

**MENOPAUSAL-RELATED HEALTH SYMPTOMS AND QUALITY OF LIFE AMONG WOMEN
IN ACADEMIA: AN EMPIRICAL ASSESSMENT FROM COLLEGES OF EDUCATION IN
SOUTH-WEST, NIGERIA**

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Abstract

Women are vital asset to human existence, and anything affecting their wellness will as well impact on the health of the family and community. For many women menopause connotes negative life experiences. For many women menopause is characterized with fear fuzzy thinking, anxiety, insomnia, hot flashes, loss of libido, loss of youth, femininity, beauty, calcium and more. The negative labelling attached to menopause coupled with the traditional medical response to women's health issues, undoubtedly contributed to limited knowledge, poor perception and unhealthy attitudinal dispositions of women towards menopause. The objective of this study was to investigate the menopausal-related health symptoms and quality of life among women in Colleges of Education in South-West, Nigeria. The study adopted a descriptive survey research design of an ex-post-facto type. The sample size consisted of 157 women of menopausal age. A standardized questionnaire tagged "Menopausal – specific quality of life questionnaire" was used to collect data from the respondents. A reliability index of 0.81 was reported for the scale. Data was analyzed using both descriptive (percentage, mean, average mean and standard deviation) and inferential (chi-square and Pearson Correlation Coefficient) statistics. The result shows that the women in academia experienced all the menopausal-related health symptoms. They were more affected with the psychosocial factors [25.1 (89.7%) ± 5.89], physical factors [55.7 (82%) ± 7.33], sexual factors [9.0 (75.2%) ± 2.71], and the vasomotor factors [8.98 (74.8%) ± 2.93]. Age ($\chi^2 = 13.33$, $p = .009$), period of last menstruation ($\chi^2 = 8.61$, $p = .000$) and age at menopause ($\chi^2 = 11.08$, $p = .00$) are good correlates of menopausal-related health symptoms. Also, the study indicated an inter-relationship among the components of menopausal-related health symptoms and quality of life. This study concluded that the most severe symptoms are found in psychosocial, physical, sexual and vasomotor domains, and they are equally interconnected. It is therefore recommended that women sexuality and sexual lives is crucial to their wellness. Aging women may need to be helped to adapting to life during menopause.

Key Words: Menopausal-related health symptoms, quality of life, women

Introduction

Menopause is a universal phase in a woman's life. It is a stage in the reproductive cycle that every woman experiences during the aging process. However, it is often accompanied by series of symptoms which if not addressed could worsen the existing-ill health. In addition, menopause is positively related with non communicable diseases like diabetes, hypertension, osteoporosis, cervical cancer, and breast cancer leading to increase morbidity and mortality rate among menopausal women (Wenger, Arnold, Merz, Cooper-DeHoff, Ferdinand, Fleg, & Lindley, 2018). Furthermore, women at this phase of their life experience gross psychological and social disorders like depression, swing in mood, sleep pattern alteration, loss of social interaction, professional roles, and poor ego integrity. Inadequate knowledge about menopause and its

associated symptoms could in turn affect overall health-related quality of life (QoL) (Pallikadavath Ogollah et al, 2016).

Most women see this transition period as being wearisome and most times it is associated with reduction in wellbeing and numerous health challenges (Prakash, Stojanovska, Nurgali, & Apostolopoulos, 2017). Many women of middle age are afraid of losing their qualities of being a woman and beauty after menopause. Most problems that are commonly reported include vasomotor problems (hot flushes, and night/excessive sweat), physical problems (fatigue, headache, pains in the joint and weight gain), psychological problems (depression, anxiety, mood disorder, loss of memory, and sleeping problems), and sexual problems (vaginal problems, frequency in urination and sexual dysfunction Grady, 2016)

Menopause and its associated biological changes bring about symptoms which pose a negative influence on the general health and quality of life (QoL) and same to the wellness of women in this phase of their life (Sharma, Mahajan, 2015). The severity of menopausal symptoms differ from person to person as a result of confounding factors like lifestyle, social status, body make up, and psychological status (Kothiyal and Sharma, 2017). Although Hormonal Replacement Therapy (HRT) has been reported to be the effective remedy to menopausal problems, but the way women accept and long –term continuation of HRT is on the low side cancers (Fonseca, da Silva, & Ferreira, 2017). Particularly since many research findings have reported that HRT could cause an increase risk of several diseases, including breast and ovarian cancers (Fonseca 2017).

