BREAST CANCER-RELATED KNOWLEDGE AND ATTITUDE AS CORRELATES OF SCREENING INTENTIONS AMONG FEMALE IN-SCHOOL ADOLESCENTS AND YOUNG ADULTS IN IBADAN, OYO STATE

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Abstract

Female adolescents and young adults (FAYAs) are not often considered to be at risk of breast cancer. It is usually regarded as a disease for elderly women. FAYAs are now being diagnosed of breast cancer, yet there is a dearth of literature examining the breast cancer-related knowledge, attitude and screening intentions of this population. This study was designed to assess the breast cancer related knowledge, attitude and screening intentions of FAYAs. This is a descriptive cross-sectional study in which three hundred and twenty-two (322) female adolescents and young adults were selected through random sampling technique from amongst female senior secondary school students in Ibadan. Data was collected from January 2015 to February 2015 using a self-designed and pilot tested instrument to assess participants' breast cancer-related knowledge, attitude and screening intentions. Three research questions were raised in this study and data was analysed using descriptive statistics, correlation and regression analysis. Participants had an age range of 15-25 with a mean of 16.12. While 237 (73.6%) participants have heard of breast cancer before, 85 (26.4%) did not. The most popular sources of breast cancer information for 147 (45.7%) of the respondents was the television, followed by radio 114 (35.4%). The least source of cancer information was the print media (11.5%). Only 15 (4.7%) of the respondents indicated having a family member with breast cancer. Generally, participants' breast cancer-related knowledge was below average. None of the respondents could list a single breast cancer screening method. Multiple regression analysis showed that breast cancer related knowledge (β =.220, t = 4.133, $p<0.01$) and attitude to breast related problems (β =.343, t = 6.428, $p<0.01$) were significant predictors of FAYAs breast cancer screening intentions. Correlation analysis indicated that significant linear relationships existed between FAYAs breast cancer-

related knowledge, attitude to breast related problems and breast cancer screening intentions ($p<0.01$). It is concluded that while the breast cancer awareness is high, the breast cancer-related knowledge of FAYAs in this study is low and breast cancer related knowledge and attitude predicts breast cancer screening intentions. It is recommended that FAYAs should be educated about breast cancer early to enable them make informed decisions later about breast cancer screening to enhance early detection of breast cancer.

Key words: Breast cancer, Screening intentions, Adolescents, Female, Young adults

Introduction

The etiology of breast cancer is unknown. Numerous risk factors such as genetics or family history, diet and environmental factors may, however, influence the development of this disease. There have been reports that as much as 80 to 90% of patients with breast cancer could have a cure if the cancer is detected in the early stages (Oluwatosin, 2008). To seek medical help early in the course of the disease depends on women's ability to recognise symptoms of breast cancer through routine performance of practicable screening (Okobia, Bunker, Okonofua & Osime 2006). The three screening methods commonly used for early detection of breast cancer are breast self-examination (BSE) clinical breast examination (CBE) and mammography. Clinical breast examination is the physical examination of a woman's breasts by a medical or allied health professional (Mason & White, 2008) every three years for women aged 20-40 and yearly for older women. Mammography is a form of breast x-ray. A baseline mammogram is recommended for women between 35 and 39 years of age, with subsequent mammography every one to two years for women between 40 and 49 years, and yearly after age 50 (Janz, Becker, Anderson, & Marcoux, 1989). Breast self-examination is a relatively simple, convenient, non-invasive, minimal-risk, and inexpensive method of early detection recommended for women. Women ought to begin this routine in their 20s to learn the look and feel of their healthy breast so that they may without delay report any noticeable change in their breasts to a healthcare practitioner (Mason & White, 2008). For younger women, this is often the only method that is available to them to detect abnormal changes at an early stage and even poor knowledge they would like to be taught how to do self breast examination. (Asuzu, 2007)

Even though early detection of breast cancer is clearly associated with breast cancer survival, many women still do not follow recommended screening guidelines (Regan & Durvasula, 2008). Several barriers influence women's choices regarding breast cancer screening. These factors include accessibility, cost, trust of healthcare providers, lack of transportation, lack of knowledge of cancer screening guidelines, and the underlying belief that cancer, itself, is incurable. Another factor could relate to women's low self-perceived risk of having breast cancer.

