



The Menopause Chronicles: A Dive into Nigerian Women's Perceptions at a Tertiary Care Center

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Due to medical advances, women's lifespans have increased, making menopause an issue of the 20th and 21st centuries. In 1960, less than 250 million women were over 60, but by 2030, 1.2 billion will be peri or postmenopausal, increasing by 4.7 million a year. Post menopause now accounts for one third of the average developed woman's life. Because of these predicted population structure changes, physicians are beginning to see menopause as a major public health issue. In developing nations like Nigeria, sociocultural and socioeconomic factors strongly influence menopause perception. In Nigeria, reproduction is shrouded in silence. Puberty, sex, condom use, contraception, and menopause are covered.

The study was descriptive. The study recruited 270 adult female patients (>18 years) from Nnamdi Azikiwe University Teaching Hospital using simple random sampling, proportionate sampling, and systematic random sampling. A pre-tested, anonymous, validated questionnaire was administered

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by an interviewer. Data was entered and analyzed using IBM-SPSS version 25 statistical software. Descriptive statistics and Chi-square tests were performed. The significance level for all statistical tests was 5%.

Using a 100% scoring system, the mean knowledge score of the respondents was 59.42 ± 19.92 , and 52.1 percent had good knowledge. Using the same scoring system, the mean attitude score was 57.12 ± 9.03 and 47.5 percent had good attitudes. 61.6 percent had a good perception score of 65.54 ± 21.91 . Menopause knowledge also correlated with age and education ($p < 0.05$). Menopause perception was linked to education. The study found that Nnamdi Azikiwe University Teaching Hospital adult female patients had good knowledge, fair attitudes, and good perceptions of menopause. 51 percent of respondents had tertiary education, which may explain this.

Keywords: Menopause; perception; menstruations and physiological event.

1. INTRODUCTION

Menopause is a natural process of aging defined as a definitive cessation of ovarian follicles activity and consequently, the end of menstruations [1]. Menopause is said to have occurred when a woman misses her period for 12 months consecutively, so it is usually a retrospective diagnosis [2]. Menopause is a physiological process where a woman stops seeing her menses permanently. Menopause usually signifies the end of a woman's reproductive life. The mean age of menopause throughout the world today is 50 years and varies according to cultural and ethnic factors, as well as geographical location [3].

Menopause is a physiological event occurring with ovarian failure and marks the end of women's reproductive life [4]. In 1960, the world population of women aged over 60 was below 250 million, but it is estimated that in the year 2030, 1.2 billion will be peri or postmenopausal and that this total will increase by 4.7 million a year. The average woman in the developed world can now expect to spend approximately one third of her life in postmenopausal state [5]. Because of these predicted changes in population structure, physicians are beginning to see that menopause is not a negligible phenomenon but a major public health problem [6].

In Nigeria, culture of silence shrouds anything that is related to reproduction. It spans from puberty, negotiating sex and condom usage, uptake of contraceptive methods and eventually to menopause [5]. Menopause poses a lot of challenges to women in various ways; the transition from reproductive age to menopausal age is not without its problems [7]. As women get older and advance to menopause, they may experience some of the symptoms mentioned

earlier. These symptoms may be very disturbing and sometimes unpredictable especially when the affected person does not know that they are related to menopause and what to do [8].

The Study on "Women's perceptions of menopause at a tertiary care facility in Nigeria" will determine whether the study group have a positive or negative perception of menopause. Existing studies have found that socio-cultural factors can affect women's attitude, perceptions and experiences towards menopause. In societies where menopause is viewed positively, symptoms are less common [2]. Scholars have indicated that the stigma related to menopause begins in early life due to little knowledge and education beside cultural and social factors. Understanding this crucial stage of life may change women's negative attitudes towards menopause, which cause apprehension and adverse emotional states in women dealing with this condition [2].

2. METHODOLOGY

2.1 Study Location

The study was conducted at Nnamdi Azikiwe University Teaching Hospital, Nnewi North local Government, Nnewi Anambra State, Nigeria.

