Effect of Health-Education Intervention on Perception and Quality of Life of Menopausal Women in Selected Local Government Areas in Ibadan

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ABSTRACT

Menopause is an important and normal developmental process in a woman's life. It is marked by the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. The purpose of this study is to evaluate the effect of health-education on the perception and quality of life of (QoL) of Menopausal Women in Ibadan, with the intention of knowing how health-education could impact menopausal women's perception and quality of life positively. Quasi-experimental study design was used to explore the effect of health education intervention on knowledge, perception and quality of life of Menopausal women and the study utilized multistage sampling technique and 130 questionnaires were retrieved out of 152 questionnaires administered, all the retrieved questionnaires were valid for analysis. The findings showed that the level of knowledge of the participants was better at post-intervention (96.2%) than pre-intervention (93.8%). Also (20.8%) participants had negative perception at pre-intervention while it reduced to (9.2%) post-intervention. The percentage of quality of life (38.5%) at pre-intervention was increased to (66.9%) at post-intervention. The null hypotheses were rejected (pv = 0.001) as there was significant difference between pre-interventional and post-interventional knowledge, perception and quality of life using paired samples t-test. In conclusion, participants performed better at post-intervention than at pre-intervention which implies that health-education given had positive impact on their knowledge perception and quality of life. It was recommended therefore that menopausal women be well informed through health-education intervention to reduce the menace of menopausal syndrome and increase their coping system.

Keywords: Health Education, Perception, Quality of Life, Menopause, Menopausal Women

Introduction

Menopause is an inevitable biological transition marking the end of a woman's reproductive life, characterized by the cessation of ovarian function and a decline in steroid and peptide hormone production (Alva & Chethan, 2016). It is diagnosed retrospectively after 12 months of amenorrhea (Pathak, Ahirwar, & Ghate, 2017). Although menopause is a natural process rather than a disease, hormonal changes often produce a range of physical and psychological symptoms such as hot flushes, night sweats, insomnia, urinary and genital changes, and mood fluctuations (Alva & Chethan, 2016).

The experience of menopause varies across individuals and populations. While some women perceive it as a period of liberation from menstruation and contraception, others experience distressing physiological and psychosocial symptoms. Studies report a higher prevalence of menopausal symptoms among Caucasian women (40–70%) than among Asian women (10–50%) (Pallikadavath et.al., 2016). The transition often coincides with midlife stressors, including the "empty nest syndrome," which may exacerbate psychological distress and reduce quality of life (Pathak et al., 2017). Also in a study by Adebusuyi, 2020, women in academia experienced all the menopausal health symptoms but were more affected with psychosocial factors and vasomotor factors.

Menopausal symptoms can be classified into four domains vasomotor, psychosocial, physical, and sexual—all of which can affect well-being, life satisfaction, and overall quality of life (Nazarpour & Simbar, 2018). Inadequate knowledge and misconceptions about menopause may worsen anxiety, depression, and poor self-image (Pallikadavath et al., 2016). Consequently, quality of life tends to decline during this period, and awareness of menopausal changes and available management options is vital for women's physical and emotional adjustment (Samarasiri et al., 2017; Perich, Ussher, & Meade, 2017).

Menopausal symptoms affect more than 75% women and 25% experience severe symptoms, not all women experience menopausal symptoms (Currie et.al., 2021).

Government need to design a program to help increase women's general knowledge, positive attitude and perception about menopause because most women in Nigeria display little or no understanding of menopause and most women perceive menopause to be an ailment rather than a state of transition and due to that some of them develop psychological issue due to inability to cope with the menopausal symptoms.

PERCEPTION OF WOMEN ABOUT MENOPAUSE

Adekunle, Fawole and Okunola (2016) revealed that Nigeria women also believe that menopause is influenced by social, cultural and economic setting in which they live and may also reflect the differences in mode of treatment for or perception of its symptoms.
Health education, as defined by the World Health Organization, is the part of health promotion that involves interactive methods to improve people's access to health information and strengthen their ability to use it, raising awareness of health determinants and encouraging both individual and collective actions to modify those determinants and improve health outcomes. (WHO, n.d. retrieved 2025)

The study therefore was done to investigate the effect of Health Education on improving Perception on menopause and menopausal syndrome and Quality of Life (QOL) of Menopausal Women in Ibadan with the intention to know how health education could impact menopausal women's knowledge, perception thereby improves their QOL.

The specific Objectives of the study include to:

a. Assess the level of knowledge of menopausal syndrome among menopausal women in pre and post intervention.

b. Examine the perception of the participants towards menopause and menopausal syndrome pre and post intervention
c. Evaluate the Quality of Life of menopausal women pre and post Intervention

METHODOLOGY

A quasi-experimental one-group pretest–posttest design was adopted to determine the effect of health education on menopausal women's perception and quality of life. This design allows for the examination of cause-and-effect relationships by introducing an intervention and measuring changes before and after exposure.

