

Psychosocial Correlates of Menopausal Symptoms among Women in Ilorin, Nigeria

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ABSTRACT

Background: The increasing rate of social involvement among African women has made menopause of high concern today. The aim of this study was to identify some psychosocial factors that determine how severely women in Ilorin, Nigeria perceive menopausal symptoms.

Method: Women who attained menopause naturally between 40-60 years of age were interviewed using structured questionnaires to obtain certain demographic and psychosocial information following informed consent. Perception of menopausal symptoms was assessed using the Menopause Rating Scale (MRS). The psychosocial parameters were then correlated with MRS scores. Data were analysed using SPSS software version 22. Associations between categorical variables were tested using the chi-square (χ^2), the student-t test was used for the continuous variables ($p < 0.05$) while linear regression was used to identify independent determinants.

Results: Three hundred and eighty-five women aged 51.3 ± 0.3 years on the average participated in the study, 331 (86%) were Yoruba, 16 (4.2%) were Ibo, 3 (0.8%) Hausa and 35 (9%) were of other ethnic minorities. The total Menopause rating score was 14.02 ± 0.44 out of a maximum score of 44 which indicated a generally mild perception. Joint pain (1.77 ± 0.16) was however the most perceived symptom. There is a significant association between all the psychosocial parameters assessed and MRS scores ($p < 0.05$). However societal support was the

only independent determinant of menopause severity.

Conclusion: Social support is by far the most important determinant of menopausal symptom severity in our study subjects. Effort to enhance social support in Nigeria will help the women cope better with menopausal symptoms and improve their overall quality of life.

INTRODUCTION

A woman is said to have reached menopause when she has had one full year of menstrual cessation^{1,2}. There are a wide variety of physiological changes that occur in the years immediately surrounding menopause. These symptoms could be somatic such as hot flushes, heart discomfort/palpitation, sleeping problems and joint/muscular discomfort; psychological such as depressive mood, irritability, anxiety, physical/ mental exhaustion or urogenital such as burning sensation in vulva/vagina, painful micturition, frequency of urine and dryness of the vagina^{3,4}. Some of these symptoms have been found to be more occurring in certain geographical regions than others⁵⁻¹². For instance, in India, the predominant symptoms were joint and muscular discomfort, physical and mental exhaustion and sleeping problems⁴, women in Saudi Arabia showed more of impaired memory loss, loss of libido and lack of concentration¹¹ while Polish women displayed mainly psychological symptoms¹³. In Nigeria, the major problems were joint and muscular

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discomfort, hot flushes, vaginal dryness among others^{6,12,14,15,16}

What is more difficult to predict is how severe each woman would perceive these discomforting changes. Some women's experiences could be so disabling to the point of needing medical care while some would barely feel any symptom^{17,18}.

There are a range of factors which have been identified from literatures contributing to the variation in women menopausal experience. These include biological or reproductive factors^{10,11}, demographic factors^{12,19,20}, economic factors, psychological^{6,10,21,22}, cultural and social factors^{12,23,24}. Amongst all these, the least researched appears to be the psychological factors⁸. However, Individual's personality and episodes of life events have been found to impact on the severity of menopause symptoms. Women with prior experiences of mood disorder and negative attitude to menopause were reported to have worse menopausal experiences^{10,25,26}, whereas women with high self-esteem, higher educational qualification and reduced anxiety have been found to have milder symptoms^{26,27}.

Lack of social support, unemployment and poor health management have also been implicated as a determinant in the way women perceive menopause symptoms^{10,21,22}. Some of these social supports such as relationship with partners, relationship with children, relationship with friends and immediate environment including the work place affect stressful transitions that determine how they cope with menopause symptoms^{10,28}.

