). Those who have firm belief that what happens in their lives comes primarily due to some external factors rather than internal factors belong to category calls as external locus of control. External locus of control also describes an individual that believes that most of their life conditions are determined by forces outside of their control, such as like deities, governments, power structures, institutions, and also fate or luck. They are viewed as a continuum and most individual are situated between the two extremes of complete external control and total internal control orientations.

Other people, luck or fate can also be external factors (Gats & Karel, 1993). Locus of control turns into health locus of control when it comes under the roof of health. Individuals with internal locus of control think that they control their own health. On the other hand, those individuals who think that their health will be good due to care of medical professionals or due to luck or fate belong to external locus of control (Wallston, et al., 1978; Wallston, 2005). It is shown by health locus of control theory that internal locus of control is associated with healthy behaviours. On the other hand, chance locus of control is associated with unhealthy behaviours (Wallston, 1992; Norman, Bennet, 1996; Reich, Erdal, Zautra, 1997). There are three subscales on health locus of control instrument i.e. internal locus of control, chance locus of control and powerful other locus of control (Wallston, 1992).

Locus of control can influence not only how menopausal women respond to the events that happen in their life, but also their motivation to act. If they believe that they hold the keys to their fate, they are more likely to act to change their situation when needed. If on the other hand, a menopausal woman believe that the outcome is out of her hands, she may be less likely to work toward change. A locus of control orientation is a belief about whether the outcomes of menopausal women actions are contingent on what they do (internal control orientation) or on events outside their personal control (external control orientation). In 1954, psychologist Julian Rotter suggested that individual (such as menopausal women) behavior was controlled by rewards and punishments and that it was these consequences for our actions that determined their beliefs about the underlying causes of these actions. Women who possesses internal locus of control are more likely to take responsibility for their actions; tend to be less influenced by the opinions of other people; often do better at tasks when they are allowed to work at their own pace; usually, have a strong sense of self-efficacy; tend to work hard to achieve the things they want; feel confident in the face of challenges; tend to be physically healthier; report being happier and more independent; and often achieve greater success in the workplace. But women who possesses external locus of control are more likely to blame outside forces for their circumstances; often credit luck or chance for any successes; don't believe that they can change their situation through their own efforts; frequently feel hopeless or powerless in the face of difficult situations; are more prone to experiencing learned helplessness.

Menopausal symptoms and their severity vary from person to person due to the roles of some confounding factors (Elsabagh&AbdAllah, 2017) such as lifestyle – which empirical evidence has shown that it is related to behavior modifications for menopausal symptoms (Nonhormonal management of menopause-associated vasomotor symptoms, 2015). Menopausal symptoms, especially the vasomotor (actions upon a blood vessel which alter its diameter) and sexual symptoms, are associated with impaired QOL in women (Ibrahim, et al., 2015; Waidyasekera, et al., 2009). Moilanen et al. (2010) emphasized the role of life style factors such as being overweight, being sedentary and high alcohol consumption in quality of life of menopausal women.

In recent decades, lifestyle has been recognized as an important determinant of health status and has become a focus of increasing research interest worldwide. The World Health Organization (WHO) has stated that 60% of an individual's health-related quality of life depends on his or her lifestyle (WHO 2004). In support, numerous publications (Nöthlingset al., 2010; Hu et al., 2011; Reddy et al., 2011) have shown that healthy lifestyle practices reduce disease occurrence and mortality rates. Healthy lifestyles depend on the early adoption of healthy living habits; unhealthy lifestyles among youths are strongly linked to unhealthy habits in adulthood (Lowry et al., 2000; Landsberg et al., 2010). According to Handan (2019) some studies conducted reveal that the symptoms seen in menopausal women decrease with the healthy life style behaviors. Till today, there is still paucity of studies in our Nigerian setting with similar evidences, hence, the present study addresses will fill the gap of finding the mediating roles that lifestyle will play in quality of

life of menopausal women in the presence of health self-efficacy and trait anxiety. In line with the above, Handan maintained that complaints decreased with the increase of healthy life style behaviors in women who were at menopause period.

