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## Original Article

# Associated Climacteric Symptoms and Quality of Life among Rural Middle-Aged Women in Kumasi -

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## ABSTRACT

**Background:** Aging comes with developmental transitions, changes and growth; as observed among adolescents, young adult, middle adults (menopause) and the aged. Most of these transitions and changes, especially menopause, appear to present with many physiological symptoms along with changes in psychological and social functioning. We aimed to ascertain the symptoms menopausal women experience and quality of life during menopause.

**Methods:** Two hundred and sixty middle aged menopausal women were employed for the study, using multi stage procedure of sampling. The study excluded women with known chronic physical and mental problems. Menopause-Specific Quality of Life was the instrument for data collection.

**Results:** Analyses of results revealed that, hot flushes (60.4%), accomplishing less (100%), decrease in stamina for rigorous activity (100%) and insufficient vaginal secretion during intercourse (87.9%) were the most common menopausal symptom of vasomotor, psychosocial, physical and sexual respectively. Again, menopausal women experienced a high severity of symptoms indicating a low quality of life.

**Discussion and Conclusion:** Middle aged women experiences a number of symptoms with the menopause transition. The severe nature of the experience affects their lives and the day to day activities, further impacting negatively on their quality of life. Interventions to improve the physiological, psychological and social functioning during the menopause stage of transition should be put in place to reduce the effects of the transition on the wellbeing of women at menopause.

**Keywords:** Menopause; Middle aged; Symptoms; Quality of life

## INTRODUCTION

Aging of the feminine reproductive system results mainly from changes in hormonal levels in relation to cyst abnormalcy which marks the start of climacteric/menopause [1]. According to Padubidri and Daftary [2], menopause is generally the end of menstruation for a periods of 12 months or a stop in the functions of ovaries resulting in lasting amenorrhea. The transition normally takes place spontaneously or by an induced alteration in the hormonal mechanisms of women. [3,4].

The menopausal changes, whether natural or induced results in altered physical, psychological and social performance. The alterations in functioning and performance usually results from fluctuations in hormonal levels. The decline or fluctuations in hormonal levels also causes the fluctuations and eventual end of menstruation. Changes in sexual desire, bladder dysfunctions, hot flushes, difficulty sleeping, changes in appearance, abnormality in menstruation etc. are all symptoms reported by menopausal women. Menopause transition also trigger certain psychological vulnerabilities such as low self-esteem, depression, stress, low self-image which decreases quality of life markedly [5]. These menopausal symptoms and changes sometimes become severe to interfere with the life of women and brings with it many undesired healthcare challenges that adversely impact the functioning and life quality [6]. Sometimes, the difficulties women encounter with the menopausal symptoms, results in their regular visit to physicians for assistance [7].

There exist some substantial similarity in coverage of symptoms by women everywhere around the world as reported in studies. Symptoms under vasomotor such as night sweat and hot flushes have been reported the common menopausal symptoms across various countries including America [8], Australia [9], among Norwegian female cohort [10], in India [11], among Iranian women [12], in some rural areas of Africa [13], in Egypt [14] and in Ghana by a study conducted in Accra Metropolis [15].

Several studies have reported a negative effect associated with menopausal symptoms during menopause stage [14,16,17]. Satoh and Ohashi, [18] and Cheng, Lee, Wang, Wang, and Fuh [19] however, reported no adverse changes in quality of life among menopausal women. Joint and muscular symptoms [20] as well as physical and psychosocial symptoms [21] have been shown to affect quality of life the most whilst vasomotor symptoms have less impact [22].

Some interventions such as non-hormonal pharmacological agents and hormone replacement therapy are efficacious in managing the symptoms associated with menopause but the risk outweigh the benefit [23]. Psychological interventions such as Cognitive Behavioral Therapy (CBT) have been found to be helpful in regulating the sexual functioning of middle aged women [24].

Considerable, a lack of information on the symptoms associated with menopause with its resulting consequences on life quality among middle aged Ghanaian women exist. In addition, studies assessing menopause-related factors have been limited to the capital city of Ghana, with little to none conducted in other parts of the country which possesses different characteristics. The study assessed symptoms of menopause and quality of life.

## METHODS

### Study design and population

The study employed the descriptive survey design and the population consisted of all menopausal women with in Kotwi Township of the Kumasi Metropolis. This community was chosen due to the availability of a health facility with a special gynecological unit. The study included only women between the ages of 40 to 60, have naturally occurring menopause, mentally oriented, do not use hormonal replacement therapy as well as those who had at least a basic education. The study excluded with surgical, premature and disease induced menopausal women as well as menopausal women with known chronic physical and mental health disorders. Status of menopause was self-reported.