In addition, menopausal-related health symptoms are categorized into four main domains namely, vasomotor, psychosocial, physical and sexual domains. These symptoms affect the physical and mental wellbeing, life satisfaction, and finally the quality of life. With the increasing population of the elderly worldwide, there is increase in the number of women who live seventy percent of their life in hypo estrogenic status which could affect the quality of life (Nazarpour et al, 2019). Quality of life is an important outcome measure of health care, and understanding the influence of menopause on quality of life is a critically important part of the care of symptomatic postmenopausal women (Shin & Park, 2016). Quality of life tends to decline in midlife women, and there is a need to determine what role, if any, symptoms commonly associated with the transition to menopause and early postmenopausal play in this phenomenon (Samarasiri, Rajanayake, Wattegedara, Kodituwakku, Senadheera, & De Silva, 2017).

Menopausal symptoms experienced by Women of Menopausal Age

The menopausal transition period which is the transition period of reproductive to post reproductive period in women has been categorized in to four domains which are: vasomotor, somatic (Physical), psychological, and urogenital (sexual) domains of menopausal-related problems (Greene, 2008). Reduction in the female hormonal level as a result of ovarian aging have been constantly reported to be associated with experience of problems, such as, hot flushes, excessive sweating, and some urogenital problems (Som & Ray, 2013). However the extent to which these problems are associated with normal aging process and other circumstance in life needs more investigations. This is because causes of these problems among women during this menopausal transition period appeared complicated with several issues.

The occurrence of genitourinary that include urinary incontinence coughing and laughing, painful sexual intercourse and frequent urination were reported in about 10% women under study Radoja, Pavlović, Perić, & Degmečić (2017). Similarly, Makara-Studzińska, Kryś-Noszczyk, & Jakiel, (2014) in Nigeria found a higher prevalence of about 39% of genitourinary problems among these women of different ethnics could be linked with the attitude of the women towards health and culturally inclined. But, unlike hot flushes, the genitourinary problems could not be properly linked with menopause occurred or increased with old age (Silverman, & Gulati, 2019). Also, the secrecy and social inhibition about sex and female internal and external genitalia that is spread widely among Nigerian women could be associated with low response in sexual issues as observed by Nkwo (2009). This is similar to the report of Chen (2014) that fewest women reported vaginal dryness (Chen, 2014). Also, some privileges that the women of menopausal age enjoyed socially in some communities could affect their experience and perception on these menopausal-related problems as Nkwo and Onah (2008) reported in a study conducted in Nigeria.

Studies have reported incidences of psychological problems like feeling sad, anxiety, forgetfulness and being easily irritated are 64.2, 62.5, 60.8, and 56.7%, respectively in rural women of Amassoma (Giwa-Osagie, 2013), but lower when compared with what Nkwo (2009) and Ande et al. (2011) reported among Igbo women in Enugu State and Benin City women respectively in Nigeria. This could be as a result of polygamy marriage that is, one husband with many wives that is commonly practiced in Niger Delta region of Nigeria. This report was at variance with what was found some studies that was previously done in some other parts of Nigeria that supported good perception of menopause among women (Fadehan, 2016). In studies conducted in Pakistan and China, 96% and 90% of women under study reported psychological problems respectively and this was observed as the highest prevalence of psychological problems among menopausal women group (Ahmed, Jahan, Nadia, & Ahmed, 2016).

Health-related Quality of Life of Women of Menopausal Age

The quality of life of an individual is categorized as physical, social, psychological and functional wellbeing (Maddigan et al. 2015). Numerous studies have showed that the transition in women and discomfort experienced during menopause could reduce the quality of life of women during and after menopausal years (Heidelberg et al., 2011; Williams, 2009 & Karacam, 2009) more importantly in the physical, psychological, and social domain (Jakiel et al, 2009). The health-related quality of life during menopausal period is dependent of so many circumstances that include aging.