In the decision made in 2006 by the Scientific Advisory Committee of the Royal College of Obstetricians and Gynaecologists, non-drug applications (a form of healthy life style) are recommended for the decrease of menopause complaints (RCOG, 2006). Menopausal symptoms affect quality of life and duration of life of women negatively. For this reason, preventive measures should be considered before pharmacological treatment in women going through menopause.

Therefore, it is very important to make menopausal women gain healthy life style behaviors. These behaviors are: Medium level physical activity (at least three times a week and at least 30 minutes of moderate exercise); healthy diet, for example, daily salt consumption less than 300 mg (according to British Hypertension Society guidelines), consumption of 1g calcium per day, providing 800 IU vitamin D intake, reduction of carbohydrate and fat consumption, increase in consumption of fruits, vegetables and seafood; to quit smoking and alcohol; to ensure that these behaviors remained (RCOG, 2006). Lowering body mass index (BMI) below 25 kg/m2 is achieved with these behaviors and body weight is maintained at normal level (Elsan, 2018; Lobo et al., 2014; Stachowiak, et al., 2015).

Also, healthy lifestyle behaviors affect the severity of menopausal complaints. In relevant studies, it has been shown that healthy lifestyle behaviors have an important effect in reducing menopausal complaints. The habit of having a healthy diet and regular exercising, the success in stress management, the availability of interpersonal support systems, self-esteem, self-fulfillment and general awareness of health responsibility ensure woman at this period of menopause to experience it with less complaints and more comfort (Batista, et al., 2018; Kocak, 2017). Symptoms seen in menopausal periods in which women spend most of their life time increase the complaints of women and decrease their quality of life. In studies conducted (e.g., Nonhormonal management of menopause-associated vasomotor symptoms, 2015) it has been shown that the symptoms seen in women decrease with the healthy life style behaviors, and there are not enough studies for Nigerian participants. The present study aims to indicate how healthy life style behaviors and quality of life of women at menopause period are vital. That is, whether the healthy life style behaviors including physical activity, nutrition, spiritual development, health responsibility, interpersonal relations and stress management affect the quality of life of women at menopause period.

According to the data of the World Health Organization, 70-80% of death causes, even in developed countries is linked to lifestyle factors such as malnutrition, substance use and stress (Dickey, 2001). Health protection and the prevention of diseases depend on the proper implementation of healthy lifestyle behaviors. Health self-efficacy is an important determinant on health promotion behaviors of menopausal women and influence their healthy lifestyle (Duffy, et al., 1996). For instance, menopausal women with a high level of self-efficacy are in a tendency to

initiate and maintain more difficult tasks, put forth greater efforts to learn and maintain a new behaviour when compared to those with a low self-efficacy.

Statement of the Problem

Quality of life is a phenomenon that is paramount to psychology; hence the study of quality of life of menopausal women deserves to be of great concern to research in present time. Although menopausal phase signifies the normal aging process that subject women from the reproductive to the non-reproductive state; its impact (positive and negative) in the lives of women and their quality of life is of great concern. Amongst the earlier discoveries is that the menopausal process may extend for a longer variable period before and after the physiological cessation of menstruation and last many years after that, subjecting women into a complex bio physiological and psychosocial change. Similarly, the increase in the life expectancy women lives about one third of their lives with hormone deficient state have created need to assess quality of life during menopause. Notably, this increase may have resulted from certain factors that affect the quality of their life. Despite how numerous the factors that affect the quality of life of menopausal women, the present study focused on locus of control and life style. The present study maybe first in assessing the locus of control as well life style and their impact on the women's quality of life in this part of the world. Hence, the findings of the study will be adding to existing knowledge about quality of life of menopausal women.

Therefore, this study intends to find answers to the following questions

- 1. Will locus of control significantly predict quality of life of Menopausal Women?
- 2. Will lifestyles significantly predict quality of life of menopausal women?