Although in time past, menopause was not a clinical case especially in Africa, women embraced this phase of life with all its inconveniences. This perhaps could be due to the simple life styles of mothers of those days and probably the low level of education where women were only meant to play the roles of child bearing and house-keeping^{23,29}. But today, the increased rate of social involvement among African women especially in Nigeria has made menopause of high concern²³. Some women perceive it as irreversible end to their ability to

remain attractive to their spouses while some are worried that it might mean the end of being a productive member of their communities^{23,29}.

Local studies to determine the psychosocial predictors of menopausal symptoms severity among the Nigerian women are virtually non-existent.

So, while trying to provide therapeutic solution to this multifactorial problem which the aetiology has not even been fully elucidated, a concerted effort can be made in providing statistical evidences of independent psychosocial factors that directly or indirectly determine the severity of these menopausal symptoms. Perhaps, the trauma women go through at this sensitive phase of life can be reduced. This is the major motivation for this study.

General Aim

To identify certain psychosocial factors that determine how severely women living in Ilorin, Nigeria perceive menopausal symptoms.

Specific Aims

1. To evaluate the study women for severity of menopause symptoms using the Menopause Rating Scale (MRS)³⁰ tool
2. To identify the presence of certain psychosocial variables that can affect menopause symptoms
3. To determine the correlation between these psychosocial variables and MRS scores in the population under study

METHODOLOGY

Study Design:

It was a descriptive cross-sectional study.

Study Site

This study was carried out at selected health care facilities, Government parastatals and commercial outlets within Ilorin metropolis. Ilorin is arguably the largest city in the Middle Belt Region of Nigeria with a population of about 800,000 residents drawn mainly from most of the major Nigerian ethnic groups like Yoruba, Hausa, Igbo and Nupe³¹.

Sample size determination

Minimum sample size was determined using the Fisher formula³²

Study Subjects

Inclusion Criteria:

1. Women who have had amenorrhea for at least 12 consecutive months
2. Must be between ages of 40 and 60 years

Exclusion Criteria

1. Age <40 years
2. Women with premature menopause
3. Women with iatrogenic menopause due to oophorectomy, chemotherapy or radiotherapy
4. Women on medications that can affect gonadal functions or cause vasomotor symptoms e.g. steroids, beta-blockers
5. Women with mental health challenge

Research Instrument

Each participant was interviewed with a structured questionnaire. The questionnaire was adapted from other tools that have been used in previous studies^{11,14,30}. The research tool contained 3 domains:

1. Demographic domain
2. Psychosocial evaluation domain
3. Menopause Rating Scale (MRS) Domain³⁰

The perception of menopausal symptoms by the respondents was evaluated using the Menopause Rating Scale (MRS). Each symptom on the MRS was placed on scale 0-4 where 0 is zero perception, 1 is mild, 2 is moderate, 3 is severe and 4 is very severe. Total MRS score was calculated by summing the scores for all the 11 items giving a maximum score of 44 and minimum score of 0.

Sampling Technique

Women that met the inclusion criteria were contacted and detailed information about the study was communicated to them. Candidates who were literate were served the questionnaires following verbal and written consent while those who were illiterate were interviewed by some trained assistants having obtained their verbal consent.

Statistical Analysis

Data were analysed using the SPSS statistical software version 22³³. Continuous variables were presented as means \pm SD while the categorical variables were presented as frequency and proportions. Associations between categorical variables were tested using the chi-square (χ^2) while the student-t test was used for the continuous variables. A p value of <0.05 was taken as statistically significant difference.

Correlation between the various continuous variables and the severity of menopausal symptoms was analysed using linear regression.

Ethical Consideration

Ethical approval for the study was gotten from the Ethics and Research Committee of the Kwara State Ministry of Health.

Benefit to Science.

Identification of factors that make the perception of menopause symptoms severe among Nigerian women would help their health care givers provide knowledge base orientation that can help ameliorate the severity of these symptoms.

RESULTS

Demographic Evaluation of Respondents

A total number of 385 women participated in the study. Majority of them 331(86%) were Yoruba, 16(4.2%) were Ibo, only 3(0.8%) were Hausa while the remaining 35(9%) belonged to the other ethnic minorities. Most of the women 213(55.3%) were Muslims, while the remaining 172(44.7%) were of the Christian faith.