The study was conducted in three Local Government Areas (LGAs) of Ibadan, Oyo State, Nigeria—Ibadan North (urban), Akinyele, and Egbeda (rural). Ibadan, the state capital, is a major city in southwestern Nigeria. The city comprises 11 LGAs, five urban and six rural.

The study population comprised menopausal women aged 45–60 years residing in the selected LGAs.

Inclusion criteria: Women aged 45–60 years who had reached menopause (cessation of menstruation for ≥12 months) and were willing to participate.

Exclusion criteria: Women with chronic or debilitating illnesses, those who had undergone hysterectomy or oophorectomy, and those unwilling to participate.

Sample Size/ Sampling Technique

Sample size was determined using Jacob Cohen (1988) formula allowing for a 10% attrition rate, the final sample size was 152 participants.

A multistage sampling technique was employed:

Stage I: Three LGAs were randomly selected—one urban (Ibadan North) and two rural (Akinyele and Egbeda).

Stage II: Two prominent worship centers were purposively selected from each LGA due to their accessibility and large female attendance.

Stage III: Eligible and consenting menopausal women from the selected centers participated in the pre-intervention, educational intervention, and post-intervention phases.

130 completed questionnaires were retrieved and analyzed.

Method of Data Collection

Data collection occurred in three phases:

Pre-intervention: Consenting participants completed the baseline questionnaire assessing knowledge, perception and quality of life. The instrument adapted from validated menopause

knowledge and MENQOL scales had been pretested for clarity and reliability and the same questionnaire was used at post intervention to ensure compatibility.

Intervention: A Structured health education intervention was delivered to participants across the selected centers. The session was developed based on WHO guidelines for health education for midlife women and incorporated culturally relevant examples to increase awareness and understanding of menopausal symptoms and management strategies aimed at improving quality of life of menopausal women between the ages 45 and 60.

Post-intervention: Four weeks later, the same participants completed a post intervention questionnaire.

Two trained research assistants assisted with data collection after establishing rapport and explaining the purpose of the study. Questionnaires were administered in English, and confidentiality was assured.

Data Analysis

Data were coded and entered into Microsoft Excel, then analyzed using SPSS version 25.0. Descriptive statistics (frequencies, percentages, and charts) summarized demographic data and research questions. Hypotheses were tested using the paired samples t-test at a 0.001 significance level.

Ethical Considerations

Ethical approval with reference no AD 13/479/44549^{B} was obtained from the Oyo State Ministry of Health Ethics Committee following an introductory letter from the researcher's department. Permission was also sought from religious leaders of participating centers. Written informed consent was obtained from all participants, who were assured of confidentiality, anonymity, and the voluntary nature of participation. Respondents were encouraged to ask questions during the sessions, and all sources used in the study were duly acknowledged.

RESULTS

Socio demographic Characteristics

Table 1: Participants Socio-demographic data (N = 130)

Socio-demographic	Frequency	Percent
Occupation		
Trader	54	41.5
Civil servant	54	41.5
Unemployed	3	2.3
Nurse	3	2.3
Retiree	2	1.5
Travel consultant	1	0.8
House wife	5	3.8
Managing director	1	0.8

Counsellor	1	0.8
Business man/woman	1	0.8
Self-employed/Artisan	3	2.3
Pastor	1	0.8
Student	1	0.8
Ethnicity		
Yoruba	102	78.5
Hausa	2	1.5
Igbo	25	19.2
Ebira	1	0.8
Religion		
Christianity	61	46.9
Islam	69	53.1
Marital Status		
Married	94	72.3
Widow	25	19.2
Divorced	6	4.6
Single	5	3.8
Level of education		
Primary	8	6.2
Secondary	40	30.8
Tertiary	82	63.1

Most participants were within the mid-adult age range (42–64 years), with a mean age of 54 ± 5.95 years. The majority were traders and civil servants (83%), predominantly Yoruba (78.5%), married (72.3%), and educated to tertiary level (63.1%) (Table 1). The mean age at menopause was 49 ± 4.10 years, and average parity was 4 ± 1.41.

