MENOPAUSAL KNOWLEDGE AMONG IN-SCHOOL ADOLESCENTS IN NSUKKA LOCAL GOVERNMENT AREA OF ENUGU STATE, NIGERIA

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Abstract

The study determined menopausal knowledge among in-school adolescents in Nsukka Local Government Area of Enugu state. Cross sectional survey research design was employed. The population for the study consisted of all the 13,043 in-school adolescents in public secondary schools in Nsukka Local Government Area of Enugu state. A sample of 388 adolescents drawn using Taro Yamane formula was used for the study. Multi stage sampling procedure was used to select the sample. The instrument used to collect data was researcher structured questionnaire titled Menopausal Knowledge Questionnaire (MKQ). Analysis was by the use of SPSS version 22. Frequencies and percentages were used to answer the research questions. Results showed that there is generally high level of menopausal knowledge (64.0%) among in-school adolescents in Nsukka Local Government Area, Enugu State. Respondents aged 20-24 years demonstrated higher knowledge (72.0%) followed by those aged 16-19 years (63.6%) while those aged 12-15 demonstrated the least knowledge (62.9%). Those in SSIII had higher knowledge (67.7%), followed by SSII (66.0%) while those in SSI had the least knowledge (61.9%). Following from the findings, the researchers recommended that information on all aspects of menopause including concepts, signs and symptoms and management should be given to in-school adolescents by their teachers (health educators) so as to increase their knowledge on menopause and position them to correct certain misconceptions on the subject matter.

Keywords: Menopause, in-school adolescents, knowledge

Introduction

Women in their lifecycle go through pre and post-menopausal phases. The timing of menopause, knowledge as well as menopausal symptoms varies between populations and within populations. 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 (Malik, 2008). The author further reported that the western woman knowledge towards the menopause is generally high and about one third of them considers the menopause as 'a normal physiological change'. Nevertheless, Nigerian women need knowledge about menopause in order to be able to cope with this important stage of their lives.

Menopause means the final menstrual period and represents a watershed in the reproductive life of a woman (Daine& Margaret, 2006). It is a natural event that every woman expects, occurring between the ages of 40 to 55 years, an average of 51 years in every woman. It is the permanent cessation of menstruation resulting from the loss of ovarian and follicular activity. Ekwuzie (2001) asserted that at menopause, a woman's own oestrogen levels fall and the monthly period (menstruation) stops. Carlow (2006) observed that menopause is the time in a woman's life at which she can no longer reproduce. Ekwuzie (2001) equally described that although it also ends fertility, you can stay healthy, vital and sexual. Some women feel relieved because they no longer need to worry about pregnancy. During this time, ovulation stops and oestrogen hormones drop. According to Chung (2009), menopause is a point in time and not a process; it is the time point at which a woman's last period ends. A woman will not know when that time point has occurred until she has been 12 consecutive months without a period. The symptoms of menopause, on the other hand, may begin years before the actual menopause occurs and may persist for some years afterwards as well. While the menopause can sometimes be sudden events, for most women there is gradual change in menstrual

pattern in the years preceding the menopause as ovarian activity fluctuates, which may be accompanied by troublesome symptoms; this is often called perimenopause.

Several signs and symptoms of menopause have been identified such as hot flushes, nervousness, irritability, depressive mood with occasional crying spells, headache, dizziness, anaemia, dryness of the vagina causing painful intercourse, pruritus (itching of the vulva), atrophy of reproductive organs, weight gain, scanty pubic hair, shrinkage of the breast (Daine& Margaret, 2006). Other signs and symptoms include fatigue and sleep problems, loss of bone mass that predisposes to osteoporosis, slow increase in blood cholesterol level that predispose to cardiovascular disorder (Huffma & Shriley, 2005; Ross &Willson, 2002; Delano, 2005; Dillaway, 2006; Restegari, 2007). Menopause is a highly individual experience. Symptoms vary between women from mild to severe; although some women may have no symptoms at all. In some women the symptoms last for less than one or two years, but other women have them longer. The knowledge of the female reproductive system and the physiological changes that takes place in the body would however enable the woman to understand the change and be prepared to accept this period and tolerate the discomfort.

