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Full Length Research Paper

Therapeutic value of multivitamin: Reducing emerging symptoms of menopausal women helping as a child care giver in Nigeria

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Menopause is becoming an increasingly important aspect of women's health. This aim of this study was to determine the socio-demographic characters of menopausal women and the therapeutic value of multivitamin in reducing emerging symptoms. This is an intervention study of menopausal women aged 40 years and above who are helping as a child care giver in Ilorin metropolis. Information on their socio-demographic characteristics and symptoms experienced was obtained with the aid of a questionnaire. The mean age of the respondents was 57.2 ± 1.2 years. Moslems constituted 72.5% of the women, while 27.5% were Christians. Nearly all (80.9%) were of the Yoruba ethnic group. Amongst the women, 52.8% had formal education, 65.7% were married and most belonged to one or more social groups. Vasomotor symptoms, such as internal heat/hot flushes was common among the study group of 54 (30.3%), while the control was 44 (27.2%), night sweats was high in the study group, 51 (28.7%). Post-intervention analysis showed that respondents became more conscious of signs/symptoms of menopause with hot flushes/internal heat, weakness/tiredness and insomnia being the most common complaints. This change in reported symptoms was statistically significant for the study group (P = 0.041296), unlike the control group where it was not significant (P = 0.558667) for the study and control groups. Multivitamins and health education are good therapeutic values in reducing menopausal symptoms; thus, they assist women in taking care of their grand children. It is important to take these factors into account when planning health strategies to improve the lives of these women.

Key words: Menopause, therapeutic value, emerging symptoms, multivitamin, child care giver.

INTRODUCTION

Menopause is the time in a woman's life when menstruation ceases and natural reproductive stage ends. It is a natural part of the ageing process in females and usually occurs within the age range of 40 to 55 years (NPHCDA/WHO, 1999). However, the average age for the final menstrual period is 48.4 years (Okonofua et al., 1990).

In 1990, there were approximately 467 million women in the world that are of age 50 and above (World Bank, 1993). This number is estimated to increase to 564 million by 2020 (World Bank, 1991; Hill, 1996). In Nigeria, the total female population is 59.5 million and about 5 to 8% are in their postmenopausal period, large proportion of whom is gainfully employed and still contributes to the economic development of the country (World Population Data Sheet, 2002; World Health Organization, 1981, 1996). The estimated population of postmenopausal women in Ilorin is 40,300, which is approximately 5% of the total population (World Health Organization, 1996).

Attitude of women towards menopause varies with various age groups, educational levels, religions and ethnic groups. Women usually have negative attitudes

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towards menopause, because of their ignorance and lack of education about its reality (Matthews, 1996; Matthews et al., 1990; Hunter, 1996). Studies revealed more positive attitudes, particularly of more highly educated women.

There are some adjustment practices that must be met in order not to cause a breakdown in the individual menopausal life cycle. These adjustment practices also depend on the socio-demographic background of the women, and include women engaging themselves in business or politics, or reviving some interesting activity in which they showed talent, or had some training in their youth before the business of making a home took up all their time (Giwa-Osagie, 2003).

Despite the call by World Health Organization (WHO) in 1980 and 1990 on all member states to review the existing information on menopause and make recommendations for the future and clinical practice (World Health Organization, 1981; 1996), little is known about issues relating to menopause in Nigeria and Kwara State in particular.

The aim of this study therefore is to determine the socio-demographic characteristics of menopausal women in Ilorin, Kwara State. This aim of this study was determine the socio-demographic characters of menopausal women and the therapeutic value of multivitamin in reducing emerging symptoms.

MATERIALS AND METHODS

This is an intervention study carried out in three stages; namely pre-intervention, intervention and post-intervention. The study areas are Alanamu, Ajikobi, Adewole, Baboko, Okoerin and Ubandawaki, in Ilorin West Local Government, while the control areas are Olufadi, Balogun Fulani I and IV, Okaka and Okeogun I and II in Ilorin South Local Government Areas (Fufu). Simple random sampling technique by balloting methods was used to select the two local government areas, out of the existing sixteen local government areas in Kwara State. The selection of Ilorin West and Ilorin South Local Government for the study and control groups, respectively was by randomization, which was achieved by tossing the coin. The head was the study group, while the tail was the control group.

Pre-intervention stage

Questionnaires were administered by trained interviewers to participants in the study and control groups, with a view to obtain baseline information on their socio-demographic characteristics and menopausal symptoms experienced.