Table 2: Comparison of Participants' Perception toward Menopause and menopausal syndrome before and after Intervention (N = 130)

Perception Items	Pre-intervention (SA/A %)	Post-intervention (SA/A %)	Key Change
Socio-cultural and economic factors influence menopause	52.3	80.0	Improved awareness
Menopause is natural and needs no medical attention	68.5	45.4	Decreased misconception
Menopausal period signifies loss of strength	29.9	18.5	Reduced negative perception
Menopause is a milestone in life progression	69.3	87.0	Strengthened positive attitude

Intensity of menopausal effects cannot be reduced	59.2	26.1	Improved belief in symptom management
Cardiovascular disease is associated with menopause	37.0	25.4	Increased health awareness

Perception towards Menopause

Table 2 shows that participants perception improved after the health education intervention. Agreement that menopause is a milestone in life progression rose from 69.3% to 87.0%, while the misconception that "menopause needs no medical attention" declined from 68.5% to 45.4%.

Similarly, the belief that "menopausal symptoms cannot be reduced" dropped from 59.2% pre-intervention to 26.1% post-intervention, reflecting greater confidence in symptom management

Research question 1: What is the level of knowledge of menopausal syndrome among menopausal women pre and post intervention?

Research question 2: What is the perception of participants towards menopause and menopausal syndrome at pre and post intervention?

Table 3: Summary of Participants level of knowledge of menopause and perception towards menopausal period

Items	Pre-intervention		Post-intervention	
	Frequency	**Percent**	**Frequency**	**Percent**
Knowledge Level of Menopausal Syndrome				
Inadequate (<50%)	2	1.5	2	1.5
Fairly adequate (50 - 59%)	6	4.6	3	2.3
Adequate (60 - 100%)	122	93.8	125	96.2
Perception Level				
Negative Perception (<50%)	27	20.8	12	9.2
Positive Perception (50 – 100%)	103	79.2	118	90.8

Participants level of knowledge on menopause and menopausal period perception are summarized and the result is presented on Table 4.3. Findings summary shows that prior to intervention, 122 (93.8%) had adequate knowledge of menopause while after intervention, the level of adequate knowledge increased to 125 (96.2%). As regard perception, 27 (20.8) had negative perception and 103 (79.2%) had positive perception at pre-intervention while at post-intervention, level of negative perception decreased to 12 (9.2%) and positive perception increased to 118 (90.8%)

Table 4: Significant differences between pre-interventional and post-interventional knowledge, perception and QOL of menopausal women (N = 130)

Variable	Mean (Pre)	Mean (Post)	Mean Difference	t(df=129)	p-value	Remark
Knowledge	8.20	8.92	0.72	3.38	0.001	Significant
Perception	17.15	20.71	3.56	4.25	0.001	Significant
Quality of Life	41.90	80.43*	38.53	11.88	0.001	Significant

Effect of Health Education

Paired sample t-test results (Table 4) revealed significant difference between pre and post intervention on knowledge mean difference of 0.72, perception 3.56 and quality of life 38.53 after the intervention. These findings indicate that the health education program substantially enhanced participants understanding of menopause, fostered positive perception and improved overall quality of life.

