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Practice of Breast Self Examination among Young Adults in Tertiary Institutions in Ilorin, North Central Nigeria

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Abstract: Detection of breast cancer at the earliest possible time followed by appropriate treatment is the logical goal in the pursuit of cure of carcinoma of the breast. This is a descriptive epidemiological study on practice of Breast Self Examination (BSE) among young adult females in tertiary institutions in Ilorin, Nigeria. Systematic random sampling technique was adopted to select the respondents for the survey. Self administered questionnaire was used as the research instrument. Seven hundred respondents returned the completed questionnaires and were analyzed. Majority (81.9%) of the respondents had heard of breast self examination but only 53.5% had ever practiced it. About half of those that ever practiced breast self examination were currently practicing self examination of the breast. Friends (34.3%), relation (16.0%) and history of breast cancer in the family (8.4%) motivated respondents who currently practice breast self examination to continue. Although, 74.3% of the respondents claimed to know how breast self examination is done, only 9.2% had good knowledge of performance of breast self examination. The problems encountered by the respondents during breast self examination were difficulty in palpation, appropriate position to examine the breast and inability to differentiate between normal breast tissues and breast lump. Two-thirds of those that ever practiced breast self examination had encouraged other people to do the same. Less than 20% of those who currently examine their breast do it every month. Effective health education through various media like parental education, seminar, print and electronic media and male involvement in encouraging their friends and spouse in breast self examination will promote the culture of sustaining regular breast self examination. Integrating breast self examination messages into reproductive health by collaboration between the health care providers, the government and the mass media (which presently enjoy high level of information dissemination) will increase the practice of breast self examination.

Key words: Practice, breast, self-examination, young adults, institutions, Ilorin, Nigeria

INTRODUCTION

The incidence of breast cancer is rising more rapidly in population groups that enjoyed a low incidence of the disease (Adebamowo and Adekunle, 1999). Breast cancer has become the commonest malignancy (excluding skin cancers) in women worldwide (Haris *et al*., 1992). However, the impact of breast cancer on a given population can be lessened by prevention, early detection, effective treatment or palliation in incurable cases (Magrath and Litvak, 1993; Boffetta and Parkin, 1994). The logic of investing in the prevention of cancer, rather than its cure seems to be obvious and the continued emphasis on curative services for cancer in all countries defies explanation. Potential improvement in mortality by implementation of state of the art therapy are relatively small for many cancers and can be achieved only at a cost most developing countries can not afford (Boffetta and Parkin, 1994).

The basic approaches to cancer control are primary prevention, screening and treatment. Primary prevention has the greatest potential but it is not yet applicable against breast cancer (Miller, 1991). Prospects for primary prevention of breast cancer are virtually non-existent (Donegan and Spralt, 1995; WHO, 1997). Thus, there is little that can be done based on current knowledge to decrease the incidence of the disease (Kalache, 1990). General health promotion including avoidance of obesity from childhood onwards could help (Donegan and Spralt, 1995; WHO, 1997). Other possible prevention activities include increasing physical activity, low fat diet (Donegan and Spralt, 1995; Alhilal, 1999) and avoidance

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of cigarette smoking and breast irradiation in young women (Donegan and Spralt, 1995). Chemoprevention is currently only a research exercise (Donegan and Spralt, 1995; WHO, 1997). The role of prophylactic mastectomy is uncertain because at present it is difficult to quantify a woman's risk precisely (Donegan and Spralt, 1995). The possibility of modification of gene function is being explored (Donegan and Spralt, 1995). No optimal strategy has yet been defined for women who are at high risk (WHO, 1997).

Unless a major breakthrough in understanding the etiology of breast cancer occurs in the near future, hopes for lowering mortality will remain in early detection of the disease through screening (Kalache, 1990; Strax, 1978; Harris and Vogel, 1997). Consequently, detection at the earliest possible time followed by appropriate treatment is the logical goal in the pursuit of cure, prolongation of life, palliation and reduction of deformity (Breast Cancer Digest, 1979; Walt, 1998; Harvey *et al*., 1997; Senie *et al*., 1981). Bringing ladies into screening programmes at a younger age group could however, provide an earlier opportunity for patient education and help to increase awareness of, access to and utilization of health care facilities. This study examined the practice of Breast Self Examination (BSE) among young female undergraduates in 2 tertiary institutions in Kwara State, Nigeria.