There is a significant difference in the perception of the risk and effect that such perception has on breast cancer screening between age groups (Johnson & Dickson-Swift, 2008). Older women who have a higher perception of risk are more likely to undertake regular breast cancer screening, whereas there is no correlation found between young women and perceived risk in

association with breast cancer screening (Johnson & Dickson-Swift, 2008). This could be because it is well known by women that breast cancer risk increases with age and young women do not feel that they are at risk until they reach an older age. Therefore, they see no need to undertake regular breast self-examination or other screening methods.

Indeed, research has shown that breast cancer usually develops after the age of 45 among women. Okobia, Bunker, Okonofua, and Osime, (2006) have observed that the majority of reports from Nigerian hospitals confirm the late 40s as the mean age at initial diagnosis. The age of onset of breast cancer is, however, decreasing (Gabriel & Domchek, 2010; Haggar, 2012; Aben, van Gaal, van Gils, van der Graaf & Zielhuis, 2012; Moon, Park, Oh, Jung & Shin, 2014). Adebamowo and Ajayi, (2000) in Nigeria reported 42.6 years as the peak age of breast cancer incidence with 12% of cases occurring before the age of 30 years. The majority of breast lesions or tumours in female adolescents and young adults (FAYA) are usually benign as pointed out by the findings of Umanah, Akhiwu and Ojo, (2010) who reported only a case of malignant tumour of an invasive ductal carcinoma out of eighty-four breast tumour samples tested from patients aged 10-19 years in Benin City, Nigeria.

Though rare, breast cancer in FAYA appears to be more fatal because when compared with older women, FAYAs are significantly more likely to be diagnosed with a late stage and high-grade disease (Keegan, DeRouen, Press, Kurian & Clarke, 2012). This is, especially, so since mammogram screening is not usually recommended for FAYAs as the denseness of the adolescent's breast stroma does not allow for easy interpretation of results (Neinstein, 1999), hence apparent mass usually precede diagnoses of breast cancer in this age group (Agnese, Yusuf, Wilson, Shapiro, Lehman & Burak, 2004). Also, when a suspicious breast mass is observed in early adolescent females, there is the tendency to wrongly presume that it is developmentally normal as swelling of the breasts is one of the expected physical changes associated with puberty in female (Rosen, 2001). Furthermore, a breast cancer diagnosis in FAYAs usually has great impact on future quality of life and life expectancy (Bleyer, 2007).

Studies in Nigeria (Okobia, Bunker & Okonofua, 2006) similar to those reported from Egypt and Hong Kong (Seif & Aziz,2000, Yuk,2009) have shown that most women have poor knowledge of breast cancer and its risk factors. A study to assess women's level of knowledge of breast cancer, early detection measures and warning signs done among young rural women in Southwest, Nigeria showed that the respondents lacked knowledge of vital issues about breast cancer and early detection measures (Oluwatosin & Oladepo, 2006) as 90.7% of the respondents did not know anything about the treatment of breast cancer and the early warning signs and only 6.4% identified breast self-examination as a method of detection of early breast cancer.

In a cross-section study, Opoku, Benwell and Yarney (2012) explored the breast cancer screening behaviours of 474 Ghanaian women aged 40 to 70 years in two urban settings in southern Ghana. Overall, only 2% of the women reported ever undergoing mammography screening in their lifetime, 12% reported having been examined by a health care professional once in their lifetime and about 32% of women reported ever practicing BSE in their lifetime. However, very educated Ghanaian women were more likely than the

uneducated ones to have mammography screening or to perform BSE (Opoku, Benwell & Yarney, 2012). This is in line with the findings of Asuzu, Unegbu and Akin-Odanye (2012) on Knowledge, Attitude and behaviour of University of Ibadan women towards cancer of the cervix, where academic women were more knowledgable towards cancer of the cervix than non-academic women.

Also, in a study among female secondary students in Abuja, it was reported that a high percentage knew that BSE can be used to prevent breast cancer while only a few (10.1%) actually practice BSE (Isara & Ojedokun, 2011) According to Asuzu (2007) in the study of self breast examination among undergraduate students in Ibadan, their knowledge was not sufficient and about only 25% practiced self-breast examination.