Hypotheses:

The following hypotheses were tested in the study:

- 1. Locus of control will significantly predict in quality of life of Menopausal Women
- 2. Lifestyles will significantly predict quality of life of menopausal women

Theoretical Framework

Self-Determination Theory of Quality of Life developed by Ryan and Deci (2000) is adopted for this research. They noted that self-determination is a concept underlying aspect of choice and control over one's life. According to Ryan and Deci (2000) individuals' motivations to act arise from their own interests while some are occasioned by external pressures. They suggest different types of motivation have specific consequences for learning, performance, personal experience, and well-being. Ryan and Deci (2000) suggests that "competence, "autonomy," and "relatedness" are three basic human needs.

They suggest, for example, that extrinsically imposed acts are more likely to be accepted (internalized) if the person experiences a sense of "competence" in completing the act. The task therefore provides a "reward" of achievement even if it was not of interest in and of itself. This may allow a person to grow in regard to their self-esteem; satisfying a "need" to feel competent. Autonomy relates to choose and control of life circumstances, such that "autonomy supporting" approaches to teaching, for example, are thought to promote individual initiative and effective

learning. Ryan and Deci also contend that extrinsic motivations are more acceptable if prompted by "others" who are valued by the person. This theory therefore stresses the importance of selfdetermination (choices) and within this freedom to act (control), along with achievement (esteem) and sense of group identity (culture) in achieving a "good" Quality of Life. It suggests that the goals pursued should be one's own, or congruent with our ambitions, in so far as this is possible. The literature on this theory outlines the complex inter-play, not just of the needs of individuals and competing externally imposed and internally sought goals, but also the intricate web of contextual resources, rights, opportunities, and cultural influences that may enhance or frustrate achievement of personally valued Quality of Life.

Method

Participants

Participants for this study comprised one hundred and fifty (150) menopausal women selected from Federal Medical Center Jalingo, Taraba State Nigeria. Participants were selected from departments of the institution, and comprised both staff and patients. Participants were selected using convenient sampling technique. Only menopausal women who were conveniently available and agreed to participate were administered the questionnaire. Their ages ranged from 44 years to 78 years. Their mean age and standard deviation were (M= 51.11; SD = 5.26). Participant's demographics such as religion, marital status, number of children, number of years married, locality, educational qualifications, occupations were obtained. Inclusion criteria was only women who have entered menopause. To check this, participants indicated the last time they experienced menstruation.

Instruments

A questionnaire comprising demographic information and three scales was used for data collection in this study. The instruments are the Menopause-Specific Quality of Life Questionnaire (Lewisa, et al., 2005), Locus of Control Behaviour Scale (Craig, Franklin & Andrews, 1984), and Healthy Lifestyle Behaviors Scale (HLBS) (Walker et al., 1996)

The MENQOL questionnaire format and item changes (Lewisa, Hilditcha, &Wong 2005)

The MENQOL was developed by Lewisa, Hilditcha, and Wong (2005) on women aged 47–62 years, who were 2–7 years beyond menopause, and it consists of 29 items divided into four domains: vasomotor (three items), psychosocial (seven items), physical (16 items) and sexual (three items). All items follow the same format in which the woman is asked whether she has experienced the item in the previous month. If 'no', she goes to the next item; however, if 'yes', she indicates how bothered she was by the item on a 7-point Likert scale (Likert, 1952) ranging from '0': 'not at all bothered' to '6': 'extremely bothered'. For analysis, the questionnaire score becomes '1' for 'no', '2' for 'yes', 'not bothered' through to '8' for 'yes', 'extremely bothered'. The score by domain is the mean of the converted item scores forming that domain and ranges from 1–8. The question format specifically assessed only those aspects of the menopausal experience, which were perceived negatively by the women since literature suggests that these negative aspects are more likely to be responsive to change than positively perceived items in their effect on quality of life (Bech, 1987). The 1996 MENQOL version used second person possessive adjectives to describe items. Since the women were responding about their perceptions