MATERIALS AND METHODS

This is a descriptive epidemiological study on practice of breast self examination among young female undergraduates in University of Ilorin and Kwara State polytechnic in North Central Nigeria. Systematic random sampling technique was adopted for subject selection. The respondents were identified by names, number on the sampling frame, room numbers and the hall of residence. The sampling fraction and sampling interval were determined. Verbal consent was sought for participation in the survey. Those students that declined participation were replaced by the next person in the sampling frame. Seven hundred students responded for the study.

Self administered questionnaire was used as the research instrument for the volunteer to participate in the study. The data instrument contained relevant questions on socio-demographic characteristics, knowledge and practice of breast self examination. The questionnaire was pre-tested and necessary corrections were done thereafter. The data generated on the questionnaires were verified and validated manually for errors and entered in to the computer for analysis using Epi-Info version 6.4 software package on the computer.

RESULTS

The respondents age ranged between, 16 years and 28 years with the mean age group of 20-21 years and the modal age group was 20-21 years. One hundred and sixty nine (24.2%) were married, while 531 (75.8%) were single (Table 1). Majority of the respondents 588 (84.0%) were Yoruba; Igbos were 38 (5.4%), while other tribes were Nupe, Baruba, Hausa and Igala 74 (10.6%). Two hundred and seventy six (39.4%) respondents were Muslims, while Christians were 424 (60.6%).

Five hundred and seventy three (81.9%) respondents had heard of breast self examination. Television, 165 (23.6%) was mentioned as the commonest first source of information on breast self examination by the respondents (Table 2). Other first sources of information mentioned are radio, 128 (18.2%), health worker, 130 (18.6%), print media, 105 (15.0%) and friends 45 (6.5%). About half of the respondents 398 (56.9%) had ever practiced breast self examination, while 302 (43.1%) had never practice breast self examination. Among the respondents that had practiced breast self examination at one time or the other, 213 (53.5%) were currently practicing breast self examination, while, 185 (46.5%) of ever practiced did not practice breast self examination currently.

The decision to practice breast self examination for the first time was influenced most commonly by friends 225 (56.5%) and also by mother 51 (12.8%), boyfriend/husband 22 (5.5%), relative 42 (10.6%) and health workers 58 (14.6%). Respondents, who currently practice breast self examination were motivated by various reasons to do it (Table 3). Seventy three (34.3%) mentioned friends, relation 34 (16.0%), history of breast diseases in the family, 18 (8.4%), health worker 46 (21.6%) and mother 42 (19.7%) as factors that supported their current practice of breast self examination. The reasons identified by respondents who stopped breast self examination were forgetfulness 78 (42.2%), lack of time 50 (27.0%), absence of lump in the breast in the previous examination 42 (22.7%) and 15 (8.1%) believed it is not necessary to do it again.

Five hundred and twenty respondents (74.3%) in the survey claimed they know how to perform breast self examination. Among the respondents, who claimed to know how breast self examination is done, 167 (32.1%) were taught by health workers, 173 (33.3%) by mother, 372 (71.5%) by friends and 168 (32.3%) learnt it from relations. Respondent who claimed to know how breast self examination is done were assessed and scored; 48 (9.2%) had good knowledge of performance of breast self examination, 126 (24.2%) scored fair, while 346 (66.6%) scored poor on how it is done. Five hundred and thirty

Table 1: Socio-demographic characteristics of respondents (N =700)

Variable	Frequency (%)
Age distribution	
<18	11 (1.6)
18-19	90 (12.9)
20-21	254 (36.3)
22-23	149 (21.2)
24-25	162 (23.1)
>25	34 (4.9)
Marital status	
Married	169 (24.2)
Single	531 (75.8)
Ethnic group	
Yoruba	588 (84.0)
Igbo	38 (5.4)
Others	74 (10.6)

