

KNOWLEDGE, ATTITUDE, AND SELF-CARE MANAGEMENT OF MENOPAUSAL SYMPTOMS AMONG MIDDLE-AGED WOMEN IN THE FEDERAL CAPITAL TERRITORY, NIGERIA: A COMMUNITY BASED CROSS-SECTIONAL STUDY

J.O. Olufuye, S.A. Lawal

Department of Public Health, Faculty of Allied Sciences, Babcock University, Ilishan-Remo, Ogun State, Nigeria

Correspondence:

J.O. Olufuye

Dept. of Public Health,
Faculty of Health Sciences,
Babcock University,
Ilishan-Remo,
Ogun State.
Email:olufuye0748@pg.babcock.edu.ng

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ABSTRACT

Introduction: Menopause is a natural biological transition characterized by the permanent cessation of menstruation, typically occurring between the ages of 45 and 55 years. Despite its significance, menopause remains under-recognized in many low- and middle-income settings, where limited awareness and socio-cultural factors may negatively affect women's health and quality of life. This study assessed the knowledge, attitude, and self-care management of menopausal symptoms among middle-aged women in the Federal Capital Territory (FCT), Nigeria.

Methodology: A community-based descriptive cross-sectional study was conducted among 115 middle-aged women aged 40–60 years in selected Area Councils of the Federal Capital Territory (F.C.T), Nigeria. Participants were recruited using a multistage sampling technique. Data were collected using a structured questionnaire assessing socio-demographic characteristics, knowledge of menopausal symptoms, attitudes toward menopause, and self-care management practices. Data were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations.

Results: The mean knowledge score was 10.49 ± 4.56 out of a maximum of 20. More than half of the respondents (53.9%) demonstrated moderate knowledge, while 35.7% had low knowledge and 10.4% had good knowledge. The mean attitude score was 40.08 ± 3.35 , with the majority of participants (55.7%) exhibiting a negative attitude toward menopause. The mean self-care score was 23.82 ± 3.76 out of 80, and all respondents (100%) demonstrated poor self-care management practices.

Conclusion: The study revealed moderate knowledge, negative attitudes, and poor self-care practices regarding menopause among middle-aged women in the FCT. These findings highlight the need for targeted health education and community-based interventions to improve awareness, promote positive attitudes, and enhance self-care practices among women in this population.

Keywords: Menopause, Health education, Knowledge, Attitude, Self-care management, Quasi experiment.

INTRODUCTION

Menopause is a natural and inevitable phenomenon and is said to have occurred when menstruation ceases for up to a year in women between the ages of 45–55 years, but it could happen earlier or later for a few. Apart from the natural occurrence which is age-related and due to decreased follicular activity that results in depletion of the vital female hormones; progesterone and oestrogen, it can also occur due to surgery for removal of the ovary (oophorectomy) or the uterus (hysterectomy), cancer treatment such as chemotherapy, genetic heritage or sometimes unknown reasons.¹ The WHO technical Group, 1996, described menopause as a marker of biological ageing in women. It is one of the most significant stages in the female reproductive life cycle, being a transition from reproductive to non-reproductive stage.²

Globally, studies have shown that various factors like genetics, the environment and lifestyle influence the onset and experience of menopause³. While in a lot of Asian countries, menopause is like a liberating phase of life that frees a woman from reproductive responsibility, the western world views it more as a medical issue associated with aging and loss with possible negative psychological outcomes⁴. The level of attention given to menopause as an issue that requires support for research and diligent healthcare and policy support also varies globally. While generally, many national policies still lack the inclusion of menopausal care⁵, the advocacy for its inclusion in workplace policies in regions like Europe and North America is notable⁶.

In the Sub-Saharan Region of Africa, a region with mostly low-and middle-income Countries(LMICs), menopause is viewed as a social, spiritual and biological event usually associated with stigmatization.⁷ While some traditions see postmenopausal women as people of increased status and wisdom, others consider it as a signal of aging and loss of fertility and ascribe lower social standing to such women.⁸ Also, the poor state of health infrastructure in the region, as known with all other low and middle-income regions, is reflected in the low level of availability of medical attention for menopause or its inclusion in national health strategies.⁹ Furthermore, poor health messaging, low level of literacy and a lack of specialized healthcare workforce on menopause complicate the health outcomes of menopausal women that as a result lack services like counselling, education and hormone therapy, especially in rural settings where people then fall back on herbal remedies, advice from older women or other informal methods.¹⁰ Commendable however are efforts identified in a study in 2021 from Zimbabwe, where the need to include menopause education in primary care settings was emphasized.¹⁰ Information gaps are also bridged through initiatives like health talks and peer support groups, digital health platforms and mobile outreach.¹⁰ Kenya and Tanzania for instance use mobile messaging to provide reproductive health education, including menopause to women.¹¹ These efforts are, however, still grossly sporadic and underfunded.