The study of quality of life in the post-menopausal women has become an essential component in clinical practices. Most studies on quality of life of postmenopausal women were conducted in developed countries with different socio cultural realities, which may influence not only the perception of quality of life but also the experience of menopausal symptoms. Very little information exists about quality of life of postmenopausal women in developing countries (Nisar, Sohoo, & Sikandar, 2015). In other words, considering the influence of menopausal-related health symptoms on wellbeing and quality of life of women over the entire life process is important and not just concentrating on little period around cessation of monthly flow.

Menopausal symptoms have negative impact on Quality of Life (QoL) among women. Epidemiological studies reported higher prevalence (40%–60%) of physical, psychological, vasomotor, and sexual disorders among menopausal women and a positive linear relationship between menopausal changes and quality of life (QoL) (Heidari, Ghodusi, Rezaei, Kabirian Abyaneh, Sureshjani, & Sheikhi, 2019). About 65% of women in the menopausal age suffer from various degrees of cardiovascular diseases, cardiovascular death, atherosclerosis, stroke, angina after myocardial infarction, low bone density, osteoporosis, and fracture, increased breast, endometrial and ovarian cancer risk to mention but few (Li, Sun, Lin, Qi, Li, Yan, & Ren, 2016).

Research Questions

Three research questions were raised to guide this study

1. What are the menopausal-related health symptoms experienced by women in academia?
2. What are the socio-demographic correlates of menopausal-related health symptoms among women in academia?
3. Would there be any significant association among the components of menopausal-related health symptoms and quality of life?

Methodology

Research Design: This study adopted a descriptive survey design. This survey design is preferred since the researcher cannot control the conditions experienced by the subjects. This is so, because the researcher is only interested in determining the menopausal-related health symptoms and quality of life among menopausal women in academia.

Sample and Sampling Techniques: The sample for this study consisted of one hundred and fifty-seven menopausal age academic women in Colleges of Education. A multi-stage, purposive sampling technique

and simple random sampling technique was used to select the respondents. At the first stage, three (3) States were randomly selected from the six (6) States in South-West, Nigeria. They are: Lagos, Ogun and Oyo. At the second stage, all the Federal Colleges of Education were purposefully selected while state with more than one State/Private Colleges of Education were selected randomly. For instance, Lagos State has two (2) State and four (4) Private Colleges; Oyo has four (4) Private Colleges; while Ogun has one State College. In all, six (6) Colleges of Education participated in the study. Purposive sample was used to select all the 157 respondents for this study.

Instrumentation: A standardized instrument tagged "Menopausal – specific quality of life questionnaire was adapted for data collection. The 30 items scale was developed by Hilditch et. al (2005). It contains (4) four main domains of menopausal-related health symptoms with vasomotor domain containing 3 items, psychosocial domain containing 7 items, physical domain containing 17 items and sexual domain containing 3 items. The vasomotor domain assessed hot flushes, night sweats, and sweating. The psychosocial domain evaluated the psychological wellbeing of the individual by including items regarding anxiousness, memory, and feeling “blue”. The physical domain assessed items such as flatulence, bloating, pain, tiredness, sleeping pattern, energy and weight gain. The sexual domain inquired about changes in sexual desire, vaginal dryness, and intimacy. Menopausal specific quality of life was assessed on a YES and NO scale for the severity of menopause symptoms while the degree to which they adversely affect women’s quality of life was assessed on the likert scale of 5 point scale, ranging from 0 to 4 as "Not at all bothered" (0), "Slightly bothered" (1), "Often bothered" (2), "Always bothered" (3), and "Extremely bothered" (4). A reliability index of 0.81 was reported for symptoms of menopause and 0.89 for Menopause Specific Quality of life.

Procedure for Data Collection: The researcher visited the selected Colleges of Education and liaised with the Registrar of each of the selected schools to secure permission to carry out the study in their respective schools. Three research assistants were used for the study. A period of three weeks was used for the administration of the questionnaires and collection of data.

Data Analysis: Analysis was done using inferential statistics of chi-square analysis to test question 2 and Pearson Product Moment Correlation to test question 3 at 0.05 level of significance while descriptive analysis of frequency counts, percentages, mean and standard deviation to test question 1.

Results and Discussion

Research Question One: What are the menopausal-related health symptoms experienced by women in academia?