Knowledge is important to man's quality of life because many of the things we do depends on the knowledge we have. Knowledge is familiarity, awareness or understanding of someone or something, such as facts, information, discovering or learning. It is the ideas and understanding which an entity possesses that are used to take effective actions to achieve the entity's goal. Knowledge as defined by Crowther (2002) is all the information, fact, truth and principle learned throughout a given time. According to Noroozi, Kasiri, Eslami, Hassan and Davari (2013) appropriate understanding of women that certain physical, mental, social and psychological changes occur during menopause helps them with greater readiness to cope with these changes when they come. Familiarity with these changes and understanding their reasons are essential in the life of all women. Thus, menopausal knowledge in this study is the familiarity, awareness and understanding of the concept of menopause, its symptoms and management among in school adolescents.

Adolescent has been defined variously by many authors. Alan and Lauren (2003) described adolescent as a juvenile between the onset of puberty and maturity. According to United Nations Family Planning Association, (2007) and World Health Organization WHO (2005) an adolescent is a young person between 10 – 19 years with his/her views and evolving decision-making capacities. An adolescent is a young person who is no longer a child, but not yet an adult. Adolescent describes the teenage year between 13 and 19 and can be considered the transitional stage from childhood to adulthood (Lucile, 2013). In order words, adolescents do not mean age in years, but someone who is changing from a child to adult at any age. In –school adolescents in this study refer to those young persons between the ages of 12 and 24 years found in schools, mostly secondary schools. Certain factors such as age, class interval, location gender among others can however affect menopausal knowledge among adolescents. Age and class interval will be considered in this work.

Nsukka Local Government area (LGA) is one of the 17 LGAs in Enugu State, Nigeria. There are numerous public and private secondary schools where these in-school adolescents attend. In the LGA there are policies and programs for women's health promotion but they are mostly focused on issues relating to pregnancy and family planning. Enough attention is not paid to other women's health needs including the problems of menopausal transition period. Moreover, few studies have been carried out on the subject matter in the study area. Therefore, the need to study menopausal knowledge among in-school adolescent becomes timely. This is because knowledge acquired at early stage like adolescent stage will help them to be well equipped on the process of menopause so as to be able to cope with menopause in future and inculcate same to others when necessary. The purpose of the study therefore was to find out the menopausal knowledge among in-school adolescents in Nsukka LGA of Enugu state, Nigeria. To achieve this purpose, three research questions were posed thus;

- 1. What is the level of knowledge possessed by in-school adolescents on the concept of menopause in Nsukka Local Government Area?
- 2. What is the menopausal knowledge among in-school adolescents in Nsukka Local Government Area based on age?
- 3. What is menopausal knowledge among in-school adolescents in Nsukka Local Government Area based on class interval?

Method

To achieve the objective of the study, the cross-sectional survey research design was employed. The population for the study consisted of all in-school adolescents in public secondary schools in Nsukka Local Government Area of Enugu state. The total population of in-school adolescent in secondary schools in Nsukka LGA of Enugu State during 2016/2017 academic year was thirteen thousand and forty-three (13,043) (Post-Primary School Management Board – PPBMB Nsukka, 2017). A sample of 388 in-school adolescents was chosen for the study. This sample size was determined using Yaro Yamen formula for sample size determination for finite population. Multi stage sampling procedure was used to select the sample. First stage involved the use of simple random sampling to select two schools - boy's and girls' schools respectively. Second stage is by the use of purposive sampling to select senior secondary school students, SS1-SS3. This is because they are the ones that may have been exposed to more in depth lessons on reproductive processes including menopause. The third stage involved the use of systematic random sampling to select 65 students from each of the three sampled classes (SS1-SS3) in the two schools. This procedure yielded a total of 390 in-school adolescents used for the study.