Nigeria, with over 250 ethnic groups, it is not surprising that perspectives on menopause are largely affected by cultural and religious beliefs, socioeconomic status, education, and access to healthcare.¹² In parts of Nigeria menopause is paradoxically viewed as both a natural stage of life accompanied by both liberation and wisdom, but is at the same time a sign of loss of femininity and sexual value, with elements of stigmatization resulting.¹² Some also see it as a spiritual affliction or illness, because of symptoms like hot flashes and mood swings.¹² Physical symptoms that result from menopause are often treated with privacy in the Yoruba and Igbo culture with a resultant effect of under-reporting and poor health outcomes in many.¹³ There is also inadequacy of menopause-related services like counseling, hormonal replacement or lifestyle support in Nigeria because reproductive health services are focused primarily on maternal health and family planning.¹⁴ The lack of prioritization of menopause in national health policies, combined with its low visibility in public discourse, limits recognition of its impact on women's quality of life, mental health, and the increased risk of chronic conditions such as osteoporosis, cardiovascular disease, and depression.^{13,14}

In recent years, digital health tools have demonstrated potential in enhancing access to education and support related to menopause. Mobile applications and telehealth services currently offer resources for monitoring symptoms, online counseling, and education about menopause.¹⁵ These platforms facilitate privacy, lessen stigma, and provide tailored support to women, especially in under-served areas.¹⁵ Moreover, global initiatives such as the “Menopause in the Workplace” campaign, particularly in Europe and North America, have played a significant role in raising awareness of menopause in public and workplace settings, while promoting inclusive policies and educational interventions.¹⁶ Nevertheless, the digital gap in low-resource environments may restrict these advantages, necessitating comprehensive community-driven approaches in conjunction with digital advancements to guarantee inclusivity and fairness.¹⁷ Globally, technology, advocacy, and policy change are progressively converging to transform how menopause is viewed and handled.

The aim of this study was to assess the knowledge, attitude and self-care management of women experiencing menopause in the Federal Capital Territory.

METHODOLOGY

Study Design

This study employed a community-based descriptive cross-sectional design to assess the knowledge, attitude, and self-care management of menopausal symptoms among middle-aged women in the Federal Capital Territory (FCT), Nigeria.

Study setting

The study was conducted in the Federal Capital Territory (FCT), Abuja, Nigeria. The FCT is located in the central region of the country and serves as the administrative capital of Nigeria. It is strategically positioned between latitude 8°25'2" and 9°20'2" North and longitude 6°45'2" and 7°39'2" East, and is bordered by Niger State to the north and west, Nasarawa State to the east, and Kogi State to the south. The FCT covers a land area of approximately 7,315 square kilometers and is characterized by a mix of urban, peri-urban, and rural settlements.^{18,19,20}

Administratively, the FCT is divided into six Area Councils, namely Abuja Municipal Area Council (AMAC), Abaji, Bwari, Gwagwalada, Kuje, and Kwali.^{18,19,20}

This research was conducted in three Area Councils of the Federal Capital Territory (FCT), Nigeria, Abaji, Kuje, and Bwari. These councils were chosen to

represent the variety in geography, culture, and health service availability throughout the FCT, and to assess how a community-focused health education initiative affects middle-aged women's understanding, attitudes, and self-care management concerning menopause.

The Abaji Area Council, situated in the south-western FCT and adjacent to Kogi and Niger States, is mainly rural, with agriculture being the primary livelihood.¹⁸ The main ethnic groups consist of the Gbagyi, Bassa, Egbira, and Hausa. The restricted access to healthcare and education in the region, coupled with a significant population of middle-aged women, makes it appropriate for health initiatives focused on bridging menopause-related knowledge deficiencies.¹⁹

Kuje Area Council, located in the southwestern FCT, serves as a semi-urban center that blends traditional and contemporary ways of life. It borders Gwagwalada, AMAC, and Nasarawa State. Kuje has a varied population, though the Gbagyi are the majority. Its economic pursuits consist of agriculture, small-scale trading, and government employment, while its variety of healthcare services and demographic diversity render it suitable for evaluating intervention efficacy in semi-urban environments.

