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KNOWLEDGE AND PERCEPTION OF MENOPAUSAL PREPAREDNESS AMONG WOMEN IN AKINYELE LOCAL GOVERNMENT, OYO STATE, NIGERIA

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Abstract

The study aim was to assess the knowledge and perception of menopausal preparedness among women in Akinyele Local Government Area, Oyo State. A descriptive cross-sectional design was used to assess the knowledge and perception of menopausal preparedness among women in Ibadan. Simple random sampling method was used to select 396 respondents for the study through self developed questionnaire. Hypotheses were tested with the use of inferential statistics (chi-square) at 0.05 level of significant. Questions on knowledge, perception, and preparedness of participants were scored and classified into adequate, and inadequate during analysis. The results revealed that respondents have adequate knowledge of menopause as

74.7% of them indicated correct response to knowledge questions on menopause. Similarly, Chi-analysis showed significant relationship between the respondents' level of education and knowledge of menopause at $p = 0.05$, $\{X^2(1) = 9.055, p = 0.03\}$. However, 55.5% participants were not adequately prepared for menopause. The findings of the study revealed that there good knowledge about menopause and there is a significant relationship between education and knowledge, perception and menopausal preparedness. There is need for improvement in dissemination of information on menopause, its effects and management, information on menopausal sign and symptoms, management and health risks should be disseminated.

Keywords: Knowledge, Perception, Menopausal, Preparedness, women

Introduction

All women who live long enough will experience a biological decline in ovarian function leading to reproductive senescence marking the end of their fertility and capacity for reproduction. However, the actual experience of menopause for women is individual and like health is influenced by a multitude of biological, cultural, socioeconomic and lifestyle factors (Skrzypulec, Dabrowska & Drosdzol, 2010; Jassim & Al-Shboul, 2008). The menopausal transition is defined biologically as beginning with variations in menstrual cycle length and a monotropic rise in FSH, and ending with the final menstrual period, confirmed only when followed by 12 months of amenorrhoea. Harlow, Gass, Hall, Lobo, Maki and Rebar, (2012) pointed out that menopause usually occurs between 45 and 54 years of age with an average onset of 51 years. A number of negative health outcomes occur more frequently after menopause, including osteoporosis (Murtagh, 2011; Mazza, 2004), loss of protective effect against cardiovascular disease (Mazza, 2004) and a 60% increase in risk of metabolic syndrome (Eshtiaghi, Esteghamati and Nakhjavani, 2010).

A longitudinal study put the average age of menopause in Australian women as 52.9 years (Guthrie, Dennerstein, Taffe, Leher, Leher and Burger 2005), with the onset ranging anywhere between 45–64 years of age (Guthrie, Dennerstein, Taffe, Leher, Leher and Burger 2005). A higher median age for menopause has been noted as occurring in societies that have higher standards of living (Velez, Alvarado, Lord and Zunzunegui, 2010). It is usually accepted that women should undergo a cycle in their lives, characterized by cessation of menstruation which is accompanied with various symptoms, medical conditions and behavioural changes. Offering the best advice and care possible for women during this menopause, requires a good understanding of the factors that play a role in influencing the menopausal experience. Life is in stages and it is important for women to be adequately prepared including their husbands for this stage of their lives.

Prior to menopause, women have been found to have a lower risk of cardiovascular disease than men, a finding attributed to the protective effects of estrogen (Du, 2002). However, research on cardiovascular disease in indigenous and non-indigenous people in Western

Australia found that indigenous women did not appear to experience the premenopausal protective effect from cardio-vascular disease evident in non-Indigenous women (Katzenellenbogen, Sanfilippo, Hobbs, Briffa, Ridout and Knuiman, 2010). Indigenous women also have lower educational attainments when compared to non-Indigenous; 20% of indigenous females have a post-school qualification compared to 37% for non-indigenous women (Burns, Maling and Thomson, 2010). As a likely consequence of the lower education attainment, unemployment in indigenous Australians is three times the rate of non-indigenous Australians (Pink & Allbon, 2008). Articles detailing the different menopausal experience of women in countries such as Japan, North America and Europe exist as well (Anderson and Yoshizawa, 2007; Madden, Lawton, Rose, Cormack, Stanley and Dowell, 2008). Similarly, Ikeme, Okeke, Akogu, & Chinwuba (2011) found good knowledge of menopause among women with high educational status in their study. The authors stressed that education had a significant effect on perception of menopause among the women. Women with high educational level presented themselves to hospital for treatment and were keen to consult a doctor of any untoward effects of menopause (Ikeme, Okeke, Akogu, & Chinwuba, 2011). Sultan, Sharma, & Jain (2017) found 92% of women in their study that had knowledge of menopause while in another study conducted in United Arab Emirates by Hamid (2014) only 67% women had knowledge about menopause. Mixed perception towards menopause was recorded by Sultan, Sharma, & Jain (2017). As important as knowledge and perception of menopausal preparedness is for better management there is scarcity of menopause preparedness-related literature in Nigeria. It is on this premise that these researchers desire to close this gap by evaluating the knowledge and perception of menopausal preparedness among Women in Ibadan, Oyo State, Nigeria. The study aim was to examine the knowledge and perception of Menopausal Preparedness among Women in Ibadan, Oyo State, Nigeria. We developed three research objectives to guide the study focus as follow;