2.2 Study Design

This was a descriptive cross-sectional study.

2.3 Study Population

This comprised of adult female patients at Nnamdi Azikiwe University Teaching Hospital.

2.4 Inclusion Criteria

1. All female patients 18 years and above on admission but not critically ill within

Nnamdi Azikiwe University Teaching Hospital

2. All female patients 18years and above at the out-patient clinics of Nnamdi Azikiwe University Teaching Hospital
3. Respondents who gave consent

2.5 Exclusion Criteria

1. All female patients less than 18years on admission or at out-patient clinics within Nnamdi Azikiwe University Teaching Hospital.
2. Female patients 18years and above but are critically ill during the time of study
3. Respondents who do not give assent/consent.

2.6 Sample Size Determination

The Cochran's formula below was used to calculate the sample size

$$N = Z^2 PQ / d^2$$

where N is the minimum sample size:

z is the standard normal deviate (1.96) at 95% confidence level.

p is the prevalence = 0.80⁶

q = 1-p = 0.20

d is the degree of precision is usually set at 5% (0.05)

$$N = 1.96^2 \times 0.80 \times 0.20 / 0.05^2$$

$$N = 245.86$$

$$N = 246$$

Attrition rate was taken as 10% of 246 i.e 10/100 x 246 = 24.6

Therefore, the total desired sample size was 246 + 24.6 = 270.6 = 270

2.7 Sampling Technique

A multistage sampling technique was used in this study.

Stage 1: To select the Tertiary Health Care Institution to be used, a sample frame which consisted of the various tertiary health care institutions in Anambra was made. A simple random sampling using balloting system was adopted to pick one out of the two Tertiary Health Care institutions in Anambra State.

Stage 2: Proportionate Sampling was used to select respondents from the following clinics in

the hospital; General Out-Patients Department, Medical Out-Patients Department, Surgical Out-Patients Department, Gynecology Clinic and Antenatal Clinic.

Stage 3: Systematic Random Sampling was used to select the respondents from each of the clinics while a Simple random sampling (balloting system) was used to select the number used in the systematic random sampling.

2.8 Pre-Testing of Questionnaire

The questionnaire was pre-tested at the Primary Health Centre at Neni, Anaocha Local Government Area, another rural settlement like my area of study.

2.9 Data Management

Data was analyzed using SPSS version 23. Descriptive and inferential statistics were applied where necessary. Numerical variables were reported as mean and standard deviation, while categorical data was reported using proportion and percentages. Level of knowledge, attitude and perception of menopause was tested, and chi-square statistics was also tested. To calculate the knowledge each, correct statement was given "1" mark and "0" mark for incorrect and don't know responses. There were 10 knowledge questions, and the maximum score was 10 marks. Then depending on the mean value, overall knowledge is divided into three groups named good, fair and bad knowledge. Attitudes regarding menopause were analyzed by using the Likert scale.

3. RESULTS

This study was done to determine the factors that influence the perception of menopause among Adult Female Patients in Nnamdi Azikiwe University Teaching Hospital. There were 270 female respondents in this study. Data was collected from all using a structured questionnaire.

Table 1a & b- Data used for the analysis was collected from a total of 270 adult females in NAUTH whose age ranged from 18 to 73 years with mean age calculated as 36.37 ± 13.77 years. The majority of the respondents are married (67.4%). Majority are from the Igbo tribe (98.5%) and almost all are Christians (99.3%). Most of them have completed tertiary education (51.1%) and 41.1% of them are traders.