Bwari Area Council, located in the northwestern FCT, is an urban and peri-urban region recognized for its educational establishments, such as the Nigerian Law School and the JAMB headquarters. It boasts a sizable, ethnically varied population and comparatively elevated literacy rates. Economic activities differ, and access to healthcare is more organized in comparison to Abaji and Kuje.²⁰

Collectively, these three sites offered an extensive framework for evaluating the effects of health education amid various cultural, economic, and geographical settings in the FCT.

Study population

The study population consisted of middle-aged women aged 40–60 years residing in the selected communities within the chosen Area Councils of the FCT. Women within this age range were included because they are most likely to be experiencing the menopausal transition. Inclusion criteria comprised women aged 40–60 years who had resided in the study area for at least six months and who consented to participate in the study. Exclusion criteria included women who were severely ill at the time of data collection, those with cognitive impairments that could affect their ability to respond to the questionnaire, and those who declined to provide informed consent.

Sample size determination

The sample size for this study was derived from a larger quasi-experimental study designed to assess changes in knowledge, attitude, and self-care management following a health education intervention. For the parent study, the sample size was calculated using a formula for comparing mean differences in paired measurements:

The formula is:

$$n = ((Z_{1-\alpha/2} + Z_{1-\beta}) / (d/\sigma))^2$$

where n represents the required sample size, $Z_{1-\alpha/2}$ is the standard normal deviate corresponding to a 95% confidence level (1.96), $Z_{1-\beta}$ is the standard normal deviate corresponding to 80% statistical power (0.84), d is the expected mean difference (effect size), and σ is the standard deviation of the difference.

Based on assumptions from similar studies, an effect size of 0.5 and a standard deviation of 1.0 were used. Substituting these values into the formula yielded a minimum sample size of approximately 32 participants per group. After adjusting for a 15% attrition rate, the required sample size increased to 38 participants per group.

However, for the present study, which reports baseline findings using a cross-sectional approach, all available participants recruited for the parent study were included, resulting in a total sample size of 115 respondents.

Sampling and procedure for data collection

This involved selecting samples through multiple stages:

1. **Stage 1:** Selection of Local Government Areas (LGAs): Select 3 out of 6 LGAs in the Federal Capital Territory (FCT) using purposive sampling.
2. **Stage 2:** Selection of Wards: 4 wards were selected from 10 in each of the selected LGAs (12 wards in total) using simple random sampling.
3. **Stage 3:** Selection of Participants: Middle-aged women aged 40–60 years were recruited from each selected ward using convenience sampling. Recruitment was facilitated through Women Affairs personnel at the Area Council offices, who maintain regular contact with women in the community and assisted in identifying and mobilizing eligible participants during routine engagements. The representative was given the age range with specification of diversity based on the three menopausal transition phases and age, so that of about 38 participants, about twelve were perimenopausal, of age bracket, 40-54 years another twelve postmenopausal, of age bracket, 56-60 years and sixteen menopausal, of age bracket, 45-55 years. To ensure representation across the selected wards, participants were distributed as evenly as possible within each Area Council. Since four wards were

selected from each Area Council, the participants allocated to each council were shared across the four wards based on availability of eligible women. This resulted in approximately four to six participants being recruited from each ward. The variation in the number recruited per ward was due to differences in the availability and willingness of eligible women to participate at the time of data collection.

Data gathering for this research was conducted using a structured questionnaire created by the researcher.

To build trust and collaboration among the communities, the researcher presented herself to participants using a formal introduction letter from the Head of the Public Health Department at Babcock University. This letter was submitted to the local officials, health representatives, and community leaders in the chosen area councils (Abaji, Kuje, and Bwari). Protocols for community entry were adhered to in order to secure acceptance and engage participants.

Participation was completely optional. Only women who expressed a desire to participate in the study were included. At the start of the interaction, participants were comprehensively informed about the study's aim, the types of questions, and their rights as participants. They were guaranteed complete confidentiality, stressing that no names or personal identifiers were needed in the survey. Informed consent in writing was secured from every participant before administration of the instrument.

Detailed directions were given both orally and, on the questionnaire, to assist respondents in correctly filling out every part. The researcher and trained aides were also present to help participants read or understand questions when needed, especially for those with low literacy. A translator was also secured to address the issue of language barrier.