- ◆ To assess the level of knowledge of women about menopause
- ◆ To determine the perceptions of women about menopause
- ◆ To evaluate the level of women's preparedness for menopause

Hypotheses

The following hypotheses were formulated for the study;

- ◆ There is no significant relationship between respondents' level of education and knowledge of menopausal preparedness.
- ◆ There is no significant relationship between respondents' knowledge and menopausal preparedness.

Material and Methods

This study adopted a descriptive cross-sectional design to assess the knowledge and perception of menopausal preparedness among women of reproductive age in Ibadan.

The research took place in Akinyele local government of Ibadan. Ibadan is an ancient city in Oyo State, Nigeria. Ibadan is the capital of Oyo State, with a population of over 3 million. It is the country's largest city by geographical area. Ibadan is located in south-western Nigeria. Ibadan came into existence in 1829, during a period of turmoil that characterized Yorubaland at that time. There are 11 local government areas in Ibadan, Metropolitan area made up of five urban local governments in the city and six semi-urban local governments in the fewer cities. The local governments in Ibadan are Ibadan North, Ibadan North-East, Ibadan North-West, Ibadan South-East, Ibadan South-West, Akinyele, Egbeda, Ido, Lagelu, Ona Ara, Oluyole.

The study population are women of reproductive age within Akinyele local government in Ibadan, Oyo State. A simple random sampling method was used in this study to select women reproductive age within Akinyele local government in Ibadan, Oyo State. The sample size for the study was determined using the formula below:

$$n = \frac{Z^2 P(1-P)}{e^2} \quad (\text{Kasiulevicius, Sapoka and Filipaviciute, 2006})$$

Where, n = required sample size; Z = standard normal value corresponding to 95% confidence level set at 1.96; P = assumed prevalence 50%; e = level of error tolerance 5%

Thus, a sample size of 384 was arrived at for the study. Then, 10% attrition was added for possible invalid/missing questionnaires. Hence, the sample size was 427 participants.

Self develop semi-structured questionnaire was used for data collection which made up of both close and open-ended questions. The instrument was divided into three sections. Section A assessed socio-demographic data of respondents (age, occupation, marital status, number of children, level of education, menopausal status). Section B1 sought information about the knowledge of women on menopause. Section BII sought information about the perception of women on menopause, while section C addressed information about the level of preparedness for menopause among women. Face and content validities of the questionnaire were ensured by experts in nursing science who subjected the instrument to critical review. Items were compared with previous similar studies and compared with stated research aim and hypotheses. The stability, consistency and equivalence of the instrument were determined by the use of a test-retest method by distributing 10 questionnaires among women outside Akinyele local government in Ibadan. The Chronbach Alpha value of the questionnaire was 0.8. Subsequently, the questionnaire was revised and final copy was produced based on the recommendations of the experts. A total of 396 questionnaires were administered by the researchers to women within Akinyele local government, Ibadan. Respondents were sought from Churches, Mosques, Schools, Markets (Ojoo market) within Akinyele local government, Ibadan. The administered instrument to

the respondents were retrieved from the respondents same day which yield a total of 95% return rate.

Data collected were analyzed using SPSS 20 version (Statistical Package for Social Sciences). Appropriate descriptive statistics was used to answer research questions namely percentage, mean and median. The mean age, range, mean and standard deviation were reported in textual format while the remaining socio-demographic variables were presented in Tabular format. Hypotheses were tested with the use of inferential statistics (chi-square) and results were presented in Tables. Questions asked on knowledge of menopausal preparedness and perception of women on menopause was scored separately and quantified into adequate and inadequate during analysis, above the mean score was scored adequate and below the mean was scored inadequate.