Intervention stage

Health education and multivitamin tablets was given to the study group only, while the control group received only heath education. The content of the health education dwelt on what menopause means, who is qualified to be addressed as menopausal woman, physiology of menopause, endocrine changes in menopause, early and late symptoms and signs of menopause, misconceptions about menopause and treatment modalities for menopausal problems, such as the role of nutrition, exercise and the importance of regular medical check-up (screening) were emphasized. All the unfounded misinformation and myths relating to menopause were addressed. Question and answer sessions were allowed during which issues raised were clarified by the researcher. The health education intervention was in form of lectures and distribution of various Information Education Communication (IEC) materials, such as posters and handbills obtained from the Community Initiative for Family Care and Development (CIFCad) were distributed. While the study group each received 10 mg of calcium tablets. Twelve health education sessions were held giving each participant the opportunity of participating in at least two health education sessions. The primary health care center in each ward was used as the venue for the health education. There were three-health education sessions per week on agreed dates and time at each Primary Healthcare Centre (PHC), namely, Alanamu, Adewole, Ajikobi,, Okoerin, Baboko and Wbandawaki. The health education intervention lasted for a period of four weeks, and each session lasted two hours.

Post intervention stage

Six months after the intervention, the same questionnaire administered at the pre-intervention stage was administered to both their study and control groups. This was to evaluate the impact of the intervention on menopausal symptoms. For ethical reasons, the control group also benefited from calcium regimen and health education session after collection of the post-intervention data.

The study was a cross-sectional study conducted in North Central Nigeria. The subjects used for the study consisted of menopausal women of 40 years of aged and above who had stopped menstruating for 12 consecutive months. Excluded from the study were women of aged less than 40 years, women of 40 years of age and above who were frail or bedridden and women of age greater than 40 years but still menstruating.

The respondents were interviewed with the aid of a semi-structured questionnaire. The questionnaire was translated to Yoruba language and used for respondents who do not understand English language. The questionnaire contained relevant information on the respondents' socio-demographic characteristics and menopausal symptoms.

All collected data were collated and checked manually for errors and then entered for analysis using EPI-INFO Version 6.4 computer-software package. Data analysis was done to produce frequency distribution tables and means.

RESULTS

As seen in Table 1, one hundred and seventy eight (178) persons were interviewed. Over one-third of the respondents studied, 56 (31.5%) were within 50 to 59 years old of age. The mean age of the respondents was 57.2 ± 1.2. Majority of the respondents, 129 (72.5%) were of Islamic faith, while 49 (27.5%) were Christians. Nearly all the respondents, 144 (80.9%) were of the Yoruba ethnic group while the other ethnic groups, were Nupe and Baruba. Over half of the respondents studied, 94 (52.8%) had formal education while 84 (47.2%) had no formal education. Most of the respondents, 117 (65.7%) were married but 49 (27.6%) were widowed. Many of the respondents, 50 (28.15%) were skilled workers. Some types of group's membership are more commonly found than others. Religious groups, 118 (66.3%) and age based women groups, 58 (32.6%) were the most common

Table 1. Socio-demographic characteristic of the respondents (pre-intervention).

Variable	Study group (n = 178), frequency (%)	Control group (n = 180), frequency (%)
Age (in years)		
40-49	56 (31.5)	64 (35.6)
50-59	70 (39.3)	70 (38.9)
60-69	41 (23.0)	32 (17.8)
70 and above	11 (6.2)	14 (7.7)
Total	178 (100.0)	180 (100.0)
Religion		
Christianity	49 (27.5)	30 (16.7)
Islam	129 (72.5)	150 (83.3)
Total	178 (100.0)	180 (100.0)
Ethnic group		
Hausa	15 (8.5)	13 (7.2)
Ibo	12 (6.7)	9 (5.0)
Yoruba	144 (80.9)	152 (84.5)
Others	7 (3.9)	6 (3.3)
Total	178 (100.0)	180 (100.0)
Educational status		
None	84 (47.2)	75 (41.7)
Primary	32 (18.0)	50 (25.2)
Secondary	29 (16.3)	39 (21.7)
Post- Secondary	33 (18.5)	21 (11.4)
Total	178 (100.0)	180 (100.0)
Marital status		
Married	117 (65.7)	108 (60.0)
Widowed	49 (27.6)	60 (33.3)
Divorced	5 (2.8)	8 (4.4)
Separated	7 (3.9)	4 (2.2)
Total	178 (100.0)	180 (100.0)
Occupation		
Senior Professionals	26 (14.6)	19 (10.6)
Intermediate professionals	39 (21.9)	22 (12.2)
Junior Professionals	35 (19.7)	47 (26.1)
Skilled Workers	50 (28.1)	55 (30.5)
Unskilled Workers	28 (15.7)	37 (20.6)
Total	178 (100.0)	180 (100.0)
Group membership*		
Religious group	118 (66.3)	146 (81.1)
Women group (Age based group)	58 (32.6)	64 (35.6)
Work related group	42 (23.6)	26 (14.4)
Co- operative group	36 (20.2)	8 (4.4)
Social /Friend group	22 (12.6)	8 (4.4)
Others	18 (10.1)	18 (10.0)

*Multiple responses.