With regards to attitude towards breast cancer screening, Nguyen, Belgrave and Sholley, (2011) showed that beliefs about modesty impede participation in breast cancer screening among Vietnamese immigrants in the United States. Women who considered touching and exposure of women's breasts as morally embarrassing reported lower screening behaviours. Also, concern about embarrassment is a significant barrier to breast cancer screening uptake among women in South Africa and Uganda (Krombein & De Villiers, 2006; Elsie, Gonzaga, Francis, Michael, Rebecca, Rosemary and Zeridah, 2010). In both studies, screening procedures of CBE and mammography were considered sexually embarrassing, and this perception in turn negatively affected women's attitudes towards participation in the screening programmes. For example, women who believe that mammography screening is effective in detecting breast cancer have been found to have positive intentions towards screening uptake. Similarly, women who know that regular screening can potentially improve survival of breast cancer are most likely to undergo screening (Othman, Kiviniemi & Lally, 2012).

The pubertal stage of life is a period of rapid transformation that presents instructive opportunities that are capable of modifying health behaviours into the later stage of life. For instance, teaching adolescents how to care for their breasts is likely to promote preventative behaviours such as performing regular breast cancer screening when they get older (Ludwick & Gaczkowski, 2001). However, there is a paucity of research findings addressing young women's breast cancer-related knowledge, attitude and breast screening intentions.

Given the serious implication of a cancer diagnosis in female adolescents and young adults, it is important to assess their breast cancer-related knowledge and attitude as well as their screening intentions. Hence, this study is designed to assess the breast cancer related knowledge, attitude towards breast problem and breast cancer screening intentions of female adolescents and young adults. Though several studies have assessed the breast cancer related knowledge, attitude and practice among female adults in various settings, only a few have assessed awareness of BSE and practice of BSE among in-school adolescents but few if any has assessed the breast cancer screening intentions of female adolescents and young adults in our environment.

METHODS

Research questions

This study seeks to answer the following research questions:

1. What are the specific breast cancer related knowledge, attitude and screening

intentions of female adolescents and young adults?

2. What type of relationship exists between female adolescents and young adults' breast cancer related knowledge, attitude to breast related problem and breast cancer screening intention?
3. What is the relative contribution of breast cancer related knowledge and attitude to breast related problem on the prediction of breast cancer screening intention of female adolescents and young adults?

Research Design: This study made use of the descriptive research design of cross-sectional type that involves reporting a phenomenon as it is without manipulating any of the variables of interest.

Sampling technique: The simple random sampling technique was used in selecting the senior secondary school female students that participated in this study from different secondary schools in Ibadan.

Instruments: The self-developed instrument used for this study was pilot tested before going to the field to ascertain its reliability. The instrument has four sections. The first section elicited information about the demographic characteristics of the respondents. The second section on breast cancer-related knowledge ($\alpha = .82$) was used to assess the respondents' knowledge of the symptoms of breast cancer as well as the likely causes of the disease. The third section on attitude towards breast related problems ($\alpha = .54$) assessed what respondents response will be if they noticed a problem with their breasts. The last section on breast cancer screening intention ($\alpha = .77$) assessed respondents' plan to screen for breast cancer in the nearest future. Each of the sections used for assessment used the 5-point likert scale response format of 'I don't, know', 'Strongly disagree', 'Disagree', 'Agree' and 'Strongly agree' with scores of 0 to 4 respectively. The higher the score on each scale, the higher the breast cancer-related knowledge, positive attitude towards getting early treatment for breast related problems and intention to screen for breast cancer respectively.

Data collection: Permission to administer the questionnaire to the students was obtained from the principal of each secondary school used. Senior secondary school students from each school who were willing to participate in the study were asked to sit in a class where the questionnaire was administered and collected immediately after filling. Before administration, the purpose of the study was explained to the students and they were assured of their freedom to refuse to participate in the study without any consequence. They were encouraged to be as honest as possible as every information they give will be taken as confidential and will only be used for research purpose. Of the 350 questionnaires administered and retrieved, 322 were found suitable for data analysis. The data was collected between January and February 2015

Data analysis: Data was analysed using multiple regression analysis, Pearson product moment correlation, frequency counts and simple percentages on SPSS.