All ethical principles were observed during the process of the study as the study did not commenced until ethical clearance was obtained from the UI/UCH ethical Committee. The respondents were given detail information on the purpose of the study. Respondents were assured of confidentiality of all data provided during the research study. Anonymity of participants was assured and they were informed that data collected will be used solely for academic purpose. Written informed consents from the respondents were obtained before the study commenced, the questionnaire was explained to respondents who did not understand English language and their informed consent was sought before its administration. The local language version of the questionnaire was produced using back-to-back translated by language experts. The participants were told about the benefits and risk of the study which include making recommendations to government, individuals, Non-Governmental Organizations and increase in awareness of menopausal preparedness, readiness and symptoms management. The participants were not exposed to harmful processes like invasive procedures and collection of blood samples.

Results**Table 1: Socio-demographic Characteristics of Respondents (N = 396)**

Variables	Frequency	Percent
Age (years)		
21 – 30 Years	96	24.2
31 – 40 Years	96	24.2
41 – 50 Years	168	42.4
51 – 60 Years	36	9.1
Occupation		
Civil Servants	104	26.3
Self-employed	116	29.3
Unemployed	76	19.2
Others	100	25.3
Educational Status		
No tertiary education	100	25.3
Tertiary education	296	74.7
Number of Children		
One – Three	148	37.4
Four – Six	152	38.4
None	96	24.2
Menopausal Status		
Premenopausal	336	84.8
Perimenopausal	56	14.2
Postmenopausal	4	1
Marital Status		
Singles	104	26.3
Married	272	68.7
Divorced	20	5.1

Most of the participants in this study were self-employed; they had their own personal business, others 25.3% were house wives and 19.2% were unemployed. A larger proportion of the participants were married with 68.7% while only 5% were divorced. which may imply that good support system would be available during menopause and that divorce rate is very low in Ibadan.

A large percentage of tertiary institution graduates (74.7%) participated in the study while those with no tertiary education were 25.3%. The mean number of children was 3 and this is likely because larger proportion of the participants were educated. A larger percent of women

within reproductive age (premenopausal women) 84.8% were recruited in the study and only 1% were postmenopausal.

Research question 1: What is the level of knowledge of women about menopause?

Table 2: Level of knowledge of menopause among women

Levels of Knowledge	Frequency	Percent
Inadequate knowledge	112	25.3
Adequate knowledge	284	74.7
Total	396	100.0

The Table above gives the summary of respondents' general knowledge about menopause, questions pertaining to what menopause are, and time of start and its confirmation were scored and grouped into adequate and inadequate knowledge. General knowledge about menopause is adequate as 74.7% of participants have adequate knowledge about menopause.

Research question 2: How do women perceive menopause?

Table 3: The Perception of Menopause among the Respondents

Perceptions about menopause	SA	A	UD	D	SD
Normal transition	288 (72.7%)	92(23.2%)	4 (1.0%)	4 (1.0%)	8 (2.0%)
Disease entity	8 (2.0%)	48 (12.1%)	20 (5.1%)	128(32.3%)	192(48.5%)
Stressful period	60 (15.2%)	104 (26.3%)	60 (15.2%)	116 (29.3%)	56 (14.1%)
Free from fear of pregnancy	132 (33.3%)	156 (39.4%)	48 (12.1%)	36 (9.1%)	24 (6.1%)
Disturbs human relationship	32 (8.1%)	76 (19.2%)	92 (23.2%)	128 (32.3%)	68 (17.2%)
Free from menstrual stress	200 (50.0%)	128 (32.3%)	28 (7.1%)	28 (7.1%)	12 (3.0%)
Period to freely have sex	84 (21.2%)	144 (36.4%)	100 (25.3%)	40 (10.1%)	28 (7.1%)
Period characterized by annoying symptoms	48 (12.1%)	128 (32.3%)	128 (32.3%)	68 (17.2%)	24 (6.1%)
Should be a missed stage in a woman	20 (5.1%)	40 (10.1%)	104 (26.3%)	124 (31.3%)	108 (27.8%)
Reminder of aging and death	108 (27.3%)	176 (44.4%)	40 (10.1%)	56 (14.1%)	16 (4.0%)
Sexual intercourse becomes stressful	32 (8.1%)	92 (23.2%)	164(41.4%)	64 (16.2%)	44 (11.1%)

From the above Table a large percentage of participants strongly agree that menopause is normal transition (72.7%), one can cope with menopause 30.3%, reminder of aging and death (27.3%), free from menstrual stress (50.0%) and for participants who agreed menopause is normal transition (23.2%), one can cope with menopause (53.5%), reminder of aging and death (44.4%), free from menstrual stress (32.3%). Most of the participants believe menopause is not a disease entity as 32.3% disagreed while 48.5% strongly disagreed.