The mean age of the respondents was 51.3 \pm 0.3 years; mean weight was 74.5 \pm 0.7kg while the mean height was 1.62 \pm 0m.

Menopause Rating Scale (MRS) Score

The total MRS score was 14.02 \pm 0.44 out of a maximum score of 44 (Table 1). This result showed that menopausal symptoms of respondents was generally mild. The symptom with the highest MRS

score was Joint pain (1.77±0.16), closely followed by Low libido (1.66±0.07) and Hot flushes (1.64±0.07); while the one with the least score was dyspareunia (0.76±0.06).

Table 1: Menopause Rating Scale Scores

Menopausal Symptom	Mean Score
Hot Flushes	1.64±0.07
Palpitations	1.13±0.06
Sleep Disorder	1.46±0.07
Depressive mood	1.12±0.06
Irritability	1.14±0.06
Anxiety or Panic	1.26±0.06
Poor Concentration	1.09±0.06
Low Libido	1.66±0.07
Dyspareunia	0.76±0.06
Urinary Frequency	1.11±0.06
Joint Pain	1.77±0.16
TOTAL MRS SCORE	14.02±0.44

Psychosocial Evaluation

Table 2 shows the psycho-social experiences of the respondents on a Likert scale of 1-5, where 1 is the least desirable and 5 is the most desirable.

Table 2: Psychosocial Evaluation of the Respondents

Psychosocial Parameter	Score
Childhood Experience	4.2±0.1
Adolescence	4.1±0.1
Marital Relationship	3.9±0.1
Work place	3.3±0.1
Family Support	3.3±0.1
Societal Support	2.7±0.1
Transportation	3.0±0.1
Neighbourhood	3.3±0.1
Food	3.8±0.1
Health Care	3.5±0.1

Result showed that childhood (4.2±0.1) and adolescence (4.1±0.1) were the most enjoyable life events for the studied women followed closely by Marital Life (3.9±0.1). Family support, neighbourhood and work place experiences were moderate (3.3±0.1). They also have moderate desirable experience of transport system (3.0±0.1), Food (3.8±0.1) and Health care (3.5±0.1). Their least desirable experience was societal support (2.7±0.1).

Correlation of Psychosocial Parameters with Total MRS Score

Table 3 shows that there was a significant negative correlation between the MRS score and all the psychosocial factors evaluated. Further analysis by linear regression of significant correlates showed that Societal Support (p=0.014) was the only independent psychosocial determinant of MRS score (Table 4).

Table 3: Showing Bivariate Pearson's Correlation

PARAMETERS	Mean	S.D	P. Correlate	P. Value
Age (Years)	51.3	6.05	0.163	0.001**
Weight (Kg)	74.5	14.96	0.052	0.315
Height (m)	1.62	0.07	-0.002	0.971
BMI (Kg/m	28.25	5.56	0.063	0.215
Childhood	4.17	1.047	-0.169	0.001**
Adolescence	4.05	0.990	-0.225	0.000**
Marital Relationship	3.89	1.032	-0.230	0.000**
Work place	3.71	1.081	-0.222	0.000**
Family Support	3.30	1.408	-0.233	0.000**
Societal Support	2.66	1.364	-0.279	0.000**
Transportation	2.96	1.284	-0.241	0.000**
Neighbourhood	3.32	1.202	-0.228	0.000**
Food	3.76	1.007	-0.217	0.000**
Health Care	3.53	1.214	-0.290	0.000**