Results

Respondents' demographic characteristics

FAYAs that participated in this study were 322 senior secondary school students selected from different secondary schools in Ibadan. They had an age range of 15 to 25, with a mean of 16.12 and SD of 1.80. A good number of the respondents (N=202, %=62.7%) were Christians while 116 (36.0%) were Muslims and 4 (1.2%) belong to other religious groups. Also, 237 (73.6%)

of the respondents have heard of breast cancer before while 85 (26.4%) have not. The most popular source of cancer information for 147 (45.7%) of the respondents is the television, followed by radio for 114 (35.4%) of the respondents. Other sources of information were seminars (46, 14.3%), mother (45, 14.0%), friends (44, 13.7%), internet (41, 12.7%) and the least source of cancer information was prints (37, 11.5%). Only 15 (4.7%) of the respondents indicated having someone with breast cancer in their families while 307 (95.3%) did not have a family history of breast cancer. Not knowing someone with breast cancer is capable of making the idea of breast cancer appear vague.

Research question 1: What are the specific breast cancer-related knowledge, attitude and screening intentions of female adolescents and young adults?

Table 1A: Respondents' knowledge of signs and risk factors for breast cancer

Knowledge of signs of breast cancer	**Correct response**	**Incorrect response**	**Don't know**
Lump in the breast	152 (47.2%)	59 (18.4%)	111 (34.5%)
Discharge from the breast of a non breastfeeding mother	108 (33.5%)	96 (29.8%)	118 (36.6%)
Dimpling of the breast	134 (41.6%)	74 (23.0%)	114 (35.4%)
Inversion/pulling in of nipple	135 (42.0%)	96 (29.8%)	91 (28.3%)
Lump under the armpit	118 (36.6%)	99 (30.7%)	105 (32.6%)
Risk factors for breast cancer			
Aging	72 (22.4%)	124 (38.5%)	126 (39.1%)
When a person in the family has breast cancer	84 (26.0%)	164 (50.9%)	74 (23.0%)
Smoking	141 (43.8%)	104 (32.3%)	77 (23.9%)
Drinking alcoholic drinks	116 (36.0%)	130 (40.0%)	76 (23.6%)
Putting things like phone, money, and keys in the bra	56 (17.3%)	242 (75.2%)	24 (7.5%)
Having larger breasts	190 (59.0%)	48 (14.9%)	84 (26.1%)
Excess exposure to x-rays and other types of radiation	78 (24.2%)	130 (40.3%)	113 (35.1%)
Poor hygiene	110 (34.1%)	144 (44.7%)	68 (21.1%)
Only women have breast cancer	120 (37.3%)	148 (45.9%)	54 (16.8%)

Table 1A shows that knowledge about signs of and risk for breast cancer was well below average. Majority of the respondents did not know the basic signs of breast cancer such as lump in the breast (52.9%) or under the armpit (63.3%), discharge from the breast of a non-breastfeeding mother (66.4%). Also most of the respondents were oblivious of the key risk factors for breast cancer such as ageing (77.6%) and family history of the disease (73.9%).

Table 1B: Female adolescents and young adults' attitude towards breast-related problems

Attitude to breast-related problems If I have a breast related problem I will ...	**Yes (Strongly agree/agree)**	**No (Strongly disagree/disagree)**	**Don't know**
be scared	232 (72.1%)	48 (15.0%)	42 (13.0%)
consult a doctor immediately	264 (82.0%)	39 (12.1%)	19 (5.9%)
allow a male doctor to examine your breasts	92 (28.5%)	175 (54.4%)	55 (17.1%)
go to a prayer house	119 (37.0%)	160 (49.6%)	43 (13.4%)
go to a traditional healer	60 (18.7%)	201 (62.4%)	61 (18.9%)
allow the breast to be surgically removed if necessary	105 (32.6%)	152 (47.2%)	65 (20.2%)

Table 1B shows that majority of the respondents will be scared (72.1%) if they noticed a problem with their breast and will consult a doctor immediately. However, only 28.5% of the female adolescents and young adults will allow a male doctor to examine their breasts and only 32.6% will allow the breast to be surgically removed. This indicates that though respondents are willing to see a doctor if they noticed any problem with their breasts, the thought that a male doctor will attend to them or the thought that they may be asked to have a surgery could hinder them from seeing the doctor or commencing treatment on time.

Table 1C: Female adolescents and young adults breast cancer screening intention

Breast Cancer Screening intention	**Yes (Strongly agree/agree)**	**No (Strongly disagree/disagree)**	**Don't know**
When I am older, I will screen for breast cancer regularly	178 (55.3%)	92 (28.5%)	52 (16.2%)
When I am older, I will continually seek knowledge about breast cancer screening	216 (67.1%)	72 (22.4%)	34 (10.5%)

Table 1c shows that more than half of the female adolescents have intention to screen (55.3%) for breast cancer when they are older and to seek more knowledge about breast cancer screening (67.1%).