Table 1a. Sociodemographic characteristics of the studied population

Variable	Frequency	Percentage (%)
Age (years)		
18-25	54	20.0
26-35	92	34.1
36-45	58	21.5
>45	66	24.4
Marital status		
Single	59	21.9
Married	182	67.4
Divorced/separated.	0	0
Widowed	29	10.7
Tribe		
Igbo	266	98.5
Hausa	0	0
Yoruba	2	0.007
Others	2	0.007

Table 1b. Sociodemographic characteristics of the studied population

Variable	Frequency	Percentage (%)
Religion		
Christianity	268	99.3
Islam	0	0
Traditionalist	2	0.7
Others	0	0
Level of education		
No formal	2	0.7
Primary	44	16.3
Secondary	86	31.9
Tertiary	138	51.1
Occupation		
Trader	111	41.1
Farmer	13	4.8
Civil servant	59	21.9
Others	87	32.2

Table 2a. Knowledge of menopause among female patients in NAUTH (n = 270)

Question	Frequency	Percentage (%)
Heard about menopause		
Yes	242	89.6
No	28	10.4
Where menopause was heard from		
Health professional	138	51.1
Media	72	26.7
Friends	93	34.4
Family and relatives	75	27.8
Others	14	5.2
What menopause is		
Cessation of menstruation	126	46.7
Cessation of fertility	90	33.3
A natural process	136	50.4
Heard about menopausal symptoms		
Yes	178	65.9
No	92	33.1

Table 2b. Knowledge of menopause among female patients in NAUTH (n = 270)

Question	Frequency	Percentage (%)
Menopausal symptoms known		
Hot flushes	159	58.9
Night sweats	108	40.0
Heart discomfort	42	15.6
Sleep problem	49	18.1
Depressive mood	95	35.2
Anxiety	66	24.4
When menopause occurs in women (years)		
35-44	14	5.2
45-54	174	64.4
55-64	52	19.3
65-75	2	0.7
Don't know	28	10.4

Table 2a & b- A high percentage of the respondents have heard about menopause (89.6%) and Health professionals (51.1%) is the highest source of information of menopause for the respondents. 65.9% of the respondents have heard about menopausal symptoms and Hot flushes (58.9%) is the commonest symptom of menopause known by the respondents. 64.4% chose 45-54years as the normal age of occurrence of menopause.

Table 3 shows the attitude of adult female patients in NAUTH towards menopause. 64.4% of respondents see it as a normal ageing process and 91.3% believe that sexual activities are still possible after menopause. 46.3% believe that menopause can add to a woman's freedom while 32.2% don't believe so. 20.7% of respondents think menopause can make a woman have more value in the society while 62% don't think so. 45.9% of respondents think women should seek for care for menopause while 36.8% don't think

so. 31.7% of respondents believe menopause can make a woman become different. 93.8% of women don't think a woman should change her partner after menopause and 90.1% of women don't think menopause can cause a woman to lose her womanhood. 86% of respondents don't see menopause as a life-threatening event.

Table 4 shows the perception of menopause among Adult female Patients in NAUTH. 55% of respondents see menopause as a positive thing, 17.8% of respondents see it as a negative thing while 27.3% are indifferent about it. 69% of respondents see menopause as a natural condition while 22.7% of respondents see it as a medical condition. 72.7% of respondents are happy about cessation of menstruation after menopause while 27.3% are worried about it. 50% of respondents are happy about loss of fertility after menopause while 50% are worried about it.

Table 3. Attitude of adult female patients in NAUTH towards menopause (n = 242)

Attitude	Frequency n (%)		
	No	Don't know	Yes
Positive attitudes			
Menopause is a normal aging process	18 (0.07)	68 (28.1)	156 (64.4%)
Sexual activities are still possible during and/or after menopause	10 (4.1)	11 (4.5)	221 (91.3)
Menopause adds to a woman's freedom	78 (32.2)	52 (21.5)	112 (46.3)
Menopause make a woman have more value in the society	150 (62.0)	42 (17.4)	50 (20.7)
A woman should seek care for menopause	89 (36.8%)	42 (17.4%)	111 (45.9%)
Negative attitudes			
Menopause make a woman become different	142 (58.7%)	25 (10.3)	75 (31.0%)
A woman should change her partner after menopause	227 (93.8%)	8 (3.3)	7 (2.9%)
Menopause cause a woman to lose her womanhood	218 (90.1%)	6 (2.5)	18 (7.4%)
Menopause is a life-threatening event	208 (86%)	12 (5.0)	22 (9.1%)