Measures and Data Management

To guarantee the dependability and accuracy of the data collection tool, the researcher examined previous literature and assessed tools employed in comparable studies. Drawing from the insights obtained, a systematic, self-completed questionnaire was created, crafted to correspond with the study's goals and research inquiries. The tool was utilized to collect information from middle-aged women prior to and following the health education program to assess its impact on their knowledge, attitude and self-care management concerning menopausal symptoms.

To ensure the reliability of the instrument, approximately 20% of the projected sample size was

randomly selected to participate in the test-retest at The Gwagwalada Area Council of FCT. Cronbach's alpha scores were as follows for each construct; Knowledge of Menopausal Symptoms, 0.78, Attitude towards Menopause, 0.81 and self-care management 0.82.

To establish validity, experts in the field of public health, education, sociology and psychology reviewed the instrument and provided feedback on the relevance of the items and the overall instrument in relation to the construct being measured.

The utilization of a multi-stage sampling technique, diversity of participant representation across the 3 menopausal stage as well as the robust sample size (115), further contributed to the external validity of results in the study. The questionnaire is segmented into four parts (A–D) given to participants at baseline (before the intervention) and after.

The instrument is sectioned as follows:

Section A: Socio-demographic characteristics

This section included 11 items designed to capture background information of the respondents. Variables covered included age, marital status, level of education, occupation, religion, ethnicity, income level, parity (number of children), age at menarche, age at menopause (if applicable), and previous exposure to menopause education. Most responses were either open-ended (e.g., age) or categorical (e.g., education level, income bracket). Frequencies and percentages were used to describe the sample characteristics.

Section B: Knowledge of menopausal symptoms

This section contains 20 dichotomous items measured on a three-point scale: True, False, and Don't Know. The items assessed the respondents' knowledge about menopause, including its definition, common symptoms (e.g., hot flashes, mood swings), complications (e.g., osteoporosis, cardiovascular risks), and management options (e.g., hormone replacement therapy, herbal remedies). Each correct response (True or False, depending on question wording) was scored 1, while incorrect or "Don't Know" responses were scored 0. The total score ranged from 0 to 20, with higher scores indicating greater knowledge. Negatively phrased items were reversely scored during data entry. The total knowledge score ranged from 0 to 20, with higher scores indicating better knowledge of menopausal symptoms. For interpretation, knowledge scores were categorized into three levels: low knowledge (0–7), moderate knowledge (8–14), and good knowledge (15–20).

Section C: Attitude toward menopause

This section comprises 15 items measured on a 4-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), Strongly Disagree (1). Items in this section evaluated the respondent's emotional, social, and psychological attitude towards menopause, such as whether they viewed menopause as a loss of femininity, whether they felt confident managing the should be openly discussed. Both positively and negatively worded items were included, and reverse scoring was applied where necessary. The total attitude score ranged from 0 to 60, with higher scores indicating a more positive attitude toward menopause. For analytical purposes, attitude was categorized based on the mean score, with scores below the mean classified as negative attitude and scores equal to or above the mean classified as positive attitude.

Section D: Self-care management

The twenty items in this section were intended to evaluate respondent's self-care of general and menopausal health. The topics covered included access to medical care, communication with medical professional, treatment affordability, utilization of health education initiatives and self-assurance in symptom management. On a 5-point frequency scale the responses were scored as follows: Never (0) Rarely (1) Sometimes (2) Often (3) and Always (4). "I undergo recommended breast examination," "I eat a balanced diet," and "I seek medical advice for severe menopausal symptoms." The total self-care score ranged from 0 to 80, with higher scores indicating better self-care management practices. Self-care levels were categorized using the mean score as the cut-off point, with scores below the mean classified as poor self-care and scores equal to or above the mean classified as good self-care.

The data obtained for the study was collated, entered and coded using Statistical Product and Service Solution (SPSS) version 28. The data was carefully reviewed to ensure that it is properly coded and entered into the analysis spreadsheet in a process called crosschecking. Descriptive statistics were used to summarize the data. Frequencies and percentages were computed for categorical variables such as socio-demographic characteristics, knowledge levels, attitude, and self-care practices. Continuous variables, including knowledge, attitude, and self-care scores, were summarized using means and standard deviations.

The levels of knowledge, attitude, and self-care management were categorized based on predefined scoring criteria. The results were presented in tables and described using appropriate summary measures.

A significance level of 5% was considered for all statistical interpretations.

Ethical considerations

Ethical approval was obtained from Babcock University Health Research Committee (BUHREC)854/25 and The Federal Capital Territory Health Research Committee FHREC/2026/01/130/25-03-2026. The objectives and procedures of the study were explained to the participants as well as the fact that their participation was voluntary. Informed consent was then obtained from each participant after assurance of confidentiality.