of their own experience, it was felt more meaningful to change these pronouns to the first person. Wording was shortened in items 6, 18 and 19, from the previously published MENQOL. In item 28, 'during intercourse' was removed from the item, 'vaginal dryness' to capture the perceptions of women with or without a sexual partner. The modified version, the MENQOL-Intervention questionnaire, includes all MENQOL items plus three items, which might negatively affect quality of life, 'breast tenderness' and 'vaginal bleeding' with hormone replacement therapy and 'leg cramps' with selective estrogen receptor modifiers expanding the physical domain to 19 items. These added items are listed as common side effects in the product reference manual (Canadian Pharmacists Association, 2000) and their importance is verified by clinical experience. The Domain Internal Consistency: Cronbach's alpha; Vasomotor 0.88, Physical 0.89 Psychosocial 0.82, and Sexual 0.86. Test–Retest Reliability: intraclass correlation coefficients for interval of 28 days; Vasomotor 0.78, Physical 0.81, Psychosocial 0.69, and Sexual 0.76.

Locus of Control Behaviour Scale

Locus of Control Behaviour Scale (Craig, et al., 1984) consists of 17 items designed to measure internality and externality of control. Items are scored on a 6-point Likert format of Strongly disagree (0), to Strongly agree (5). Sample items in the scale include: I can anticipate difficulties and take actions to avoid them; When I make plans, I am almost certain I can make them work; My life is controlled by outside actions and events; etc. A Cronbach's alpha reliability of internal consistency of .79 was reported by Craig, et al. (1984). Previous studies have reported adequate Cronbach's alpha reliability ranging from .75-.79 (Taiwo, et al., 2005; Nwankwo, et al., 2012) and a split half reliability of .73 (Ibeagha, et al., 2004).

Healthy Lifestyle Behaviors Scale (HLBS) (Walker et al., 1996)

The scale was developed by Walker et al. (1987) and re-examined in 1996. Bahar et al. adapted the scale into Turkish in 2008 (Bahar, et al., 2008). The scale measures the health behaviors developed relatively with the healthy life style of the individual. The scale has a total of 52 items and 6 subgroups (self-realization, health responsibility, exercise, nutrition, interpersonal support and stress management). The total score of the scale gives the score of healthy lifestyle behaviors scale (HLB). All items of the scale are scored positively and no items are scored reversely. The rating is a 4-point Likert type (never (1), sometimes (2), often (3), regularly (4)). For the whole scale, the lowest score is 52 and the highest score is 208. The higher the score taken from the scale, the better the HLBS. HLBS subgroups consisting of 48 items are: self-actualization (13-52), health responsibility (10-40), exercise (5-20), nutrition (6-24), interpersonal support (7-28) and stress management (7-28). The lowest score is 48 and the highest score is 192 for the entire scale. Total scale and subscale scores reaching the upper limit indicates that the individual has a healthy lifestyle behavior.

Procedure

A letter from the ethical board of the Department of Psychology and Sociological Studies, Ebonyi State University, Abakaliki, was used to obtain written permission to conduct the study from the management of Federal Medical Center Jalingo, Taraba State Nigeria. The permission of the

participant was sought through informed consent that were filled and signed by the participants indicating their agreement to participant in the study. Participants were approached in the various departments of the hospital either as a staff or patient; and were selected based on convenient sampling technique. Participants were assured of confidentiality of the information they provided. The participants were requested to complete the questionnaire and return them directly to the researchers or research assistants. The researchers, with the help of research assistants (recruited from the institution) distributed160 copies of the questionnaire to the participants. Participants were educated on the proper format of responding to the items to minimize the number of questionnaires to be discarded or abnormality. After cross checking the returned questionnaires for abnormalities, only one hundred and fifty (150) questionnaire were found to be properly filled; the remaining 10 questionnaires were discarded based on improperly filling. The properly filled questionnaires were used for data analysis. Participants were debriefed individually after responding to the questionnaire to the questionnaire to the properly filled individually after responding to the questionnaires were used for data analysis. Participants were debriefed individually after responding to the questionnaire, and thanked for participating and contributing to knowledge.