Table 4. Perception of menopause by female patients of NAUTH (n = 242)

Perception	Frequency	Percentage (%)
What menopause is seen as		
Positive thing	133	55.0
Indifferent	66	27.3
Negative thing	43	17.8
What menopause is		
Natural condition	167	69.0
Don't know.	20	8.
Medical condition	55	22.7
Mood regarding cessation of menstruation		
Worried	66	27.3
Happy	176	72.7
Mood regarding loss of fertility after menopause		
Worried	121	50.0
Happy	121	50.0

Table 5. Scoring of knowledge, attitude and perception of menopause among female patients in NAUTH (n = 242)

Variable	Minimum	Maximum	Mean ± SD
Knowledge of menopause (%)	28.67	95.00	59.42 ± 19.92
Attitude towards menopause (%)	38.33	85.00	57.12 ± 9.03
Perception of menopause (%)	30.00	100.00	65.54 ± 21.91

Table 5- A 100% scoring system was used in the above table; the mean knowledge score was 59.42 ± 19.92. The mean attitude score was 57.12 ± 9.03 while the mean perception score was 65.54 ± 21.91.

47.5% Of respondents had good attitude score, 35.1% of respondents had fair attitude score and 17.4% had poor attitude scores. 61.6% of respondents had good perception score, 22.7% had fair perception score and 15.7% had poor attitude score.

Table 6 shows the frequency and percentage of respondents with good, fair and poor level of knowledge, attitude and perception to menopause. From the above table, >60% score shows good knowledge of respondents to menopause, between 40-60% score shows fair knowledge score and <40% score shows poor knowledge score. This same scoring system applies to both the level of attitude and level of perception of the respondents. 52.1% of respondents had good knowledge score, 28.9% of respondents had a fair knowledge score and 19% of respondents had poor knowledge score.

Table 7a & b shows the association between knowledge of menopause and some sociodemographic factors. From the table, there is an association between knowledge of menopause and both the age of respondents and the level of education of the respondents as p<0.05 which shows a statistically significant difference between the compared variables. No other sociodemographic variable showed an association with knowledge of menopause as p>0.05.

Table 6. Level of knowledge, attitude and perception of menopause among female patients in NAUTH (n = 242)

Variable	Frequency n (%)		
	Good (>60)	Fair (40-60)	Poor (<40)
Knowledge of menopause	126 (52.1)	70 (28.9)	46 (19.0)
Attitude towards menopause	115(47.5)	85 (35.1)	42 (17.4)
Perception of menopause	149 (61.6)	55 (22.7)	38 (15.7)

Table 7a. Association of knowledge of menopause with some sociodemographic variables (n = 242)

Variable	Knowledge n (%)			X ²	p-value
	Good	Fair	Poor		
Age (years)					
18-25	20 (38.5)	21 (40.4)	11 (21.1)	64.254	0.000
26-35	47 (53.4)	34 (38.6)	7 (8.0)		
36-45	26 (54.2)	21 (43.8)	1 (2.1)		
>45	41 (62.4)	15 (19.1)	10 (18.5)		
Marital status					
Single	31 (58.5)	17 (32.1)	5 (9.4)	9.250	0.055
Married	67 (40.6)	61 (37.0)	37 (22.4)		
Divorced/separated	0	0	0		
Widowed	8 (33.3)	8 (33.3)	8 (33.3)		

*Statistically significance, p<0.05

**Fisher's exact test was used for variables with cells that has values <5

Table 7b. Association of knowledge of menopause with some sociodemographic variables (n = 242)