The instrument used to collect data was researcher' structured questionnaire titled Menopausal Knowledge Questionnaire (MKQ). The MKQ consist of two sections A and B. Section A sought information on respondents' bio data while section B elicited information on respondents' knowledge of menopause. The instrument was face validated by three experts from Department of Human Kinetics and Health Education, University of Nigeria, Nsukka. Data were collected by the researchers and two research assistants. Of the 390 questionnaires distributed, 378 were completely filled and used for analysis. Analysis was by the use of SPSS version 22. Frequencies and percentages were used to answer the research questions. In determining the menopausal knowledge, Ashur's (1977) modified by Okafor (1997) criteria for determining knowledge was used. By these criteria, scores below 20 per cent was considered very low level of knowledge (VLK), 20-39 per cent was considered low level of knowledge (LK), 40-59 per cent was considered average level of knowledge (AK), 60-80 per cent was considered high level of knowledge (HK) while a score above 80 per cent was considered very high level of knowledge (VHK).

Results

Table 1 Level of knowledge possessed by in-school adolescents on the concept of menopause in Nsukka Local Government Area (n = 378)

S/N	Statement	Correct Responses		
		F	(%)	D
1.	Menopause is the cessation of normal menstrual flow	259	68.5	Н
2.	Menopause is a natural phenomenon that occurs only to women (35 – 55 years)	259	68.5	Н
3.	Menopause is caused by witchcraft attack, enemies and illness	289	76.5	H
4.	Menopause occur due to decreased functioning of the ovary	239	63.2	H
5.	Natural menopause is a part of ageing process	297	78.6	Η
6.	Regular menstruation and hot flushes indicate the onset of menopause	187	49.5	M
7.	Menopause is characterized by insomnia headache and irregular heart beat	139	36.8	L
8.	Menopausal women cannot give birth to new born	267	70.6	H
Overall knowledge			64.0	H

Table 1 above show that in school adolescents has high menopausal knowledge (64.0%). However, the table further shows that there is low knowledge that menopause is characterized by insomnia, headache and irregular heart beat (36.8%) and moderate knowledge that regular menstruation and hot flushes indicate onset of menopause (49.5%).

Table 2 **Menopausal knowledge based on Age**

S/N	Statement	Correct Responses		
		12 – 15 yrs (N=136) F %	16 – 19 yrs (N=213) F %	20 – 24 yrs (N=29) F %
1.	Menopause is the cessation of normal menstrual flow	98 (72.0)	140(65.7)	21(72.4)
2.	Menopause is a natural phenomenon that occurs only to women $(35 - 55 \text{ years})$	90 (66.2)	144(67.6)	25(86.2)
3.	Menopause is caused by witchcraft attack, enemies and illness	102 (75.0)	164(77.0)	23(79.3)
4.	occur due to decreased functioning of the ovary	84 (61.8)	131(61.5)	24(82.8)
5.	Natural menopause is a part of ageing process	102 (75.0)	171(80.3)	24(82.8)
6.	Regular menstruation and hot flushes indicate the onset of menopause	65(47.8)	107(50.2)	15(51.7)
7.	Menopause is characterized by insomnia headache and irregular heart beat	48(35.3)	79(37.1)	12(41.4)
8.	Menopausal women cannot give birth to new born	96(70.5)	148(69.5)	23(79.3)
o	verall knowledge	(62.9)	(63.6)	(72.0)

Table 2 reveals that all the age groups have high menopausal knowledge. However, those aged 20-24 years had the highest knowledge (72.0%), followed by those aged 16-19 years (63.6%). Respondents aged 12-15 years had the least menopausal knowledge (62.9%).

Table 3 **Menopausal knowledge based on class interval**

S/N	Statement	Correct Responses			
		SSI(n=192)	SSII (n=162)	SSIII(n=24)	
		F %	F %	F%	
1.	Menopause is the cessation of normal menstrual flow	131(68.2)	109(67.2)	19(79.2)	
2.	Menopause is a natural phenomenon that occurs only to women (35 – 55 years)	124(64.6)	119(73.5)	16(66.7)	
3.	Menopause is caused by witchcraft attack, enemies and illness	146(76.0)	124(76.5)	19(79.2)	
4.	Menopause occur due to decreased functioning of the ovary	115(59.9)	111(68.5)	13(54.2)	
5.	Natural menopause is a part of ageing process	146(76.0)	130(80.2)	21(87.5)	
6.	Regular menstruation and hot flushes indicate the onset of menopause	86(44.8)	88(54.3)	13(54.2)	
7.	Menopause is characterized by insomnia headache and irregular heart beat	71(37.0)	55(34.0)	13(54.2)	
8.	Menopausal women cannot give birth to new born	132(68.8)	119(73.5)	16(66.7)	
	Overall knowledge		(66.0)	(67.7)	