Table 2: Distribution of respondents by first source of information on breast self examination

First source of information on BSE	Frequency (%)
Television	165 (23.6)
Radio	128 (18.2)
Health worker	130 (18.6)
Print media	105 (15.0)
Friends	45 (6.5)
None response	127 (18.1)
Total	700 (100.0)

Table 3: Practice of breast self examination among respondents

Variable	Frequency (%)
Person who influenced performance of BSE the first time (N = 398)	
Friends	225 (56.5)
Mother	51 (12.8)
Husband/boy friend	22 (5.5)
Relation	42 (10.6)
Health worker	58 (14.6)
Peron who taught them how to perform BSE* (N = 520)	
Health worker	167 (32.1)
Mother	173 (33.3)
Friends	372 (71.5)
Relation	168 (32.3)
Motivator to continue breast self examination (N = 213)	
Friends	73 (34.3)
Relation	34 (16.0)
History of breast cancer in the family	18 (8.4)
Health worker	46 (21.6)
Parent	42 (19.7)
Frequency of practice of BSE (N = 213)	
Weekly	30 (14.1)
Monthly	35 (16.4)
Every 2-4 month	40 (18.8)
Every 5-6 month	30 (14.1)
Every 7-11 month	50 (23.4)
Others	28 (13.5)
Reasons for stopping breast self examination (N = 185)	
Forgetfulness	78 (42.2)
Lack of time	50 (27.0)
Absence of lump during previous examination	42 (22.7)
Not necessary	15 (8.1)

(75.7%) respondents knew that breast self examination is used to screen for breast cancer among other diseases. Four hundred and ten (77.4%) of those who knew breast self examination can screen for breast cancer identified correctly the common age of occurrence of breast cancer.

Respondents were asked on positions in which breast can be examined. Five hundred and ten mentioned

Table 4: Respondents knowledge of BSE

Variable	Frequency (%)
Knowledge of breast self examination skills (N = 520)	
Good	48 (9.2)
Fair	126 (24.2)
Poor	346 (66.6)
What to look for in Breast self examination (N = 573)	
Lump	447 (78.0)
Changes in the nipple	272 (47.5)
Size of the breast	262 (45.7)
Discolouration	267 (46.6)
Others	35 (6.1)

*Multiple response

sitting position, 620 (88.6%) mentioned standing position, while lying down in a supine position was mentioned by, 108 (15.4%) respondents. Four hundred and fourty seven (63.8%) respondents knew that one of the things to look for during breast self examination is the presence of lump in the breast. Two hundred and seventy two (38.9%) respondents mentioned changes in the nipple, size of the breast and discolouration were mentioned by 262 (37.4%) and 267 (38.1%) respondents, respectively (Table 4). The frequency of practice of breast self examination among respondents varied; 30 (14.1%) of them performed it weekly, 35 (16.4%) monthly, 40 (18.8%) every 2-4 month, 30 (14.1%) every 5-6 month and 50 (23.4%) do it every 7-11 month. About half, 201 (50.5%) of those that ever practiced breast self examination had encountered one problem or the other in the course of examining their breast. The problems encountered were difficulty in palpation 59 (29.3%), appropriate position for the examination 78 (38.8%) and inability to differentiate between breast tissues and breast lump, 104 (51.7%). Out of the 398 respondents ever practiced breast self examination, 259 (65.1%) had encouraged other people to do the same.

Six hundred and seventy (95.7%) respondents never noticed lump in their breast but, 30 (4.3%) respondents had detected lump in their breast. The treatment options for breast cancer known to the respondents were surgery 680 (97.1%), chemotherapy, 120 (17.1%) and radiotherapy 239 (34.1%). On what to do if lump is detected in the breast, many respondents 673 (96.1%) will consult health workers for treatment however; few of them 27 (3.9%) indicated that they will see traditional healers for care.