Design/Statistics

The design of the study is cross-sectional design. Hierarchical Multiple Regression was the main statistics used for the study in analyzing the data collected. It enabled the researchers to study several independent variables to ensure accurate prediction of the dependent variable). Statistical package for the Social Sciences (SPSS) was employed in the data analyses.

S/N	Variable	Μ	SD	1	2	3	4	5	6	7	8	9	10
1	Quality of Life	55. 78	25.28										
2	Age	51. 55	5.34	.14*									
3	Marital Status			02	.13								
4	Years of Marriage	22. 13	8.48	.09	.60***	- .17*							
5	Religion			05	10	.20* *	20*						
6	Ethnic Group			.18*	.15*	11	03	.03					
7	Educational Qualification			.04	.05	.12	02	10	.01				
8	Occupation			09	10	07	07	.14*	.03	44***			
9	Locus of Control	41. 19	14.65	.42* **	.09	05	.08	02	.12	01	10		
10	Life Style	11 9.0 6	19.156	.53* **	.06	03	.09	14	.07	.19**	12	.58***	-

Result

 Table 1: Table of Mean, Standard Deviation, correlations of demographic variables, locus of control, life style, and quality of life among Menopausal women

 $^{***}p < .001; \ ^{**}p < .01; \ ^{*}p < .05$

Table one above showed the means and standard deviations of the studied variables and demographic variables. Correlation result indicated that amongst the demographic variables only age (r = .14, P < .05), and ethnic group (r = .18, P < .05) have significant relationship with menopausal women quality of life. Locus of control have significant association with menopausal women quality of life (r = .42, p < .001). Also, life style has significant correlation with

menopausal women quality of life (r = .53, p < .001). The findings imply that high locus of control as well as healthy life both tend to increase menopausal women quality of life.

1 /	R	R ²	$\mathbf{R}^{2}\Delta$	В	Beta(β)	Т
Step 1	.23	.05	.05		54 /	
Age				.43	.09	.74
Marital Status				11	01	05
Years of Marriage				.10	.03	.26
Religion				92	02	26
Ethnic Group				3.89	.17	1.79
Educational Qualification				03	.01	03
Occupation				-1.37	08	76
Step 2	.45***	.20***	.15***			
Locus of Control				.68	.39***	4.68
Step 3	.57***	.32***	.12***			
Life Style				.58	.44***	4.51

 Table 2: Hierarchical multiple regression predicting antisocial behaviour from peer pressure, and moral reasoning.

***p<.001

The regression result above showed the prediction of menopausal women quality of life from locus of control and life style. However, controlling for the demographic variables, regression coefficient result showed that locus of control ($\beta = .39$, t =4.68, p<.001) entered in step 2 of the model significantly predicted menopausal women quality of life. It however accounted for statistically significant 20% variance as a predictor of menopausal women quality of life ($\Delta R^2 = .20, p < .001$). Thus, menopausal women with high locus of control enjoy more quality of life. Life style ($\beta = .44$, t = .23, p < .001) entered in step 3 of the model significantly predicted menopausal women quality of life. It accounted for 32% significant variance as a predictor of menopausal women with healthier life style enjoy more quality of life.

Discussion

This study examined locus of control and life styles as predictors of quality of life among menopausal women. The finding of the study showed that locus of control is a positively significant predictor of menopausal women's quality of. Thus, menopausal women with high locus of control have higher quality of life. Also, locus of control proves to be implicated in making menopausal women to enjoy high quality of life, which enable them to cope with the challenges of menopause. This finding confirmed the first hypothesis that locus of control will statistically significantly predict quality of life of menopausal women. The finding is consistent with extant finding by Haskas, et al., (2020) which showed that the locus of control had a significant effect on the quality of life of menopausal women. That locus of control significantly affects the quality of life of menopausal women. That locus of control significantly affects the quality of life of menopausal women. Similarly, Minhas (2013)

showed that locus of control contributed to the menopausal women' quality of life and mental health scores. Moreover, locus of control significantly contributed to their physical health scores. Self-determination is a concept underlying aspect of choice and control over one's life. It is of particular importance to people with ID who historically have had decision making opportunities removed, or considerably reduced, compared to the general population. However, it is not only about "choice" but aspiration and personal goal setting. The idea that valued acts are those of inherent interest to individuals, and the importance of having freedom to pursue such interests evident in CA, are captured within Self Determination Theory (Ryan & Deci, 2000). Ryan and Deci (2000) distinguish between individuals' motivations to act that arise from their own interests and those occasioned by external pressures.