Table 4: Showing Linear Regression of Psychosocial Parameters

PARAMETERS	STD Coefficient	t	P.Value	Correlations
Childhood	-0.053	-0.774	0.439	-0.171
Adolescence	0.078	-1.050	0.294	-0.228
Marital Relationship	-0.081	-1.320	0.188	-0.238
Work place	-0.015	0.211	0.833	-0.221
Family Support	-0.011	0.155	0.877	-0.231
Societal Support	-0.157	-2.463	0.014**	-0.273
Transportation	-0.091	-1.386	0.167	-0.240
Neighbourhood	0.045	0.632	0.528	-0.228
Food	0.002	0.027	0.978	-0.215
Health Care	-0.112	-1.652	0.108	0.014

DISCUSSION

The main question this study sought to answer was to identify the psychosocial experiences that significantly impacted how severely women in Ilorin perceive menopausal symptoms. Though menopause symptoms are becoming more troubling among present day women²³, this is the first time there would be a statistical evidence of the exact psychosocial factor that determine the severity of menopausal symptoms of women in the middle belt region of Nigeria. From our study, the total MRS score of 14.02±0.44 indicated a mild perception. The symptoms that worried them the most were joint pain (1.77±0.16), low libido (1.66±0.07) and hot flushes (1.64±0.07) (Table 1). This finding is consistent with the studies done in Lagos⁶ and other parts of nigeria^{14,15,16} showing joint pain as the most challenging symptom. Similar findings were discovered in India⁹ and Saudi Arabia¹¹ but this perception was different from the experiences of women in Poland who displayed mainly psychological symptoms¹³. Poor concentration was not pronounced among Ilorin women unlike their Saudi Arabian counterparts¹¹. The disparity may be as a result of cultural differences which have been known to affect the way women perceive menopausal symptoms.

Psychosocial Perception of Respondents

Studies abound globally, showing that perceived psychosocial support is an important decider of how women cope with menopausal symptoms³⁴⁻³⁷. However, there are still scarcity of data showing the level of psychosocial wellbeing of Nigerian menopausal women. A social support survey previously done in Riyadh, Saudi Arabia³⁵ showed that their menopausal women had moderate quality of social support similar to another study done in Iran³⁶ where majority of the menopausal women studied also reported moderately perceived social support. In our study, the results are similar, the level of psychological satisfaction we found in the women in Ilorin fell generally on the average. Our findings also showed a decline in the psychosocial satisfaction of the respondents as they grow from childhood (4.2±0.1) into marital life (3.9±0.1).

Impact of Psychosocial Support on Menopause Symptoms Severity

The impact of psychosocial factors, way of life, interpersonal relationships and cultural beliefs in predicting the level of depression in menopause is of huge significance^{10,38}. Individual's episodes of life's events had been proven to affect how women respond to menopausal symptoms.^{10,25,26} Our evaluations did not say otherwise, we found a negative association between marital relationship, family support and the severity of menopause symptom indicating that the better the life event experiences, the less the menopause symptoms severity. Linear regression of independent factors revealed that societal support was the strongest negative determinant of menopausal symptoms severity among the population we studied (Table 4). This is in agreement with a previous study where there was a strong reverse relationship between perceived social support and psychological symptoms in postmenopausal women³⁶. Similarly, in Saudi Arabia, women who lacked tangible societal support had higher odds for severe menopausal symptoms³⁵. Other studies that had investigated the association between stressful life events and hormonal changes in middle aged women³⁸⁻⁴⁰ found

that psychosocial factors were associated with the dysregulation of the hypothalamo-pituitary-adrenal axis, resulting in decreased cellular glucose uptake and release of cortisol. This will explain the pathophysiology of increased depression and psychosomatic symptoms in menopausal women.

CONCLUSION AND RECOMMENDATION

This study has been able to establish that the severity of menopause symptoms among women in Ilorin are generally mild. However, their childhood experience, adolescence, marital relationship, family support, societal support, health care, food and transportation experiences correlated inversely with the severity of their menopausal symptom; and societal support proved to be the strongest and the only independent determinant.

Provision of social support should be enhanced by the government and communities to help the women cope better with menopause as the use of hormone replacement therapy is still poorly embraced within this same population⁴¹.

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