Research Question 2: What type of relationship exists between female adolescents and young adults' breast cancer related knowledge, attitude to breast related problem and breast cancer screening intention?

Table 2: Correlation matrix of the relationship between adolescents' breast cancer related knowledge, attitude and breast screening intention

		1	2	3
Breast cancer screening intentions (1)	Pearson Correlation	1		
	Sig. (2-tailed)			
Attitude to breast related problem (2)	Pearson Correlation	.426**	1	
	Sig. (2-tailed)	.000		
Breast cancer-related knowledge (3)	Pearson Correlation	.350**	.379**	1
	Sig. (2-tailed)	.000	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows that a significant linear relationship exists between respondents' attitude to breast related problems and their breast screening intentions ($p<0.01$) as well as between breast cancer-related knowledge and breast cancer screening intentions ($p<0.01$). This implies that as breast cancer-related knowledge and attitude favouring giving prompt medical attention to breast related problems increase, the breast cancer screening increase intentions also.

Research Question 3: What is the relative contribution of breast cancer related knowledge and attitude to breast related problem to the prediction of breast cancer screening intention of female adolescents and young adults.

Table 3: Relative contribution of breast cancer-related knowledge and attitude to breast related problem on the prediction of breast cancer screening intentions

Model	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.863	.441		1.958	.051
Breast cancer-related knowledge	.027	.006	.220	4.133	.000
Attitude to breast related problem	.182	.028	.343	6.428	.000

a. Dependent Variable: Breast cancer screening intentions

Results on Table 3 indicate that the two independent variables (breast cancer related knowledge and attitude to breast related problems) were potent predictors of breast cancer screening intentions. The most potent predictor was attitude (β =.343, t = 6.428, $p<0.01$) followed by knowledge (β =.220, t = 4.133, $p<0.01$).

Discussion

A good number of the female adolescents and young adults (73.6%) heard of breast cancer before. The most popular source of cancer information for 147 (45.7%) of the respondents is the television, followed by radio for 114 (35.4%) of the respondents. Other sources of information were seminars (14.3%), mother (14.0%), friends (13.7%), internet (12.7%) and the least source of cancer information was prints (37, 11.5%). The least source of breast cancer-related information for the FAYAs in this study is the print media (37, 11.5%) which could mean one of two things. Firstly, this could imply that the reading culture of the adolescents in our environment is very poor hence, the information on the print media may not appeal to them. Secondly, it could mean that there are little or no available breast cancer-related information in the print media for adolescents and young adults to read. A similar study (Alharbi, Alshammari, Almutairi, Makboul, & El-Shazly, 2012) among female teachers in Kuwaiti reported that 67.5% of the participants indicated that they had information about breast cancer and their sources of information were mainly health professionals/workers (98.2%), friends/ neighbors (83.5%), TV/Radio (76.0%) and printed materials (60.2%). The difference in the sources of breast cancer information between the adolescents in our study and teachers in the study of Alharbi et al (2012) is instructive in designing age and perhaps career appropriate interventions to promote

access to breast cancer information.

Research question one provides answers to the specific breast cancer-related knowledge, attitude and screening intentions of female adolescents and young adults. The findings of this study has shown that though 73.6% of the respondents have heard of breast cancer before, the breast cancer related knowledge amongst female adolescents and young adults is below average. A good number of them were unaware of the basic signs of and risk factors for breast cancer. Response to some items assessing breast cancer related knowledge showed that less than 50% of the FAYAs are aware that lump in the breast (47.2%), discharge from the breast of a non-breastfeeding mother (33.5%), lump under the armpit (36.6%), dimpling of the breast (41.6%) or inverted nipples (42.0%) are signs of breast cancer. Also, less than half of the respondents know that ageing (22.4%), a family history of breast cancer (26%), smoking (43.8%), taking alcohol (36.0%) and excessive exposure to x-rays (24.3%) are risk factors for breast cancer. Some studies have shown that the incidence of breast cancer is increased with increasing age of the patient, smoking, obesity, physical inactivity, radiation exposure, intake of alcohol and high fat diet (Odusanya, 20001; Adebamowo & Ajayi, 2000). Furthermore, some of the respondents erroneously believe that only women have breast cancer (45.9%) and that putting things in the bra (75.2%) and poor hygiene (44.7%) are the risk factors for breast cancer. This finding is similar to that found in a study of women in Osogbo, where less than 50% could identify breast cancer related symptoms or risk factors (Aderounmu, Egbewale, Ojofeitimi, Fadiora, Oguntola, Asekun-Olarinmoye, Adeoti & Akanbi, 2006). Isara and Ojedokun (2011) also reported poor knowledge of breast cancer among a larger proportion of the two hundred and eighty-seven female secondary school students in their study.