Research question 3: What is the level of women's preparedness for menopause?

Table 4: Participants' Level of Preparedness for Menopause among Women

Levels of women's preparedness	Frequency	Percent
Inadequate preparedness	204	51.5
Adequate preparedness	192	48.5
Total	396	100.0

Table 4 above shows that 51.5% of the respondents were not adequately prepared for menopause. The mean score is 20.4 and standard deviation is 5.081.

Hypothesis 1: There is no significant relationship between respondents' level of education and knowledge of menopause

Table 5: Relationship between Respondents' level of education and their knowledge of menopause.

Level of education	General knowledge		X^2	df	P _{Value}	Remark
	Inadequate	Adequate				
No tertiary	40 (35.7%)	60 (21.1%)	9.055	1	0.003	S
Tertiary	72 (64.3%)	224 (78.9%)				

The chi-square analysis from the above table shows significant relationship between the respondents' level of education and knowledge of menopause @ $P = 0.05$, $\{X^2(1) = 9.055, p = 0.03\}$. The null hypothesis was rejected at $p = 0.03$, these results suggest that level of respondents' education contributed to their adequate knowledge of menopause.

Hypothesis 2: There is no significant relationship between respondents' knowledge and menopausal preparedness.

Table 6: Relationship between respondents' knowledge of menopause and level of preparedness

Level of preparation	General knowledge		X^2	df	P _{value}	Remark
	Inadequate	Adequate				
Inadequate preparedness	68(60.7%)	108(38.0%)	16.742	1	0.000	Significant
Adequate preparedness	44(38.3%)	176(62.0%)				

Table 4 above shows significant association at between level of knowledge and preparedness for menopause at $p = 0.05$, $\{X^2(1) = 16.742, p < 0.001\}$. This implies that women with adequate knowledge of menopause are likely to prepare well for menopause by searching internet, asking questions, joining women group to discuss menopause, watch short clips on menopause, reading books and go for medical checkup.

Discussion of Findings

The finding shows that respondents' knowledge about menopause is good as over 80% of respondents were able to answer correctly what menopause is, when and how it is confirmed among others. Despite participants' knowledge about menopause, respondents are not very familiar with the signs and symptoms that characterizes menopause as a very % percentage of respondents still selected the wrong options for the questions asked. this finding agreed with (McKenna, 2001; Davis et al, 2003) to some extent that women seemed to have limited knowledge and understanding about menopause in general.

There was significant relationship between level of education and knowledge of menopause although some variables do not show any significance like knowledge about symptoms and signs of menopause, even the learned are not familiar with the signs and symptoms of menopause likewise do they know that menopause is confirmed after one year of complete cessation of menopause. This is in agreement with the McKenna, 2001 findings that Indigenous women, particularly in rural or remote areas were less likely to have adequate knowledge of the word menopause before. Those that showed adequate knowledge of menopause could be because having accurate and reliable knowledge about the period of menopause was facilitated with the increase in the level of education. Menopausal symptoms were experienced less by women who were at least high school graduates, working, with no history of chronic disease and a high level of physical activity. However, study is in contrast with previous studies which have indicated a negative relationship between menopausal symptoms and educational levels (Velez et al, 2010; Chedraui, Aguirre, Hidalgo and Fayad, 2007).

There was significant relationship between level of knowledge and preparedness for menopause. This implies that women with high knowledge of menopause are likely to prepare well for menopause by searching internet, asking questions, joining women group to discuss menopause, watch short clips on menopause, reading books and go for medical check-up. Finding also revealed that most women perceived menopause as a positive experience as it offers relief from the worries of menstruation, freedom from the necessity of contraception, and increased sexual freedom as 36.4% are indecisive as to whether menopause is a good experience, 42.2% perceive it as been good this agrees with previous studies (Ming-Huei et al, 2005; Madden et al, 2010). A large percentage of study participants disagreed that menopause is a disease entity but rather a normal transition this is in contrast to previous researches that states that menopause is a disease state that must be treated rather than a natural biological transition. (Hunter et al 2007; Buchanan et al, 2002).

Conclusion

The findings of the study revealed good knowledge about menopause but lack knowledge of menopausal sign and symptoms. Relationship was found between education and knowledge, perception and menopausal preparedness. we recommend there should be an improvement in dissemination of information on menopausal sign and symptoms, management and health risk,

its effects and management, and lifestyle modification for women. Further studies are necessary; to explore the awareness of women on health risks of menopause, the health implication of hormone replacement therapy and knowledge, perception and level of support of men during menopause.

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