Only one hundred and seventeen respondents (16.7%) knew other forms of breast examination. Of the respondents that knew other forms of breast examination, clinical examination and mammography were mentioned by, 115 (98.3%) and 34 (29.1%), respectively. Suggested ways of improving breast self examination in our society by the respondents were media health education 648 (92.6%), seminar 420 (60.0%), parental education 321 (45.9%), male involvement, 187 (26.7%) and incorporation of it to the family life education, 138 (19.7%).

DISCUSSION

The age of the respondents ranged between, 16 and 28 years; this findings is consistent with the expected age in Nigerian higher institutions. Breast self examination is one of the screening technique for early breast lump and cancer detection (Kalache, 1990). Majority of the respondents (81.9%) in the survey had heard about breast self examination from one source or the other. Similar observation was reported in a study conducted in Port Harcourt, Nigeria where 73.3% of the studied population had heard about breast self examination (Mathew, 1988). The print and electronic media were the commonest sources of first information about breast self examination mentioned by the respondents. This is because with the level of education of the respondents, they were able to read newspapers and other relevant documents, watch television and browse internet for health and other related information. More than 80% of the respondents had heard of breast self examination, but only 56.9% had ever practiced it. This clearly demonstrates that practice of breast self examination is poor in the study population. This is consistent with other studies in Nigeria (Mathew, 1988; Odeyemi and Oyediran, 2002).

Some of the respondents did not show concern on the need to personally examine their breast and look for any abnormality. About half (53.5%) of the respondents that had practiced breast self examination at one time or the other were currently practicing breast self examination. This shows that concerted efforts are needed to encourage the practice of breast examination in our society. Peer influence and parental guidance have significant effects not only on health issues but on other social activities. This was expressed by the respondents as 56.5 and 12.8% of those that ever practice breast self examination were influenced by their friends and parents respectively to do it. Only, 14.6% of the respondents mentioned health workers as the driving force during the first attempt to perform breast self examination. This means that health worker need to do more by using available opportunities to educate the clients on preventive aspect of health care. This is because, they are most likely to give correct information on health issues. Several factors motivated the respondents who currently practice breast self examination; these were friends, relations, mother and health workers, but it is important to mention that 8.4% of them continuously practiced it because there is family history of breast diseases including breast cancer. This corroborates the findings that breast cancer is assuming an upward trend (Adebamowo and Adekunle, 1999) in our society and efforts should be geared towards early detection and prompt intervention.

Among those who stopped breast self examination, 42.2% said they forgot, 27.0% claimed lack of time and 22.7% said since, they did not detect lump in their breast in the previous examinations, they thought it is not important to continue. These showed that there are gaps in the knowledge of the respondents on the basis for the breast self examination and these findings may not be different in the entire population in this environment. Many people will have time to spend in the hospital or with relation in the hospital to manage diseases rather than preventing it (Boffeta, 1994). Although, many respondents (74.3%) claimed to know how breast self examination is done, only 9.2% had good knowledge of the correct way of performing breast self examination. This clearly showed that majority of the people did not know how to perform breast self examination despite the claim of knowledge of performance. There were significant gaps in the knowledge of the respondents on what to look for during breast self examination as only one-third knew that there is need to check for the size of the breast and any discolouration when breast is examined. This corroborate the fact that there is need for health education and behavioural change towards healthy life styles by regular breast self examination. Out of those who currently perform breast self examination, 51.7% encountered difficulty in distinguishing between normal breast tissue and breast lump. This revealed that a lot of efforts will be needed to train people on methods and procedure of breast examination.

CONCLUSION

The practice of breast self examination is low among respondents and of more concern is that among those that practice self examination of breast, very few of them had the correct knowledge of performance of breast self examination. Significant number of those that perform breast self examination did not do it regularly and many of them had problem in distinguishing normal breast tissues and lump. Integrating breast self examination messages into reproductive health by collaboration between the health care providers, the government and the mass media, which presently enjoy high level of information dissemination will improve the performance of breast self examination. Information provided by the mass media should be enriched by health care providers through their involvement in early breast cancer detection health education programmes particularly breast self examination since they are more likely to give correct information on how breast self examination is done.

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