Variable	Knowledge n (%)			X ²	p-value
	Good	Fair	Poor		
Level of education					
No formal	0	0	2 (100)	36.097	0.000
Primary	6 (20.7)	6 (20.7)	6 (20.7)		
Secondary	36 (46.8)	36 (46.8)	24 (31.2)		
Tertiary	64 (47.8)	64 (47.8)	54 (40.3)		
Occupation					
Trader	44 (46.3)	26 (27.4)	25 (26.3)	11.155	0.084
Farmer	3 (33.3)	3 (33.3)	3 (33.3)		
Civil servant	28 (49.1)	18 (31.6)	11 (19.3)		
Others	31 (38.3)	39 (48.6)	11 (13.6)		

*Statistically significance, p<0.05

**Fisher's exact test was used for variables with cells that has values <5

Table 8a. Association of perception of menopause with some sociodemographic variables (n = 242)

Variable	Perception n (%)			X ²	p-value
	Good	Fair	Poor		
Age (years)					
18-25	20 (42.7)	7 (20.5)	14 (36.8)	2.377	0.498
26-35	40 (35.5)	21 (30.4)	10 (34.1)		
36-45	28 (59.5)	12 (23.1)	8 (17.4)		
>45	47 (68.1)	13 (20.8)	6 (11.1)		
Marital status					
Single	28 (41.5)	2 (5.1)	24 (53.4)	1.418	0.492
Married	107 (61.1)	48 (32.6)	12 (6.3)		
Divorced/separated	0	0	0		
Widowed	14 (54.5)	5 (35.8)	2 (9.7)		

*Statistical significance, p<0.05

**Fisher's exact test was used for variables with cells that have values <5

Table 8a & b shows the association between perception of menopause and some sociodemographic variable. From the table, only the level of education of the respondents showed

an association with the perception of menopause (p<0.05). No other sociodemographic factor showed an association with perception of menopause (p>0.05).

Table 8b. Association of perception of menopause with some sociodemographic variables (n = 242)

Variable	Perception n (%)			X ²	p-value
	Good	Fair	Poor		
Level of education					
No formal	0	2 (100)	0	160.930	0.000
Primary	9 (12.0)	8 (26.7)	21 (61.3)		
Secondary	38 (57.4)	24 (33.8)	12 (8.8)		
Tertiary	102 (82.3)	21 (12.7)	5 (5.0)		
Occupation					
Trader	54 (56.2)	35 (38.3)	22 (5.5)	2.429	0.488
Farmer	1 (0.9)	2 (1.3)	10 (97.8)		
Civil servant	48 (79.6)	9 (16.8)	2 (3.6)		
Others	46 (68.8)	9 (28.9)	3 (2.3)		

*Statistical significance, p<0.05

**Fisher's exact test was used for variables with cells that have values <5

4. DISCUSSION

This is a descriptive cross-sectional study of the perception of menopause among adult female Patients in Nnamdi Azikiwe University Teaching Hospital. 270 Adult female Patients from the hospital were sampled and used for this study. A summary of the social demographic data shows that 9 out of every 10 respondents were Igbos, this may be due to the location of the study which was done in a typical Igbo land (Anambra State). 5 out of every 10 respondents have received tertiary education and only 4 out of every 10 are traders.

In this Study, Based on a 100 point scale, the mean score for the knowledge of menopause was found to be 59.42 ± 19.92 and the percentage of respondents with good level of knowledge was 52.1% which is similar to the result on a similar work done by O. Ibraheem et al at Ibadan, where their mean score was 59 (using a 100 point scale) [5]. The reason for the good knowledge of menopause in this study maybe due to good level of education by the respondents of this study where 51.1% of the respondents attended tertiary education.

In more specific details, out of the 270 respondents, 242 (89.6%) claimed to have heard about Menopause while 28 (10.4%) have never heard about Menopause previously. This is similar to a work done by H. Malik that reported that 97% of their study population had heard about menopause previously [6]. Of the 242 women that have heard about Menopause, Health Professionals appeared to be the commonest source of information for menopause where 138 (51.1%) women admits to have heard

from this source. Other common sources of information for menopause include Friends 93 (34.4%), Family & Relatives 75 (27.8).