The second finding of the study showed that life style significantly predicted menopausal women quality of life. This imply that life style explains quality of life menopausal women in this study. This finding confirmed the second hypothesis that life stylewill significantly predict quality of life of menopausal women. Hence, menopausal women with healthier life style enjoy more quality of life. The finding is consistent with Elahi, Ghannad, and Haghighizadeh (2018) which indicated that menopause transition is one of the factors affecting the satisfaction with life (SWL) and lifestyle. Their study determined the relationship between health-promoting lifestyle and SWL in postmenopausal women. There was a positive relationship between the different dimensions of health-promoting lifestyle with SWL in postmenopausal women.

Stepwise multiple regression analysis showed that the nutrition dimension has the greatest impact on SWL. The best SWL model is a model that includes nutrition, spiritual growth and selfactualization, age, exercise and physical activity, and interpersonal relations components. Education of health-promoting behaviors in postmenopausal women can play a major role in increasing SWL level, and it can lead to a positive attitude towards menopause transition and facilitate the confrontation with problems related to this period. Similarly, Alaeenejad, et al., (2017) determine the relationship between health promotion behaviors and the quality of life of postmenopausal women. The results of Pearson correlation test showed that there is a significant correlation between quality of life and health promotion behaviors in the stress management dimension.

Implication of the Study

This study has some practical implications. For example, locus of control was a positively significant predictor of quality of life among menopausal women. The practical implication for this nascent finding is that menopausal women with higher locus of control enjoy more quality of life. Menopausal women engaging in behaviours that enable them to express good locus of control enjoy quality of life, feel more satisfied and happier. Interestingly, locus of control makes the women to understand their situation, and how to live with it and enjoy quality of life. Life style was a positively significant predictor of quality of life among menopausal women. The practical implication for this nascent finding is that menopausal women with healthier life style

enjoy more quality of life. Engaging in behaviours that are healthy such as exercise, good food, feeling of happiness makes them to enjoy good quality of life.

This research work is not without limitations. Larger sample size may be necessary to allow for more generalization and possible conclusions. The researcher also encountered difficulties accessing the menopausal women because of Covid-19 lockdown during the time of data collection.

Therefore, educational programs are recommended as an effective, economical and safe approach to reducing the menopause problems and augmenting the quality of life. Menopausal women should be given orientation on the need for healthy living to overcome challenges associated with menopause; and that they should be made to understand the need for developing and maintaining high internal locus of control.

Conclusion

Menopause is a unique event in women's life which occurs around the age of 50 and is a stage that all women would experience. Menopausal women with higher locus of control enjoy more quality of life. Menopausal women engaging in behaviours that enable them to express good locus of control enjoy quality of life, feel more satisfied and happier. Menopausal women with healthier life style enjoy more quality of life. Engaging in behaviours that are healthy such as exercise, good food, feeling of happiness makes them to enjoy good quality of life.

Declaration: We declare that there is no conflict of interest among the researchers in this study. The study was not sponsored by any grant or institutional body.

References

- Afzalan, F. (2002). *Evaluating quality of life in families of psychic patients* (Social Work MSc thesis). University of Social Welfare & Rehabilitation Sciences, Tehran.
- Alaeenejad, A., et al., (2017). Relationship between health-promoting behaviors and quality of life in postmenopausal women. *Journal of Client-Centered Nursing Care*, *3*(4), 269-276. https://doi.org/10.32598/jccnc.3.4.269
- Aminikhou, M. (2008). Comparison of the effectiveness of narrative therapy and cognitivebehavior therapy in improving the body image and self-esteem in women with breast cancer (MD thesis of Psychology, Allameh Tabatabai University).