### Study sampling and procedures

In the current study, 260 women with naturally occurring menopause was selected using the simple random and convenient sampling techniques. In this study, the sample size used was calculated by using the following formula:

$$N = 4pq/1^2$$

Where p = proportion in the population possessing the characteristic of interest

$$q = (p-1) \text{ and } 1 = \text{acceptable error}$$

Taking 80% prevalence of hot flushes, sweating and night sweat as a reported symptom [25] with acceptable error of 5% at 95%

Confidence Interval (CI), the sample size was as 240. Considering 10% of non-respondents, the sample size came to 264. The study was conducted from June to August 2019 with approval from UCC Institutional Review Board of Cape Coast. A consent form was signed by each participants before the study.

### Study instruments and measures

Data collection was done with a standardized instrument; Menopause-specific Quality of Life Questionnaire [26] to ascertain the symptoms experienced as well as to also indicate their quality of life. The instrument is a 29items sub divided into four components: Vasomotor (items 1-3), psychosocial (items 4-10), physical (items 11-26), and sexual (items 27-29). Symptoms are reported as experienced over the last month. The items were first put into Yes and No, with a reliability of 0.81, after which the Yes respondent's rated on a six Likert scale from 1 not bothered to 6 extremely bothered. The second half of the scale was on an ordinal basis with responses ranging from 1-6, as earlier mentioned. The final score for each sub domain was given by the arithmetic mean of the item scores comprising that domain. Severity classification of symptoms as mild, moderate or severe was determined with the following scores: mild (1-2), moderate (3-4) and severe (5-6). Women with mild severity were considered as having a high Quality of Life, moderate severity as having an average/moderate Quality of Life and those with severe symptom severity were considered as having a low Quality of life [18]. The reliability for the current study was 0.85 for the overall questionnaire and was 0.65, 0.53, 0.74, and 0.61 for vasomotor, physical, psychosocial and sexual domains, respectively, using Cronbach Alpha. Data on demographics including age, marital status and educational level were collected.

Data analyses were done using SPSS software and presented data as frequencies, percentages, means, and standard deviation.

## RESULTS

Two hundred and sixty menopausal women within the ages of 40 to 60 years were assessed. 48.9 years was the mean age. It was revealed that, 13, 49.2 and 37.7% were between the ages of 40-50 years, 46-54 years and 55-60 years respectively. Majority of the respondents (49.2%) were between the ages of 46-54 years, 38.5% of the respondents were married and 65.8% of the respondents had basic level of education (Table 1).

The results in Table 2 showed the most common symptoms of vasomotor, physical psychosocial and sexual domains to be hot flushes (60.4%), accomplishing less (100%), decrease in stamina for rigorous activity (100%) and experience of insufficient vaginal secretion (87.9%) respectively, while the least common symptoms were, night sweat (56.5), being dissatisfied with personal life (48.5%) involuntary urinating while laughing or coughing (40.8%) and avoiding intimacy (76.5).

The results in Table 2 showed a moderate/average level of quality of life of the psychosocial, vasomotor, sexual and physical domain. Therefore, on the basis of our results, menopausal women in our sample had an average quality of life.

## DISCUSSION

This descriptive study sought to assess symptoms of menopause and its impact on the quality of life of middle-aged women using Menopause-specific quality of life questionnaire. Findings showed that, the commonly experienced symptom of menopause included hot flushes, accomplishing less, decrease in stamina for rigorous

**Table 1:** Demographic characteristics of participants (n = 260).

Variables	No.	Percentage
Age (years)		
40-45	34	13.1
46-54	128	49.2
55-60	98	37.7
Marital status		
Single	13	5.0
Married	100	38.5
Divorced	63	24.2
Widow	84	32.3
Educational level		
Basic	171	65.8
Secondary	74	28.5
Tertiary	15	5.7

activity and insufficient vaginal secretion during intercourse. Almost all the respondents reported to have experienced more than one symptom. Similar results were recorded by a number of studies which found the common vasomotor symptom to be hot flushes [10, 27-30]. The findings however, contradicts the findings, which found the commonest symptoms to be night sweat, reduced accomplishment, feeling a lack of energy and changes in sexual desire for vasomotor, psychosocial, physical and sexual domains respectively [12]. Chim et al, [31] also reported of hot flashes to be low in prevalence among Singaporean cohort.

With psychosocial symptoms, the current study reported 'accomplishing less' as the common symptom whilst other studies reported poor memory [32] and feeling anxious or nervous [12] were the commonly reported. With regards to the physical domain, the study reported "decrease in stamina for rigorous activity" while, Abedzadeh-Kalahroudi et al, [12] reported 'feeling a lack of energy'. Jahanfar and Molae-Nezhad [33] also reported discomfort of muscle and joint, to be the common and severe symptoms. Similar contradictory findings were reported [19]. The current study also reported "insufficient vaginal secretion during intercourse" as more prevalent among the sexual domain. A study done by Rostami, Ghofrani, RamazanZadeh & Kazamnejad [34] however, reported "avoiding intimacy as common among women". The symptom differences as reported may be due to weather changes and diet, since most of the study were conducted in the Western world with cold climate compared to the setting of the current study which has a warm climate.