Table 1: Descriptive analysis of menopausal-related health symptoms experienced by women in academia

Components of menopausal-related health symptoms		Frequency	Percent (%)	Mean (%)	Std Dev
Vasomotor Domain (3 items)	Not bothered	15	9.6	8.98 (74.8)	2.93
	Often bothered	70	44.6		
	Always bothered	28	17.8		
	Extremely bothered	44	28.0		
	Total	157	100.0		
Psychosocial domain (7 items)	Not bothered	2	1.3	25.10 (89.7)	5.89
	Often bothered	31	19.6		
	Always bothered	49	31.2		
	Extremely bothered	75	42.9		
	Total	157	100.0		
Physical domain (17 items)	Not bothered	21	13.4	55.74 (82)	7.33
	Often bothered	49	31.2		
	Always bothered	48	30.6		

	Extremely bothered	39	24.8		
	Total	157	100.0		
Sexual domain (3 items)	Not bothered	33	21.0	9.02 (75.2)	2.71
	Often bothered	50	31.9		
	Always bothered	35	22.3		
	Extremely bothered	39	24.8		
	Total	157	100.0		
Overall mean = 85.36±6.89 (71.1%)					

Table 1 assessed the menopausal-related health symptoms experienced by women in academia in four different domains. These are vasomotor, psychosocial, physical and sexual domains. The results of this study reveal that women in academia experienced all the menopausal-related health symptoms. They were more affected with the psychosocial factors [25.1 (89.7%) ± 5.89] of menopausal-related health symptoms, followed by physical factors [55.7 (82%) ± 7.33], sexual factors [9.0 (75.2%) ± 2.71], and lastly by the vasomotor factors [8.98 (74.8%) ± 2.93]. It could be said that the women in academia experienced all menopausal-related health symptoms [85.36 (71.1%) ± 6.89] with much influence of psychosocial factors.

This result is not too surprising because every woman pass through the period of menopause and the experience of each individual is unique. The results vary a bit with the previous finds that shows that the most common menopausal-related problem found among menopausal women in Nigeria is hot flashes, which is in the vasomotor domain such as hot flashes. It is therefore in line with that of Baker, De Zambotti, Colrain, and Bei (2018) that psychological and social issues are commonly associated with menopause, with diverse degrees in severity which affect the women's health and quality of life. Also, Wenger et al, (2018) lend support for this study as they found that women experience numerous psychological changes related to the decreasing estrogen in menopause such as mood swings, depression, irritability, anxiety, and fatigue. On the physical domain (fatigue, headache, pains in the joint and weight gain) of menopausal-related health symptoms, the findings of Philips (2013) reported reduced muscle strength among the women of menopausal age, and attributed it the reduction in the hormonal level. Sexual domain (vaginal problems, frequency in urination and sexual dysfunction) of menopausal-related health symptoms affects the women's quality of life. This is in tandem with with a study conducted by Dienye et al. (2013); Adekunle et al. (2010) and Grandy, 2012) that about 60% of menopausal women experienced loss of libido during menopausal years. Also, half of menopausal women experienced hot flushes and excessive sweating in the year immediately before cessation of menstruation (Mintziiori et al 2015).

What are the socio-demographic correlates of menopausal-related health symptoms among women in academia?

Table 2: Association between the socio-demographic factors and menopausal-related health symptoms

Variables		Freq.	%	X ²	Sig
Age	45-49	27	17.2	13.33	.009*
	50-54	68	43.3		
	55-59	53	33.8		
	60 and above	9	5.7		
Educational qual.	B.SC/B.A/B.Ed	53	33.8	4.27	.081
	M.SC/M.Ed	83	52.8		
	PhD	21	13.4		
Religion	Christianity	88	56.1	3.39	.162
	Islamic	69	43.9		
	Other	-	-		
Last menstruation date	Less than a year	21	13.4	8.61	.000*
	1-2 years	56	35.7		
	3-4 years	50	31.8		
	5 years above	30	19.1		
Age you reach menopause	40-44	19	12.1	11.08	.000*
	45-49	33	21.0		
	50-54	77	49.0		
	55-59	28	17.9		