Bahar, Z., Beşer, A., Gördes, N., Ersin, F., Kısal, A. (2008). SağlıklıyaşambiçimidavranışlarıölçeğiII'ningeçerlikvegüvenirlikçalışması. *Cumhuriyet ÜniversitesiHemşirelikYüksekokuluDergisi*, 12(1), 1-13.

Batista, J. P., Mariano, I. M., Souza, T. C. F, et al. (2018). The acute effects of mat pilates on hemodynamic and salivary nitrate responses after exercise in postmenopausal women. *Journal of Aging and Physical Activity*, 9, 1-22.

Bech, P. (1987). Quality of life in psychosomatic research. *Psychopathology* 20, 169–179

- Britannica. (2016). Quality of life. Retrieved 15 January 2021.
- Canadian Pharmacists Association (2000). *Guide to Drugs in Canada: The Essential Home Reference to Over 2,000 Medications*.Canadian Book Review Annual Online, accessed November 29, 2023, <u>https://cbra.library.utoronto.ca/items/show/17241</u>.
- Chiu, C. C., Su, K. P., Cheng, T. C., Liu, H. C., Chang, C. J., Dewey, M. E., Stewart, R., &Huang, S. Y. (2008). The effects of omega-3 fatty acids monotherapy in Alzheimer's disease and mild cognitive impairment: A preliminary randomized double-blind placebo-

controlled study. *Prog Neuropsychopharmacol Biol Psychiatry*, *32*(6), 1538-44. doi: 10.1016/j.pnpbp.2008.05.015.

- Craig, A. R., Franklin, J. A., & Andrews, G. (1984). A scale to measure locus of control of behaviour. *British Journal of Medical Psychology*, 57(2), 173–180. <u>https://doi.org/10.1111/j.2044-8341.1984.tb01597.x</u>
- Craig, A. R., Franklin, J. A., & Andrews, G. (1984). A scale to measure locus of control of behaviour. *British Journal of Medical Psychology*, 57(2), 173–180. <u>https://doi.org/10.1111/j.2044-8341.1984.tb01597.x</u>
- Dickey, T. D. (2001). The role of new technology in advancing ocean biogeochemical research. *Oceanography*, 14, 417-425
- Doubova, S.V., Espinosa-Alarcón, P., Flores-Hernández, S. *et al.*(2011). Integrative health care model for climacteric stage women: Design of the intervention. *BMC Women's Health*11, 6 (2011). <u>https://doi.org/10.1186/1472-6874-11-6</u>
- Duffy, M.E., Rossow, R., & Hernandez, M. (1996). Correlates of health-promotion in employed Mexican American women. *Nursing Research*, 45(1), 18-24.
- Elahi, N., Ghannad, N., & Hosein Haghighizadeh, M. (2018). The relationship between health promoting lifestyle with life satisfaction in postmenopausal women. *Journal of Research in Medicine and Dental Science*, 6(5), 139-144
- Elsan T. (2018). Evaluation of the quality of life of period of menopause women in an ASM region. Master Thesis, Kırklareli.
- Ghazanfarpour, M., Kaviani, M., Abdolahian, S., Bonakchi, H., Najmabadi Khadijeh, M., Naghavi, M., &Khadivzadeh, T. (2015). The relationship between women's attitude towards menopause and menopausal symptoms among postmenopausal women. *Gynecol Endocrinol*, 31(11):860-5. doi: 10.3109/09513590.2015.1056138.
- Handan, O. (2019). Healthy life style behaviors and quality of life at menopause. *International Journal of Caring Sciences*, *12*(1) 492-500
- Harlow, B. L., & Signorello, L. B. (2000). Factors associated with early menopause. *Maturitas*.28;35(1), 3-9. doi: 10.1016/s0378-5122(00)00092-x.
- Haskas, Y., Suarnianti, S., &Restika, I. (2020). Efekintervensiperilakuterhadapmanajemendiripenderitadabetesmelitustipe 2: Sistematik review. Jurnal Kesehatan Andalas, 9, 235-244.
- Ibeagha, P. N., Balogun, S. K., & Adejuwon, G. A. (2004). Resiliency of inner-city Yoruba university undergraduates in South Western Nigeria. *Studies on Tribes Tribals*, 2(2), 125-129
- Kocak DY. (2017). Effect of pender's healthy life style training, which is applied in the direction of health promotion model, on eliminating the menopausal symptoms. Doctoral Thesis, Istanbul.
- Lewis, J. E., Hilditch, J.R., & Wong, C. J. (2005). Further psychometric property development of the Menopause-Specific Quality of Life questionnaire and development of a modified version, MENQOL-Intervention questionnaire. *Maturitas*, 50(3), 209–221.
- Likert, R. A. (1952). A technique for the development of attitude scales. *Educational and Psychological Measurement, 12,* 313-315.
- Lobo, R. A., Davis, S. R., De Villiers, T. J, et al. (2014). Prevention of diseases after menopause. *Climacteric*, 17, 540-556.
- Minhas, M. T. (2013). Interaction of physical activity, diet, health locus of control and quality of life among Finnish University Students. Master's Thesis in Sport and Exercise Psychology. Liikuntapsykologia. http://urn.fi/URN:NBN:fi:jyu-201305201717