Table 3 revealed that all the class levels have high menopausal knowledge. The table further shows that adolescents in SSIII had the highest knowledge (67.7%). This is followed by respondents in SSII (66.0%) and the least knowledge was among those in SSI (61.9%).

Discussion

This research study is focused to determine the overall menopausal knowledge among inschool adolescents in Nsukka Local Government Area, Enugu State. The findings in table 1 showed that there is generally high level of menopausal knowledge (64.0%) among in-school adolescents in Nsukka Local Government Area, Enugu State. This finding is expected because in school adolescents should have been exposed to reproductive functioning and anatomy and physiology of reproductive system of females which include menopause. The finding is in consonance with the report of Uzondu (2001) and Madubuogu (2004), who reported high level of menopausal knowledge among women. However, the table further shows that there is low knowledge that menopause is characterized by insomnia, headache and irregular heart beat (36.8%) and moderate knowledge that regular menstruation and hot flushes indicate onset of menopause (49.5%). This finding indicates that although these adolescents have high knowledge of the concept of menopause, they do not know much about the signs and symptoms of menopause. This finding supports that of Nisar (2008) who reported that majority of women and young girls lacked knowledge of menopausal symptoms and its health implications. The implication of this finding is that there is need to inculcate in these young ones the signs and symptoms of menopause at this stage in their development so that they should be able to grow with it and manage menopause appropriately when they reach that age.

Findings from Table 2 showed that respondents aged 20-24 years had the highest knowledge (72.0%), followed by those aged 16-19 years (63.6%). Respondents aged 12-15 years had the least menopausal knowledge (62.9%). This finding expected and not surprising. It is expected that older adolescents should possess higher menopausal knowledge than younger ones because they should possess better life experiences including menopause. Ejifugha, (2003) asserted that age brings about maturity and maturity put one in a position to rationalize, concretize accept or reject concept, information habit, attitude and practice. In line with the above assertion, older adolescents aged 20-24 years should possess higher menopausal knowledge than younger ones aged 12-15 years. This suggests that the information on menopause should be ongoing not just one-shot process.

Table 3 showed that respondents in SSIII had the highest knowledge (67.7%). This is followed by respondents in SSII (66.0%) and the least knowledge was among those in SSI (61.9%). This finding is plausible and expected. This is because, adolescents in SSIII are expected to be knowledgeable in female reproductive processes including menopause. This finding is in line with the finding by Uzondu, (2001) who reported in his study that there is close connection between class interval and menopausal knowledge. The higher the class level, the higher the menopausal knowledge. Moreover, respondents in SSS3 are in their external exam class and are expected to be conversant with the biology of female reproductive system including menopause.

Conclusion

Based on the findings and discussion of the present study, it was concluded that in-school adolescents in Nsukka LGA of Enugu state have high menopausal knowledge on the concept of menopause but low knowledge on the signs and symptoms of menopause. The level of menopausal knowledge was highest among in-school adolescents aged 20-24 years and those in SSIII.

Recommendations

Based on the findings, discussion and conclusion of the study, the following recommendations are made;

- 1. Information on all aspects of menopause including concepts, signs and symptoms and management should be given to in-school adolescents by their teachers (health educators) so as to increase their knowledge on menopause and position them to correct certain misconceptions on the subject matter.
- 2. Health educators should educate all females in the community both in school and out of school adolescents on different aspects of the female reproductive processes including menopause. This is to improve the general knowledge on menopause and position them to adapt and cope appropriately with menopausal syndrome.

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