All women that have heard about Menopause could also recognize at-least one of the components of the definition of menopause. This is similar to a work done by S. Marie, J. Muchanga, A. Lumumba et al. [1]. Menopause being a natural process is the commonest component of the menopausal definition that was recognized by the respondents.

About Menopausal symptoms, out of the 242 women that have heard about Menopause, 178 (65.9%) women have heard about Menopausal symptoms while 92 (31.1%) women have not. Hot flushes are the most reported symptoms known to be caused by menopause among the respondents, 159 (58.9%) chose hot flushes to be one of the symptoms of menopause. Other symptoms recognized by the respondents include Night sweats 108 (40.0%), Depressive mood 95 (35.2), Sleep Problem 49 (18.1%), Anxiety 66 (24.4), and Heart discomfort 42 (15.6). From this study's findings, Hot flushes appears to be the commonest symptom recognized by the respondents to be caused by Menopause. This result is consistent with a work that was done by K. Inayat et al (where Hot flushes was also the commonest symptom of menopause (61%). Although there seems to be a good difference between percentage of Hot flushes as a symptom of menopause from the study and this study, this may be due to the difference in the location of the two studies. Generally, Hot flushes differs from one country to another and also varies with sociocultural, socioeconomic and educational status [9].

Concerning the normal age of menopausal occurrence, the most common age bracket chosen by the respondents was 45-54 years where 174 (64.4%) women chose it. 52 (19.3%) women chose 55-64 years as the normal age of occurrence of menopause, while 28 (10.4%) did not know the answer to the question, 14 (5.2%) women chose 35-44 years and lastly 2 (0.7%) women chose 65-75 years.

From Table 4, there is an association between the respondent's knowledge of menopause and their age $p < 0.05$. It was noted that the higher the age, the higher the respondent's knowledge about menopause. The age group of >45 years showed the highest percentage of good knowledge score (62.4%). There is also an association between the respondent's knowledge and their level of education $p < 0.05$. The higher the respondent's level of education, the higher their knowledge of menopause. Respondents that have completed tertiary education showed the highest knowledge of menopause. 47.8% of those that have completed tertiary education showed good knowledge scores.

Using a 100 Point scale, the mean attitude towards menopause of this study was found to be 57.12 ± 9.03 and the percentage of respondents with good attitude towards Menopause was 47.6%. This shows a marked increase from the previous studies that have been done on this topic. A work carried out by K. Inayat et al showed that 46% women have good attitude towards menopause [7]. The increase on the attitude of women towards Menopause in this work could be due to the high literacy level among the respondents. Recall that 51.1% of the respondents have completed tertiary education.

In more specific details, concerning some positive attitude questions about menopause, 156 (64.4%) respondents believe menopause is a normal ageing process. 221 (91.3%) believe that sexual activities are still possible during and after sex, while only 111 (45.9%) respondents believe that women should seek for care for menopause which is low and maybe due to the high percentage of premenopausal women 216 (80%) in this study. These premenopausal women have certainly not undergone the menopausal experience, so they may not have a good judgement on some practices to be done during or after menopause.

Regarding some negative attitude questions posed on the respondents, 140 (58.7%) believe

that menopause makes a woman to be different. 227 (93.8%) believe that a woman shouldn't change her partner after menopause, this shows good attitude. 18 (7.4%) respondents think menopause can cause a woman to lose her womanhood and 22 (9.1%) see menopause as a life-threatening event. The aforementioned results are better than that from another work that was done by S. Marie, J. Muchanga and A. Lumumba et al where 26% of the study population believe that menopause causes a woman to lose her womanhood and 18% of the study population believe that menopause is a life-threatening event [1]. The reason for this maybe the due to the good literacy level of this study's population.