Table 2. Symptoms experienced by the respondents*.

Symptoms/signs of menopause experienced	Study group (Frequency (%))		Control group (Frequency (%))	
	Pre	Post	Pre	Post
1. Weakness	88 (49.4)	86 (49.1)	64 (35.6)	49 (27.2)
2. Hot flushes	54 (30.3)	98 (56.0)	49 (27.2)	56 (31.1)
3. Joint pain	66 (37.1)	77 (44.0)	56 (31.6)	60 (33.3)
4. General body pains	60 (33.7)	76 (43.4)	64 (35.6)	60 (33.3)
5. Back pains	53 (29.8)	43 (24.6)	40 (22.2)	50 (27.8)
6. Headache	62 (34.8)	55 (31.4)	52 (28.9)	57 (31.7)
7. Anxiety	40 (22.5)	30 (17.1)	48 (26.7)	56 (31.1)
8. Night sweats	51 (28.7)	69 (39.4)	64 (35.6)	66 (36.7)
9. Insomnia	78 (43.8)	65 (37.1)	58 (32.2)	68 (37.8)
10. Other	18 (10.1)	16 (9.1)	12 (6.7)	14 (7.8)

*Multiple responses: $X^2 = 11.56$, df = 9, P = 0.041296; $X^2 = 3.94$, df = 9, P = 0.558667.

social support networks for menopausal women in Ilorin metropolis. Formal groups, such as work-related groups, 42 (23.6%) and co-operatives, 36 (20.2%) were not frequently reported. Some of the women belonged to more than one type of group.

Over one-third of the respondents, study 70 (39.3%) and control 70 (38.9%) were within 50 to 59 years old of age. The mean ages of study and control groups were 57.2 ± 1.2 and 58.2 ± 1.9 years, respectively. Majority of the respondents, study 129 (72.5%) and control 150 (83.3%) were of Islamic faith, while 49 (27.5%) of the study group and 30 (16.7 %) of control were Christians.

Nearly all the respondents, study 144 (80.9%) and control 152 (84.5%) were of the Yoruba ethnic group, while the other ethnic groups, were Nupe and Baruba. Over half of the respondents, study 94 (52.8%) and control 105 (58.3%) had formal education while 84 (47.2%) and 75 (41.7%) of study and control groups, respectively, had no formal education.

Most of the respondents, study 117 (65.7%) and control 108 (60.0%) were married, but 49 (27.6%) and 60 (33.3%) of the study and control groups, respectively, were widow. Many of the respondents were skilled workers and they constituted 50 (28.15) and 55 (30.55) of the study and control groups, respectively.

Some types of group's membership are more commonly found than others. Religious groups, study 118 (66.3%) and control 146 (81.1%), and age based women groups, study 58 (32.6%) and control 64 (35.6%) were the most common social support networks for menopausal women in Ilorin metropolis. Formal groups, such as work-related groups, study 42 (23.6%) and control 26 (14.4%), and co-operatives, study 36 (20.2%) and control 8 (4.4%) are not frequently reported. The pattern of socio-demographic distribution in both study and control group were the same.

As seen in Table 2, At pre-intervention, vasomotor symptoms, such as internal heat/hot flushes, study 54 (30.3%) and control 44 (27.2%), night sweats, study 51 (28.7%) and control 64 (35.6%) and psychosomatic symptoms, such as weakness, study 88 (49.4%) and control 64 (35.6%), insomnia 78 (43.8%) and 58 (32.2%) for the study and control groups, respectively while somatic symptoms of generalized body pains, study 60 (33.7%) and control 64 (35.6%) were the major complaints, while psychological symptoms, such as anxiety, study 40 (22.5%) and control 48 (26.7%) are the least complaints. Post-intervention analysis showed that respondents became more conscious of signs/symptoms of menopause with hot flushes/internal heat, weakness/-tiredness and insomnia being the most common complaints. This change in reported symptoms was statistically significant for the study group (P = 0.041296) unlike the control group where it was not significant (P = 0.558667) for the study and control groups.

DISCUSSION

Age of the respondents ranged from 40 to 70 years with a mean of 57.2 ± 1.2 years. Almost two third of the respondents, 122 (68.5%) were in the 50 to 70 year age bracket; thus, implying that majority of them were not within the reproductive age group (women of child bearing age) (National Population Commission, 2004). However, more than two third, 126 (70.8%) of the respondents were in 40 to 59 years age bracket, implying that their experience is still recent enough for accurate recall. At the same time adequate representation is also included of respondents of 70 years of age and above. The modal age group was 50 to 59 years, while the mean age was 57.2 ± 1.2 years. Of the respondents, 56 (31.5%) were of age less than 50 years and 11 (6.2%) were age greater than 70 years. This pattern of distribution is in keeping with the population pyramid of most developing countries with a preponderance of the mid-aged when compared with few elderly individuals (Word Health Organization, 1989).

