KNOWLEDGE, ATTITUDES AND PRACTICES TOWARDS BREAST CANCER AMONG WOMEN ATTENDING OBSTETERIC AND GYNAECOLOGY CLINIC AT NDOLA TEACHING HOSPITAL IN NDOLA, ZAMBIA.

Perspective

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Citation style for this article: Mulenga K, Bwalya M,, Schilima A. Knowledge, Attitudes And Practices Towards Breast Cancer Among Women Attending Obsteteric And Gynaecology Clinic At Ndola Teaching Hospital In Ndola, Zambia.. Health Press Zambia Bull. 2018;2(8); pp 7-15.

Breast cancer is the second most common cancer in the world accounting to 570,000 deaths in 2015. Studies have shown that in developing nations it is diagnosed in its late stages hence contributing to high fatality rates. This is because of late presentation to the hospital that is usually as a result of low knowledge, which affects people's attitudes and practices. Hence, this study aimed at determining the knowledge, attitude and practice of women attending gynecological clinic at Ndola Teaching hospital. The findings of the study will help devise sensitization programs aimed at reducing the mortality burden secondary to breast cancer. A cross sectional study design was employed. A standardized questionnaire was used on 303 participants systematically randomly selected. Data was entered and analyzed using SPSS V 20.0. Pearson-chi-square correlation was used for the associations at 95% CI. A total of 300 (99.0%) out of 303 persons approached to take part in the study actually participated. The study revealed that 70.7 % (212) of our participants had inadequate knowledge. Most (88.7%) of the respondents had negative attitude towards breast cancer and breast self-examination. Altogether, 84% (253) of the participants had poor practice. Significant associations were observed between attitude and education (p=0.008), occupation (p<0.001) and relationship status (p=0.019).

These findings show that there is an urgent need to educate our women on breast cancer through information, communication and educational programs.

Introduction

Of 184 countries in the world, breast cancer is the most diagnosed form of cancer in 140 countries [1]. It is the most common cancer in women in both developed and developing countries, and it was estimated that over 508 000 women died in 2011[2]. In 2015 the mortality rate increased to 570,000. It has been estimated that by the year 2020, approximately 70% of newer cases will occur among individuals in developing countries and population groups with a substantial amount been secondary to breast malignancy [3-5]. There has been little information on the prevalence of breast cancer in women in sub-Saharan Africa and this has been attributed to lack of national cancer registry [6]. From the available literature, a rise in the incidence of breast cancer has been observed and this has been attributed to the changes in lifestyles, especially in those of African women. In addition, African nations are typically poorer than western, industrialised nations, and this is likely to be a contributing factor to the limited availability of medical technology for cancer screening and treatment. Socioeconomic status is also associated with a variety of lifestyles and dietary practices that will affect breast cancer risk [7]. Studies have shown that in developing nations breast cancer is usually diagnosed in late stages compared to developed nations hence contributing to high fatality rates [8-11]. Very few studies have been done to determine the knowledge of patients regarding breast cancer as most studies focus on breast self-examination. However, the few studies that have been in sub Saharan Africa have shown that there is low knowledge on breast cancer. The low knowledge affects people's attitudes and practices. Patients' knowledge is related to women's knowledge and beliefs about breast cancer and its management [5, 12-15]. Studies done in Zambia revealed that women had a considerable knowledge on breast cancer [16-17]. No such study has been done in Ndola. Hence this study aimed at determining the knowledge, attitude and practice of women attending gynecological clinic at Ndola Teaching hospital. The findings of this study will help formulate better policies that may enhance the sensitisation of women for a better management and reduction mortality.

Methodology

A cross sectional study was conducted at Ndola Teaching Hospital in Ndola, Zambia. Ndola Teaching Hospital is the second highest referral Hospital in the country and it covers Copperbelt, Luapula, and Northwestern Provinces of Zambia. The calculated sample size was 275 participants. Further adjustment for non-

response rate at an estimate of 10% was made. This then came to total 303 women participants. The study targeted the women attending the obstetrics and gynecology clinic and was done over a period of 12 weeks. Systematic random sampling technique of 1⁄k was used was used to select the study participants, where k was taken as 3. A standardised questionnaire was used to determine the knowledge, attitude and practice of women towards breast cancer at Ndola Teaching Hospital. The questions were asked in a language that the participants were most comfortable with. The first part had demographic information about the participants including their age, level of education, marital status etc. Section B contained questions on the knowledge, attitude and practices toward breast cancer. Data was entered and analysed using SPSS V20. SPSS V20 was used for descriptive statistics. Pearson Chi-square correlation was used to evaluate the relationship between socio-demographics and knowledge, attitude and practice at the 5% significance level. Approval to conduct this study was obtained from The Tropical Disease Research Centre (TDRC) Ethical Review Committee and Ndola Teaching Hospital. The objectives of the study were clearly explained and written consent was obtained before each interview. Only those that consented participated in this study and confidentiality was maintained.