- Mishra, G. K. D. (2006). Perceived change in quality of life during the menopause. *Social Science Medicine*, *62*(1):93-102. doi: 10.1016/j.socscimed.2005.05.015.
- Mohammed, A., Sheikh, T. L, Gidado, S., et al., (2015). An evaluation of psychological distress and social support of survivors and contacts of Ebola virus disease infection and their relatives in Lagos, Nigeria: a cross sectional study--2014. *BMC Public Health*, 27, 15:824. doi: 10.1186/s12889-015-2167-6.
- Nisar, N., & Sohoo, N.A. (2010) Severity of menopausal symptoms and the quality of life at different status of menopause: A community based survey from rural Sindh, Pakistan. *International Journal of Collaborative Research on Internal Medicine & Public health* (IJCRIMPH), 2, 118-130.
- Nonhormonal management of menopause-associated vasomotor symptoms. (2015).Position statement of The North American Menopause Society. *Menopause* 22(11), 1155-1174. DOI: 10.1097/GME.00000000000546
- Nwankwo, B.E., Balogun, S.K., Chukwudi, T.O., &Ibeme, N.C. (2012). Self Esteem and locus of control as correlates of adolescents well functioning. *British Journal of Arts and Social Sciences*, 9(2012), 214-228.
- Royal College of Obstetricians and Gynaecologists (RCOG). (2006). Alternatives to HRT for the management of symptoms of the menopause. Opinion paper.Scientific Advisory Committee.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <u>https://doi.org/10.1037/0003-066X.55.1.68</u>
- Schneider, H.P.G., Maclennal, A.H., & Feeny, D. (2008). Assessment health-related quality of life in menopause and aging. *Climacteric*, 11, 93–107.
- Stachowiak, G., Pertyński, T., & Pertyńska-Marczewska, M. (2015). Metabolic disorders in menopause. *PrzegladMenopauzalny*, 14(1), 59-64.
- Taiwo, A. O., Olapegba, P. O., &Adejuwon, G. A. (2005). Psychosocial factors associated with smoking behavior among secondary school adolescents in Ibadan Metropolis. *African Journal for the Psychological Study of Social Issues*, 8(2), 264–279.
- Walker, S. N., Sechrist, K. R., & Pender, N. J. (1987). The health promoting lifestyle profile development and psychometric characteristics. *Nursing Research*, *36*(2), 76-80.

Walker, S. N., Sechrist, K. R., &ve Pender, N. J. (1987). The health-promoting lifestyle profile: Development and psychometric characteristics. *Nursing Research*, *36*(2), 76-81.