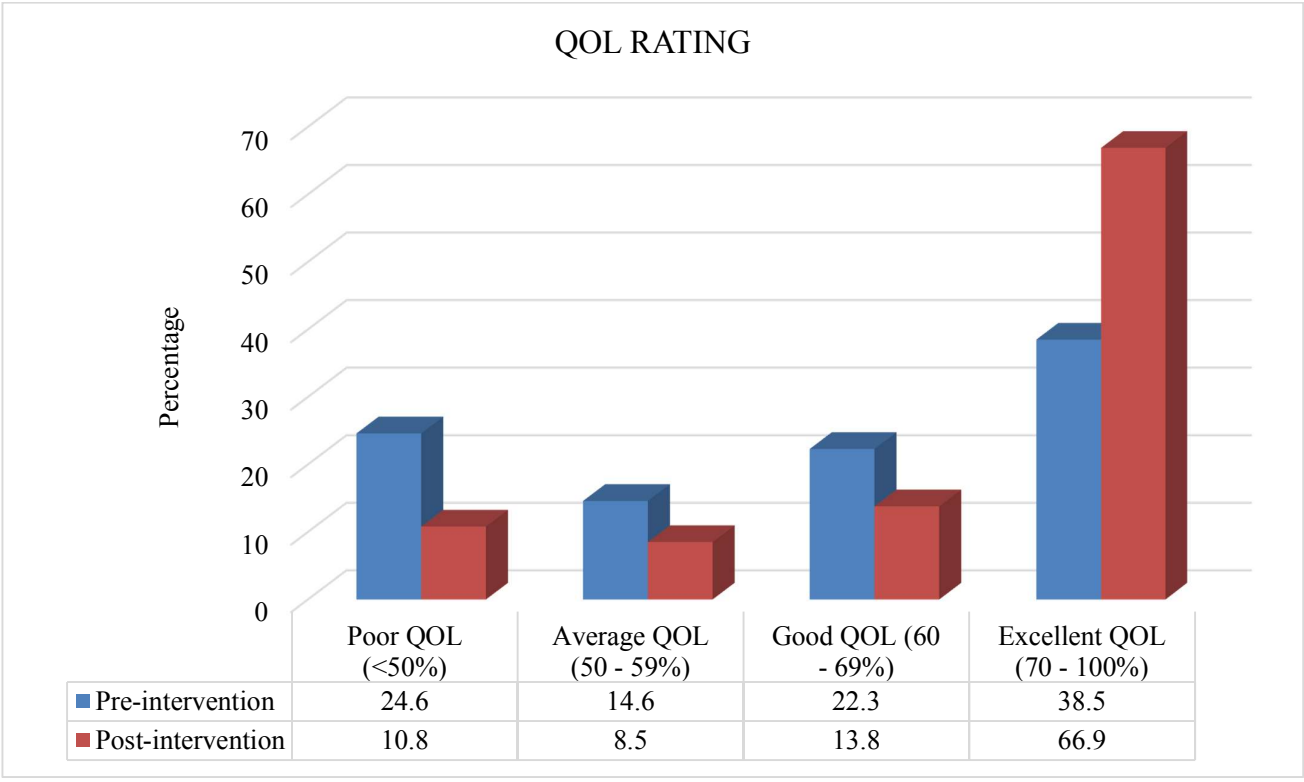

Figure 1: QOL of Menopausal Women (N = 130)

Figure 2 shows different percentage of quality of life of menopausal women during pre and post intervention but huge percentage (66.9%) was recorded on excellent QOL at post

intervention as against 38.5% at pre intervention, therefore high QOL was evaluated at post intervention

DISCUSSION

This study examined the effect of health education on menopausal women's perception and quality of life in selected Local Government Areas of Ibadan. Out of 152 distributed questionnaires, 130 were validly completed, yielding an 86% response rate. Most respondents were from Ibadan North LGA (47%), followed by Egbeda (31.5%) and Akinyele (21.5%), reflecting broad community representation across urban and rural areas.

The demographic characteristics revealed that most participants were within the expected menopausal age range (45–55 years) and had experienced menarche at a typical age, which aligns with findings by OlaOlorun and Lawoyin (2009) that reported similar reproductive patterns among Nigerian women. Approximately 70% were multiparous, and over 80% experienced menopause at the normal age range, confirming the universality of the menopausal transition.

Before the intervention, participants demonstrated a fairly high baseline knowledge of menopause, with most recognizing it as a natural biological process. However, post-intervention results indicated further improvement in both knowledge and perception levels. The proportion of women with adequate knowledge increased from 93.8% to 96.2%, while those with positive perceptions rose from 79.2% to 90.8%. These findings are consistent with Taebi et al. (2018), who observed that health education significantly enhances women's understanding and coping ability during menopause. The proportion of women reporting poor QOL dropped from 30% to 11%, while those with excellent QOL increased from 39% to nearly 70%. This substantial improvement reflects the transformative impact of educational programs on quality of life of menopausal women.

Perception analysis further revealed that misconceptions about menopause as a condition requiring no medical attention declined after the intervention, while agreement with statements emphasizing menopause as a natural life milestone increased significantly. These shifts underscore the importance of structured health education in correcting misinformation and fostering healthier perceptions.

Inferential analysis using paired sample t-tests confirmed significant differences between pre- and post-intervention scores for knowledge, perception, and quality of life ($p < .001$). This indicates that the health education intervention was effective in improving participants overall well-being. The findings support the Health Belief Model's assertion that increased knowledge and perceived control enhance the likelihood of adopting positive health behaviors.

Overall, the study demonstrates that targeted health education can significantly improve menopausal women's understanding and quality of life. Empowering women through accurate information and community-based health education is therefore critical to reducing misconceptions, promoting self-efficacy, and enhancing well-being during the menopausal transition.

CONCLUSIONS

This study assessed the effect of health education on the perception and quality of life of menopausal women in selected Local Government Areas of Ibadan. The findings demonstrate that structured health education significantly improved participants' knowledge, perception, and overall quality of life. Post-intervention scores were markedly higher across all variables, confirming that informed awareness and supportive education empower women to manage menopausal symptoms more effectively and with greater confidence.

The study also revealed a high prevalence of menopausal symptoms among participants, underscoring the need for continued community-based education and psychosocial support. Overall, the findings affirm that health education interventions are powerful tools for improving women's well-being and promoting healthy adaptation during the menopausal transition.

RECOMMENDATION

Similar studies should be carried out using another research setting to evaluate the perception and quality of life of menopausal women.

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