Methods

A total number of 26 questions were used to assess the knowledge levels. Every correct answer was awarded a 1, whereas a wrong answer and no answer were awarded a 0. This gave a total mark of 26. Using the blooms grading system, knowledge was divided into inadequate knowledge and adequate knowledge. The cut of point in our study was modified from 60% to 50% with those scoring less than 50% having inadequate knowledge and those scoring more than 50% having adequate knowledge. There were 7 attitude indictors that were used to evaluate respondents. Every positive attitude was equal to 1, and every negative attitude was equal to 0, those who scored > 5 had positive attitude, while those who scored

Results

Out of a sample size of 303, 300 women responded, giving a response rate of 99.0%. Out of the 300 participants, the majority 136 (45.3%) were in the age range 21-30 years and only 10.3% (31) were aged below 20 years. Of these only 40.7% (122) were graduates and 28 % (83) were employed. Almost all 98% (294) of the participants were Christians with a majority (61%)been married as shown in Table 1.

Table 1: Socio-demographics Characteristics

		Frequency (n)	Percentage (%)
Age(years)	<20 21-30 31-40 >40 Total	31 136 95 38 300	10.3 45.3 31.7 12.3 100
Education level	Non graduate Graduate Total	178 122 300	59.3 40.7 100
Occupation	Unemployed Employed Total	216 83 300	72.0 28.0 100
Relationship status	Married Single Total	183 117 300	61.0 39.0 100
Religion	Christian Non-Christian Total	294 6 300	98.0 2.0 100

Altogether, 70.7 % (212) of our participants had inadequate knowledge. Majority (67.3%) of the respondents did not know what breast cancer is. About half (52.3%) of the participants did not know how breast cancer is acquired.

However, 69.0% of participants knew that breast cancer is curable. Some of the risk factors that were identified included smoking with 62.0% of the respondents, and a positive family history with 64.3% of the respondents. Some of the signs and symptoms which were identified included lump in the breast with 65.3%, weight loss with 58.3%, and swelling of the breast with 70.7% of the respondents. Some of the methods used in screening and diagnosis of breast cancer which were identified included ultrasound with 53.3%, and examination by a doctor with 84.0% of the respondents. Most (72.0%) people did not know how to perform self-breast examination. The recommended age to start self-breast examination was not known by majority (52.0%), as well as the recommended age to start mammography (95.0%) as shown in Table 2

Table 2: Knowledge, attitudes and practices.

		Frequency(n)	Percentage (%)
What is breast cancer	Right Wrong Total	98 202 300	32.7 67.3 100
How is breast cancer acquired?	Right Wrong Total	143 157 300	47.7 52.3 100
Is breast cancer curable?	Right Wrong Total	207 93 300	69.0 31.0 100
Risk factors identified	smoking Family history	186 193	62.0 64.3
Signs/Symptoms identified	Lump in the breast Weight loss Swelling of the breast	196 175 212	65.3 58.3 70.7
Methods of Screening/ diagnosis identified	Ultrasound Examination by doctor(CBE)	160 252	53.3 84.0
Knowledge on how to perform self-breast examination(SBE)	Didn't know Know	216 84	72.0 28.0
Recommended age for SBE	Didn't know Know	156 144	52.0 48.0
Recommended age for mammography	Didn't know know Total	285 15 300	95.0 5.0 100

Generally, most (88.7%) women had negative attitude towards breast cancer and breast self-examination. The majority (84%) of the participants had poor practice.

Table 3. shows the association between socio-demographic characteristics and knowledge. The only statistically significant association was between the education level and knowledge (p value of <0.001).

Table 3: Associations between knowledge and the socio-demographic characteristics.