The participants' attitude towards breast related problem was average. Though 232 (72.1%) of the respondents indicated that they will be scared if they noticed a problem with their breasts, 264 (82%) agreed that they will consult a doctor immediately if they noticed a problem with their breasts. However, only 92 (28.5%) of the respondents agreed that they will allow a male doctor to examine their breasts and only 105 (32.6%) of the respondents agreed that they will allow their breasts to be surgically removed if necessary. Participants' reluctance to allow a male doctor examine their breasts have been reported in other studies even among older women (Saint-Germain & Longman, 1993; Dibble, Vanoni & Miaskowski, 1997; Kiguli-Malwadde, Mubuuke, Businge, Kawooya, Nakatudde, Byanyima & Muyinda, 2010;). The implication of this for health organisations is to ensure that more female doctors/nurses are assigned to give clinical breast examinations to patients or those that come for screening. It is, however, important to educate FAYAs about breast cancer, the need to (as well as how to) detect the disease early and adhere to recommended treatment regime as mastectomy or the removal of the affected breast is one of the cardinal treatments for breast cancer.

The intention to screen for breast cancer among the FAYAs in this study was slightly above average. Similar moderate intention to adhere to screening recommendations was reported by Diviani and Schulz, (2014). While 55.3% of the respondents agreed that they will screen for breast cancer regularly when they are older, 60% of the respondents agree that they will

seek knowledge about breast cancer screening when they get older. The theory of reasoned action proposes that attitude and social normative influence of significant others like parents especially the mother could influence FAYAs breast cancer screening intention (Dibble et al, 1997). Hence, interventions to increase screening intentions among female adolescents and young adults should target attitudinal change and should incorporate the assistance of the significant others like parents, teachers and peers.

In research question two, the significant linear relationship found between respondents' breast cancer-related knowledge, their attitude to breast related problems and breast cancer screening intentions among the participants in this study implies that as breast cancer-related knowledge and attitude favouring giving prompt medical attention to breast related problems increase, then the breast cancer screening intentions of the FAYAs also increases. This finding is similar to that reported by (Asuzu, 2007; Diviani and Schulz 2014) in their study of 639 Ticino residents of Switzerland in which cancer literacy was positively associated with cancer information seeking, participation to cancer screening, and intention to undergo cancer screening. Also, the knowledge of breast self examination has been found to be significantly associated with the practice of breast self examination (Isara & Ojedokun, 2011). In a study of Iranian-American women, personal attitude was shown to have an independent significant effect on future intention to screen for breast cancer (Kobeissi, Samari, Telesca, Esfandiari & Galal, 2014). It has been observed that multifaceted, culturally sensitive interventions can enhance beliefs and personal attitudes towards breast cancer (Hall, Hall, Pfriemer, Wimberley & Jones. 2007, Kim & Menon. 2009).

The findings from research question three indicated that the breast cancer related knowledge and attitude to breast related problems were potent predictors of breast cancer screening intentions of the participants.Simi, Yadollahie & Habibzadeh. (2009) reported in their study that attitudes alone explained the self-breast examination behaviour of 43% of women in their study. In the current study, 72.1% of the respondents indicate they will be scared if they noticed a problem with their breasts. Such fear could serve as a deterrent to screening even as observed by Jarvandi, Montazeri, Harirchi & Kazemnejad. (2002) among Iranian teachers. Encouraging screening intentions and behaviours will, therefore, be more effective if it is presented in such a way as to reduce fear and shame (Sabih, Taher, El Jabari, Hajat, Adib & Harrison. 2012).

Conclusion and recommendations

The result from this study shows a general poor breast cancer-related knowledge among in-school adolescents and young adults in Ibadan. Though the research participants had high breast cancer screening intention, majority of them would not want their breasts be examined by male doctors or nurses. It is recommended that breast health education be incorporated into the health education curriculum in secondary schools to compel students to read about breast cancer in order to be better informed about breast cancer signs, risk factors and prevention or screening methods.

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