Majority of the respondents, 129 (72.5%) were Moslems while Christians constituted 49 (27.5%). The higher proportion of Moslem respondents in this survey is not surprising, because large percentage of people in Ilorin metropolis is Moslems (Jimoh, 1994). The religious affiliation of the respondents is important since some beliefs about menopause and getting old were premised on the religious practices of the individuals. For instance, many Moslem women are kept in purdah or kulle in Hausa, during their reproductive years, but often have fewer social restrictions when they have past childbearing age (Johnson, 1982). This was supported by the findings that all the respondents interviewed were in one form of the social group or the other (Table 1).

The predominance of the Yoruba ethnic group in the metropolis was reflected with 144 (80.9%), Hausas' were 15 (8.5%) and Ibos' were 12 (6.7%). This ethnic distribution is not surprising since, historically; Ilorin was founded by warriors from old Oyo Empire, which had close links with other Yoruba towns and peoples (Jimoh, 1994).

Educational level is another important index of health status, because it is assumed that it liberates women who have greater access to information on health as well as other topics relevant to their well-being. About half of the respondents, 92 (52.8%), had formal education while one third of the group, 61 (34.3%) had at least secondary level education. This female literacy level among the respondents is slightly higher than the national figure of 43% (National Population Commission, 2004).

The overwhelming majority, 117 (65.7%) of the sampled women were married. The large number of widow women is understandable, considering the age distribution of the respondents. Skilled workers, 50 (28.1%), were the most common primary source of income for sampled women in Ilorin. A significant proportion of the women also reported that they were civil servants and artisans.

Regarding social support group membership, about 118 (66.3%) of the respondents belonged to religious group. Religions play a significant role in the attitude and adjustment practices of women to life style. 14 social groups, particularly informal ones, have been part of the traditional African way of life, but the type varied by religious and ethnic groups (Oyawoye et al., 1998). Table 1 show that some types of social groups are more commonly found than others. Formal groups, such as work-related groups and cooperatives are not frequently reported. Religious groups, friendship groups and age based women groups are the most common social group support networks for menopausal women in Ilorin.

Results of analysis showed that generalized body weakness/tiredness, insomnia, joint pains, hot flushes/-internal heat, plus anxiety were common symptoms of menopause. These symptoms of menopause have been documented in previous studies in Nigeria (Leiblum, 1983; Akingbade et al., 1990). Anxiety was shown to be one of the commonest symptoms of menopause. This was attributed to the fact that such women felt they were old and would no longer be attractive and therefore fear that their husbands could take other wives (Koster and Grade, 2003; Hunter, 1993). It was due to decreased estrogen level which nurtures both the mind and the body that results in depressions, forgetfulness and nervousness, especially among nulliparous women, as documented by some scientist (Kaufert et al., 1992; Matthews, 1992; Adodo, 2003). However the reported psychological problems are of lower percentages.

The studied participants complained little about problems of sexuality, dyspareunia, loss of libido and/or vaginal dryness. This poor reporting of symptoms was due to lack of knowledge, cultural influence and general perception of menopause as reported in other studies (Fox-Young et al., 1999; Dennerstein, 1993; Butler et al., 1994; Akingbade et al., 1990).

At post-intervention, weakness/tiredness, 86 (49.1%) and hot flushes 98 (56.0%) were amongst the highest reported symptoms, followed by joint pains, generalized body pains, night sweats and insomnia. Perhaps the warm humid climate made it difficult to recognize hot flushes and sweating, which were found in 70 to 90% of menopausal women in other areas (Akingbade et al., 1990; Punyahotra and Dennerstein, 1997; Avis, 1993; Tang, 1993). However, the most important actual signs/symptoms resulting from diminished ovarian activity include amenorrhoea and vasomotor instability as manifested by hot flushes/internal heat and sweating. This pattern of symptomatology is similar to study carried out in Southwestern Nigeria (Leiblum, 1983; Akingbade et al., 1990). The post-intervention increases in the level of knowledge of symptoms/signs of menopause, such as internal heat, sweating and insomnia, etc., are statistically significant ($P = 0.041296$) and this indicates an increase in awareness of problems associated with menopause.

This study confirms the therapeutic values of multivitamin on the symptomatology and interpretation of the menopausal experience. Therefore, all health care strategies aimed at reducing morbidity and maintaining the independent of this growing segment of the Nigerian population should however identify and keep in mind, that health education and simple drug, such as multivitamin is very useful.

Health workers should recognize their roles as providers of services and information on important issues of reproductive health including menopause and in the provision of appropriate management of patients with signs and symptoms of menopause.

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