In this study, menopausal women, had an average quality of life, since they reported an average severity of symptoms in the

vasomotor, psychosocial, sexual and physical domains. Previous studies that assessed menopausal symptoms and quality of life found a decrease in quality of life during menopause stage due to the severe nature of menopausal symptoms experienced. [14,35] Nisar and Sohoo [36] also found a high score indicating a low quality of life.

**Table 2:** Frequency and Percentage to determine the common menopausal symptom experienced by middle aged women.

Symptoms	NO		YES	
	F	%	F	%
<b>VASOMOTOR</b>				
Hot flushes	103	(39.6)	157	(60.4)
Night Sweat	113	(43.5)	147	(56.5)
Sweating	110	(42.3)	150	(57.7)
<b>PSYCHOSOCIAL</b>				
Being dissatisfied with personal life	134	(51.5)	126	(48.5)
Feeling anxious or nervous	98	(37.7)	162	(62.3)
Difficulty remembering things	5	(1.9)	255	(98.1)
Accomplishing less than I used to	0	(0)	260	(100)
Feeling depressed	68	(26.2)	192	(73.8)
Being impatient with other people	67	(25.8)	193	(74.2)
Feelings of wanting to be alone	102	(39.2)	158	(60.8)
<b>PHYSICAL</b>				
More flatulence	29	(11.2)	231	(88.8)
Feeling of aches in muscle and joint	1	(0.4)	259	(99.6)
I often feel tired or worn out	5	(1.9)	255	(98.1)
I have difficulty sleeping	97	(37.5)	163	(62.5)
I have aches in back of head and neck	104	(40.0)	156	(60.0)
Decrease in physical strength	1	(0.4)	259	(99.6)
Decrease in stamina for rigorous activity	0	(0)	260	(100)
I feel a lack of energy	16	(6.2)	243	(92.0)
I have dry skin	42	(16.2)	218	(83.8)
I have gained more weight	69	(26.5)	191	(73.5)
Increased hair growth in my face	124	(47.7)	136	(52.3)
My appearance, texture or tone of skin	5	(1.9)	255	(98.1)
I feel bloated than I used to	67	(25.8)	193	(74.2)
I experience low backache	10	(3.9)	249	(96.1)
I urinate more than I used to	17	(6.5)	242	(93.1)
I involuntary urinate while laughing or coughing	154	(59.2)	106	(40.8)
<b>SEXUAL</b>				
My sexual desire have changed	39	(15.0)	221	(85.0)
I try avoid intimacy than I used to	61	(23.5)	199	(76.5)
I experience insufficient vaginal secretion	26	(10.1)	232	(87.9)

**Table 3:** Quality of life levels in study participants (n = 260).

Items	Mean of means	Std. Deviation	Max.	Min.
Vasomotor	3.60	0.87	3.84	3.60
Psychosocial	4.05	0.71	4.51	3.18
Physical	3.96	0.41	4.22	3.30
Sexual	3.38	0.73	3.64	3.32

Even though, the current study and that of [36] study was conducted in a similar setting, that is, rural communities, the studies however, had different results. Other studies, also reported a contradictory results among Saudi women, who reported of a milder symptom severity indication of an ability to cope with the associated symptoms leading to a good quality of life scores [37]. Since the current study reports a decline in quality of life in vasomotor, sexual, psychosocial and physical domains, interventions should be implemented all levels of the menopause transition to improve their quality of life.

### CLINICAL IMPLICATION

Discussion of the associated menopause symptoms women experience, should be incorporated in the routine health check-ups of women within the middle aged range. This will help rule out the possibility of the burden of menopause-related symptoms from other developing medical conditions. It is noteworthy that, future studies access strategies that are effective options to help reduce the bothersome nature of the symptoms associated with the menopause climacteric.

### LIMITATIONS

The current study had some limitations. Women were asked to indicate the presence of any known chronic physical or mental health problem to indicate their inclusion without the researchers conducting screening to ascertain the veracity of the information presented by the women. It is possible that, some women might have present with chronic conditions which are either known or unknown to them. Also, the study lacks comparison between premenopausal, perimenopausal and postmenopausal since the study focused on only perimenopause women. In addition, since the study was descriptive in nature, the researchers were unable to assess symptoms effect on the quality of life over a long period of time. Lastly, due to the community based nature of the study, generalization of findings are limited.

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