RESULTS

Socio-demographic characteristics of respondents

Participants demographic profile in the study is shown in Table 1.

A total of 115 middle-aged women participated in the study. The majority of respondents (73.0%) were aged 40–50 years, with a mean age of 48.57 ± 5.23 years. Most participants were married (78.3%), while 20.9% were widowed.

In terms of educational status, the largest proportion had primary education (39.1%), followed by secondary education (34.8%). Regarding occupation, most respondents were self-employed (39.1%) and employed (33.0%).

The respondents were almost equally distributed between Christianity (48.7%) and Islam (49.6%). Ethnically, the majority were Hausa (60.9%).

Nearly half of the participants (48.7%) reported earning less than ₦10,000 monthly. Most respondents had 3–5 children (59.1%), and the majority (80.0%) reported experiencing menarche between ages 13–15 years.

The level of knowledge about menopause among middle-aged women in The Federal Capital Territory (FCT)

The level of knowledge about menopause among middle-aged women in the Federal Capital Territory (FCT) is presented in Table 2.

The overall mean knowledge score of respondents was 10.49 ± 4.56 out of a maximum score of 20. The majority of participants (53.9%) demonstrated a moderate level of knowledge of menopausal symptoms, while 35.7% had low knowledge and only 10.4% exhibited good knowledge.

Table 1: Demographic characteristics of the participants in the study for each group at

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	40–50	84	73.0
	51–60	31	27.0
	Mean $\pm$ SD	48.57 $\pm$ 5.23	
Marital Status	Single	1	0.9
	Married	90	78.3
	Widowed	24	20.9
Level of Education	Non-formal	16	13.9
	Primary	45	39.1
	Secondary	40	34.8
Occupation	Tertiary	14	12.2
	Employed	38	33.0
	Self-employed	45	39.1
Religion	Civil servant	2	1.7
	Farmer	7	6.1
	Others	23	20.0
Ethnicity	Christianity	56	48.7
	Islam	57	49.6
	Others	2	1.7
Monthly Income (₦)	Yoruba	14	12.2
	Igbo	8	7.0
	Hausa	70	60.9
Parity	Others	23	20.0
	<10,000	56	48.7
	10,000–50,000	43	37.4
Age at Menarche (years)	51,000–100,000	12	10.4
	>100,000	4	3.5
	1–2	19	16.5
	3–5	68	59.1
	6–9	25	21.7
	≥ 10	3	2.6
	10–12	8	7.0
	13–15	92	80.0
	16–19	15	13.0

Table 2: Knowledge level about menopause among middle-aged women in the Federal Capital Territory (FCT)

Variable	Category	Frequency (n)	Percentage (%)
Knowledge Score	Mean $\pm$ SD	10.49 $\pm$ 4.56	
Knowledge Level	Good	12	10.4
	Moderate	62	53.9
	Low	41	35.7
	Total	115	100

Attitude of middle-aged women towards menopause in the FCT
The level of attitude of middle-aged women towards menopause in the Federal Capital Territory (FCT) is presented in Table 3.

The mean attitude score of respondents was 40.08 $\pm$ 3.35 out of a maximum score of 60. More than half of the participants (55.7%) exhibited a negative attitude toward menopause, while 44.3% demonstrated a positive attitude.

Table 3: Level of attitude of middle-aged women towards menopause in the Federal Capital Territory (FCT)

Variable	Category	Frequency (n)	Percentage (%)
Attitude Score	Mean $\pm$ SD	40.08 $\pm$ 3.35	
Attitude Level	Positive	51	44.3
	Negative	64	55.7
	Total	115	100

Table 4: Self-care management level of middle-aged women experiencing menopause in the Federal Capital Territory (FCT)

Variable	Category	Frequency (n)	Percentage (%)
Self-Care Score	Mean $\pm$ SD	23.82 $\pm$ 3.76	
Self-Care Level	Good	0	0.0
	Poor	115	100
	Total	115	100

Self-care management level of middle-aged women experiencing menopause in The FCT

The self-care management level of middle-aged women experiencing menopause in the Federal Capital Territory (FCT) is presented in Table 4

The mean self-care management score among respondents was 23.82 ± 3.76 out of a maximum score of 80. All participants (100%) demonstrated poor self-care management practices, with none classified as having good self-care.

Discussion

The discussion interprets the results of the study in relation to existing literature. The findings are discussed under key domains including knowledge of menopause, attitude toward menopause, baseline self-care management practices.