Based on a 100-point scale, the mean perception score was 65.54 ± 21.91 and the percentage of respondents with good perception was 61.6%. This shows good perception by the respondents to Menopause and points to a slight increase on previous work that have done on this topic in Nigeria. For example, a work carried out by Adewuyi et al among Igbo women in Nigeria showed that their perception was 60% [4]. The reason for the increase may be due to the high literacy levels among the respondents in this study.

In more specific detail, 226 (93.4%) respondents see menopause as a natural condition, 11 (4.5%) respondents see women as a medical condition and 5 (2.1%) respondents didn't know whether it's a natural or medical condition. This result is higher than that from a previous study by S. Khokar et al where menopause was considered a normal event by 72% women while, 28% believed it to be a disease condition [10]. 176 (72.7%) respondents was happy about the cessation of menstruation after menopause while 66 (27.3%) respondents were worried about it. 121 (50%) were happy about the loss of fertility after menopause while 121 (50%) were worried about it. Many of the respondents cited low family size and inability of a woman to conceive before menopause as a reason for their worriedness.

From Table 4, there is an association between the respondent's knowledge of menopause and their level of education $p < 0.05$. It was noted that the higher the respondent's level the better their perception of menopause. Respondents that have completed tertiary education had the best perception of menopause. 82.3% of respondents that have completed tertiary education had good knowledge scores.

5. CONCLUSION

For this study, the knowledge, attitude and perception of menopause among adult female patients in NAUTH was determined. For the knowledge, it was found that adult female patients in NAUTH generally have good knowledge of menopause, however there are some information about menopause that is not common with this study group. For example, in the definition of menopause, only 33.3% of respondents are aware that menopause also means cessation of fertility. Also there seems to be a lack of discussion of menopause among family members as only 27.8% of respondents admit having heard about menopause from a family member. Although 65.9% of respondents admitted having heard about menopausal symptoms, many could not identify some known symptoms of menopause like Depressive moods where only 35.4% of respondents identified it as a symptom of menopause, Anxiety where only 24.4% of respondents were able to identify it as a menopausal symptom and Heart discomfort where only 15.6% respondents were able to identify it as a symptom of menopause.

Concerning their attitudes towards menopause, results from my finding showed a fair attitude of adult female patients of NAUTH towards menopause as only 47.5% of respondents showed good attitude towards menopause. One of the reasons for the fair attitude is that many respondents believe that a woman should not seek for care for menopause.

Regarding their perception to menopause, Adult female patients of NAUTH have a good perception of menopause (greater than 61.6% of respondents have good perception of menopause). It is worth mentioning that half of the respondents (50%) are worried about the loss of fertility after menopause.

6. RECOMMENDATIONS

1. The topic of menopause needs to be discussed more within homes. Many women learn about menopause elsewhere, Parents can do well to teach their female children about menopause at home. This will certainly increase the level of awareness of menopause.
2. Health Professionals need to do more in educating their patients about menopause. Even though this reported health professionals as the highest source of

information for menopause, they can still do more as there are some lapses in the knowledge of menopause by adult female patients of NAUTH, as many of the patients believe that women should not seek for care for menopause.

3. The Government needs to do more to educate the general masses about menopause. Only 26.7% of respondents reported to have heard about menopause from the media. This percentage is small, and it shows inadequate propagation of the knowledge of menopause on the various media channels available.

7. STUDY LIMITATIONS

The limitations encountered during the study were:

1. Some respondents were reluctant to participate in the study.
2. Some respondents did not return the questionnaire administered to them.
3. Some questionnaires were incompletely filled out by respondents.

ETHICAL CONSIDERATIONS AND CONSENT

This research work was done with approval from the Nnamdi Azikiwe University Teaching Hospital Health Research Ethics Committee (NAUTHHREC) with ethical approval number NAUTH/CS/66/VOL.16/VER.3/233/2022/136, through the Head of Department of Community Medicine, Nnamdi Azikiwe University. Participants were well oriented on the objectives of the study; consent was obtained prior to administration of the questionnaire which emphasized the right to no participation. Data confidentiality was preserved according to the Helsinki declaration of bioethics.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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