The outcome of the research questions on the socio-demographic correlates of menopausal-related health symptoms among women in academia revealed that the chi-square value obtained for age is ($x^2 = 13.33$, $p = .009$); academic qualification ($x^2 = 4.27$, $p = .081$); religion is ($x^2 = 3.39$, $p = .162$); last menstruation is ($x^2 = 8.61$, $p = .000$); and age at menopause is ($x^2 = 11.08$, $p = .00$) all at the significant levels of less than 0.05 except for education level and religion. Since these p-values were less than 0.05 values age ($x^2 = 13.33$, $p = .009$); last menstruation ($x^2 = 8.61$, $p = .000$) and age at menopause is ($x^2 = 11.08$, $p = .00$), it could be said that age, period of last menstruation and age at menopause are good correlates of menopausal-related health symptoms among women in academia. This is similar to that of Ande et al (2011), Giwa-Osagie, 2013; Osinowo (2013), Giwa-Osagie, 2013 and Slaven (2015) that socio-demographic factors may be related to emergence of menopausal-related health symptoms.

Would there be any significant association among the components of menopausal-related health symptoms and quality of life?

Table 3: Pearson Product Moment Correlation Coefficients of the interrelationship among the components of menopausal-related health symptoms and quality of life

		vasomotor	Psychosocial	physical	sexual domain
vasomotor	Pearson Correlation	1	.637**	.511**	.506
	Sig. (2-tailed)		.000	.000	.000
	N	157	157	157	157
psychosocial	Pearson Correlation	.637**	1	.522**	.547**
	Sig. (2-tailed)	.000		.000	.000
	N	157	157	157	157
Physical	Pearson Correlation	.511**	.522**	1	.555**
	Sig. (2-tailed)	.000	.000		.000
	N	157	157	157	157
sexual domain	Pearson Correlation	.506**	.547**	.555**	1**
	Sig. (2-tailed)	.000	.000	.000	
	N	157	157	157	157

N = 157; **. Correlation is significant at the 0.01 level (2-tailed).

The results in Table 3 indicated the inter-relationship among the components of menopausal-related health symptoms and quality of life. On the relationship of vasomotor, the Table above depicts direct and positive correlation between the vasomotor domain and psychosocial domain to be direct and positively correlated ($r = .637$, $P = .000$). Vasomotor domain was positively correlated with physical domain ($r = .511$, $P = .000$) and sexual domain ($r = .506$, $P = .000$). Further on the results, psychosocial domain was found to be positively related to physical domain ($r = .522$, $P = .000$) and sexual domain ($r = .547$, $P = .000$); and physical domain is positively sexual domain ($r = .555$, $P = .000$). This result is in tandem with the findings of Abedzadeh (2012), Cruz (2013) and Maddigan et al., (2015) in their various study that showed that all domains that were used to determine health-related quality of life were found to be interrelated. The health-related quality of life during menopausal period is dependent of so many circumstances that include aging.

Conclusion

Women are vital asset to human existence, and anything affecting their wellness will as well impact on the health of the family and community. For many women menopause connotes negative life experiences. For many women menopause is characterized with fear fuzzy thinking, anxiety, insomnia, hot flashes, loss of libido, loss of youth, femininity, beauty, calcium and more. The negative labelling attached to menopause coupled with the traditional medical response to women's health issues, undoubtedly contributed to limited knowledge, poor perception and unhealthy attitudinal dispositions of women towards menopause.

However, the intensity of menopausal symptoms experiences differs from person to person, culture to culture, and nation to nations. The findings of this study served as a major contribution to knowledge in the field of health promotion and education as it provides rapid assessment of at-risk women for menopausal symptoms. The current study concluded that the most severe symptoms are found in psychosocial, physical, sexual and vasomotor domains, and they are equally interconnected.

Recommendation

The following recommendations are made based on the outcome of this study.

1. Since women sexuality and sexual lives is crucial to their wellness. Aging women may need to be helped to adapting to life during menopause.

2. Every woman before menopause needs to be well informed of what to experience at menopause. This could be achieved if social health workers and health psychologists will conduct scientific research in identifying the needs of women at menopausal age.
3. Also, health educational programs for women about the menopausal period is essential. This must entail the nutritional need, coping mechanism and social adjustment to life at work, home, and immediate society.

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