The findings of this study revealed that the baseline knowledge of menopause among middle-aged women in the Federal Capital Territory was generally moderate, although a considerable proportion of respondents still had low knowledge. The findings revealed that although over half of the respondents demonstrated moderate knowledge of menopausal symptoms, a substantial proportion still had low knowledge, indicating persistent knowledge gaps within the population. This suggests that while some awareness exists, it may be incomplete or derived from informal and potentially unreliable sources. Similar findings have been reported in studies conducted in Nigeria and other low- and middle-income countries, where women often have limited access to accurate and comprehensive information on menopausal health, resulting in misconceptions and poor preparedness for the menopausal transition^{22,23}. Similarly, research conducted in Nigeria found that many middle-aged women possessed limited understanding of the physiological changes associated with menopause, which often contributed to anxiety and misinterpretation of symptoms²⁴.

Despite the moderate level of knowledge observed, the majority of respondents exhibited a negative attitude toward menopause. This finding suggests that knowledge alone may not necessarily translate into

positive perceptions or acceptance of menopause. Cultural beliefs, societal perceptions, and stigma surrounding menopause in many African settings may contribute significantly to these negative attitudes. Previous studies in sub-Saharan Africa have similarly reported that menopause is often associated with aging, loss of femininity, and social stigma, which can negatively influence women's attitudes and emotional responses to the transition^{7,8}. In Nigeria, menopause is sometimes perceived as both a natural stage and a condition associated with decline, further reinforcing conflicting attitudes and misconceptions¹².

A particularly striking finding of this study was that all respondents demonstrated poor self-care management practices. This universal deficiency in self-care highlights a critical gap between knowledge and practice. It suggests that even when some level of awareness exists, it does not necessarily translate into appropriate health-seeking behavior or effective management of menopausal symptoms. This may be attributed to multiple factors, including limited access to healthcare services, inadequate availability of menopause-specific interventions, low health literacy, and socio-cultural barriers that discourage open discussion and care-seeking for menopausal symptoms^{13,14}. Additionally, the limited integration of menopause-related services into primary healthcare systems in Nigeria may further contribute to poor self-care practices among women^{13,14}.

The combination of moderate knowledge, negative attitudes, and poor self-care practices observed in this study reflects a broader systemic issue in the recognition and management of menopause in low-resource settings. The findings are consistent with existing literature indicating that menopause remains an under-prioritized aspect of women's health in many developing countries, where healthcare systems are predominantly focused on maternal and reproductive health to the exclusion of midlife and aging-related conditions⁹. This lack of attention not only limits access to appropriate care but also contributes to the persistence of misinformation and inadequate coping strategies among women⁹.

The findings of this study shows the need for comprehensive and context-specific interventions that address not only knowledge gaps but also socio-cultural perceptions and structural barriers to care. Improving awareness alone may be insufficient unless it is accompanied by efforts to promote positive attitudes and enable practical self-care behaviors through accessible and supportive healthcare systems.

Limitations

The utilization of convenience sampling for participant selection could have had an effect on the true representativeness of the sample due to selection bias. The external validity of the result is also limited by the fact that the study locations are semi-urban and cannot reflect the rural and urban settings.

The private nature of handling menopausal symptoms in Nigeria might also have influenced the level of openness of participants in responding to questions. Recall bias is also likely as presented data is self-reported.

Recommendations and implication for programming

The observed deficiencies suggest a need for targeted health education interventions to improve knowledge and promote positive attitudes toward menopause. Integrating menopause education into primary healthcare services could enhance women's understanding and support early identification and management of symptoms. In addition, community-based health education programs, delivered through existing structures such as women's groups and local health workers, may improve awareness and encourage appropriate self-care practices. Strengthening the capacity of healthcare providers to deliver menopause-related counseling and support is also essential for improving health outcomes among middle-aged women.

CONCLUSION

This study revealed that middle-aged women in the Federal Capital Territory demonstrated predominantly moderate knowledge of menopausal symptoms, a generally negative attitude toward menopause, and poor self-care management practices. These findings highlight significant gaps in awareness, perception, and health practices related to menopause among women in the study area.

Conflict of interests

The authors declare that there is no conflict of interest regarding the publication of this study.

Contribution of authors

Olufuye: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Writing – original draft, Writing – review & editing. **Lawal:** Conceptualization, Methodology, Project administration, Resources, Supervision, Visualization, Writing – original draft, Writing – review & editing

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