		Good knowledge n (%)	Poor knowledge n (%)	Total	P-value
Age(years)	<20 21-30 31-40 >40 Total	5(16.1) 48(35.3) 22(23.2) 13(34.2) 88(29.3	26(83.9) 88(64.7) 73(76.8) 25(65.8) 212(70.7)	31 136 95 38 300	0.068
Education level	Non graduate Graduate Total	141(79.2) 71(58.2) 212(70.7)	37(20.8) 51(41.8) 88(29.3)	178 122 300	0.001
Occupation	Unemployed Employed Total	57(26.4) 31(36.9) 88(29.3)	159(73.6) 53(63.1) 212(70.7)	216 84 300	0.072
Relationship status	Married Single Total	53(29.0) 35(29.9) 88(29.3)	130(71.0) 82(70.1) 212(70.7)	183 117 300	0.866
Religion	Christian Non-Christian Total	87(29.6) 1(16.7) 88(29.3)	207(70.4) 5(83.3) 212(70.7)	294 6 300	0.491

Table 4 shows associations between socio-demographic characteristics and attitude. Significant associations were observed between education (p=0.008), occupation (p<0.001) and relationship status (p=0.019) on one hand and attitude on the other

Table 4: Associations between attitude and the socio-demographic characteristics

		Positive attitude n (%)	Negative attitude n(%)	Total	P-value
Age(years)	<20 21-30 31-40 >40 Total	1(3.2) 15(11) 12(12.6) 6(15.8) 34(11.3)	30(96.8) 121(89) 83(87.4) 32(84.2) 266(88.7)	31 136 95 38 300	0.399
Education level	Non graduate Graduate Total	13(7.3) 21(17.2) 34(11.3)	165(92.7) 101(82.8) 266(88.7)	178 122 300	0.008
Occupation	Unemployed Employed Total	15(6.9) 19(22.6) 34(11.3)	201(93.1) 65(77.4) 266(88.7)	216 84 300	0.001
Relationship status	Married Single Total	27(14.8) 7(6.0) 34(11.3)	156(85.2) 110(94.0) 266(88.7)	183 117 300	0.019
Religion	Christian Non-Christian Total	34(11.6) 0(0) 34(11.3)	260(88.4) 6(100) 266(88.7)	294 6 300	0.376

Table 5 shows that there were no significant associations between any of the socio-demographic characteristics and practice. The majority of the participants regardless of their age, education level, occupation, relationship status had a negative attitude.

Table 5: Association between socio-demographic characteristics

		Good practice n (%)	Poor practice n (%)	Total	P-value
Age(years)	<20 21-30 31-40 >40 Total	3(9.7) 28(20.6) 12(12.6) 4(10.5) 47(15.7)	28(90.3) 108(79.4) 83(87.4) 34(89.5) 253(84.3)	31 136 95 38 300	0.190
Education level	Non graduate Graduate Total	23(12.9) 24(19.7) 47(15.7)	155(87.1) 98(80.3) 253(84.3)	178 122 300	0.114
Occupation	Unemployed Employed Total	34(15.7) 13(15.5) 47(15.7)	182(84.3) 71(84.5) 253(84.3)	216 84 300	0.955
Relationship status	Married Single Total	31(16.9) 16(13.7) 47(15.7)	152(83.1) 101(86.3) 253(84.3)	183 117 300	0.448
Religion	Christian Non-Christian Total	47(16) 0(0) 47(15.7)	247(84.0) 6(100) 253(84.3)	294 6 300	0.286

Discussion

The study comprised of 300 participants of which most of the participants (70.7%) had poor knowledge. These results are similar to those of a study that was conducted in Solwezi rural district and Lusaka urban district of Zambia which showed that women had poor knowledge of breast cancer [17]. Lack of adequate knowledge can negatively impact women's education on screening practices and affect their attitude towards adoption of early detection practices [14]. Education level was significantly associated with knowledge level. This showed that those who had reached tertiary educational level generally had good knowledge, and these findings confirm what was found in a similar study done on primary health care nurses [18] which suggested that there is an association between high educational levels and good knowledge levels. Another study done in Nigeria showed that professional jobs significantly affect the level of knowledge on breast cancer [19]. The current study revealed a general negative attitude towards breast cancer as 88.7% had a negative attitude towards breast cancer. This finding is congruent with other studies that realised a negative attitude. The negative attitude was attributed to the myths that women and the community at large have on breast cancer [20-22]. In our study, this can be attributed to the poor knowledge that our participants portrayed. The current study also found that the majority of women had poor practice. This is in line with other studies were most women neither practice self-breast examination nor go to the health care providers for a clinical examination. Just like in other studies, this finding in our study can be attributed to lack of knowledge as about 72.0% of the respondents did not know how to perform self- breast examination [23-25]. There was no significant association between practice and the social demographic characteristics a finding which is different from a study done by Ramson et al where a significant association was found between practice and level of knowledge [25].

Conclusion

The study showed that the majority of women had poor knowledge, negative attitude and poor practice irrespective of their socio-economic status. There is an urgent need to educate our women on breast cancer through information, communication and educational programs.

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