Awareness of breast cancer among females with breast diseases

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ABSTRACT

Introduction: Breast cancer is the commonest cancer among females. Women need to be aware about the clinical symptoms and course of the disease to increase the chances of early detection of breast cancer and thereby to reduce mortality due to it.

Objective: To assess the knowledge of breast cancer among females with breast diseases.

Method: All patients seeking treatment for a breast disease during a period of two years from two surgical units were included in the study. A pre-tested, structured, interviewer administered questionnaire was used to collect data on the knowledge of breast cancer. The participants were inquired about the awareness, symptoms, risk factors, early detection, modes of spread and treatment of breast cancer.

Results: Out of 126 patients included in the study 111 (88%) had heard or read about breast cancer. The print and electronic media were the leading sources of information. Breast lump was the best known symptom. The most known risk factor was the positive family history. The majority (77.7%) knew that the early detection of breast cancer could increase the chances of cure. Although 69.8% of the participants knew that breast cancer can spread, the exact modes of spread of breast cancer were not well known. Only 8.7% did not know about the kind of therapy available for breast cancer. The knowledge of breast cancer declined with the decrease in the educational level ($p < 0.05$).

Conclusions: A satisfactory knowledge was present among the females participated. The future breast cancer awareness programmes need to emphasize on addressing the women with lower educational standards.

Introduction

Breast cancer is the commonest cancer among Sri Lankan women and women world over ^{1,2}. According to the most recent statistics for Sri Lanka, the incidence of breast cancer in the female population was 9.82 per 100,000 population in the year 1995. The estimated life-time risk was 1.35%. The commonest age group affected was 40-49 years. Almost half (49.7%) of the affected were less than 50 years of age ².

In Sri Lanka, a higher proportion of younger females are affected compared to the rest of the world ³. Most of the patients are detected at an advanced stage of the cancer ⁴. This lowers the 5 years survival and limits the opportunity for modern therapeutic modalities which are designed to retain the cosmetic outlook.

There is no national breast cancer screening programme in Sri Lanka. However, information on breast cancer is available to the public on

print and electronic media. Well Women Clinics are another source of information on breast cancer as the healthcare workers are expected to give information on such health issues in addition to screening women for diabetes mellitus, hypertension, cervical carcinoma and breast carcinoma.

The aim of this study was to assess the knowledge of breast cancer among females with breast disease in a sample of females in Sri Lanka. This study may provide useful information in designing future breast cancer awareness programmes.

Method

The present study was carried out at the Teaching Hospital Karapitiya, Galle. All patients seeking treatment for a breast disease from

August 2005 to March 2007 at the Professorial Surgical Unit and one other surgical unit were included in the study. The instrument used for data collection was an interviewer administered structured questionnaire developed by the authors. The questionnaire was translated into Sinhala and pre-tested. The questionnaire consisted of questions designed to assess the awareness and knowledge about symptoms, common risk factors (positive family history, exposure to radiation and nulliparity), early detection, modes of spread and treatment of breast cancer. The association between the knowledge and the educational level of the participants was analysed using Chi square test.

Pre-intern doctors interviewed the patients during their stay in the ward. Informed written consent was obtained from each patient prior to the interview. Ethical approval for the study was granted by the Ethical Review Committee of the Faculty of Medicine, Galle.

Results

Hundred and twenty six patients (126) with an age range of 13 to 75 years were included in the study. There were 52 (41.3%) married women. Only 3 (2.4%) patients stated having no formal education while the majority (73.8%) had either General Certificate of Education Ordinary Level (G.C.E. O/L) or a higher standard of education.

This study sample included 63 patients with a histopathological diagnosis of a benign breast lesion and 30 patients with breast carcinoma. The histopathological diagnosis was not available for the other patients. Most of the patients included in the study (51.5%) were self referrals. There were 111 (88.1%) patients who had recognized symptoms of breast disease incidentally while five patients have found lumps in the breast following self breast examination. Three patients had their breast lumps detected at medical examinations.

Awareness of breast cancer

There were 111 patients (88%) who had heard or read something about breast cancer. Out of the total number of patients 78 (61.9%) and 75 (59.5%) had stated print media and electronic

media respectively as sources of information on breast cancer. A friend or a relative had been the source of information in 38 (30.1%) patients. Forty two patients (33.3%) had received information from healthcare personnel.

Symptoms

Breast lump was the best known symptom and it was admitted by 94 (74.6%) patients. Fifty two patients (41.2%) knew that nipple discharge is a symptom of breast cancer. The least known symptom was ulceration of the skin over the breast, which was known to 12.6 % of the participants.

Risk factors

Of the subjects, 42.8% knew that a positive family history is a risk factor and it is the most known among the risk factors. Thirty (23.8%) patients believed that the use of oral contraceptive pills is associated with breast cancer. Nulliparity and exposure to radiation were stated as risk factors by 27 (21.4%) and 17 (13.49%) patients, respectively. The least known risk factor was early menarche which was known only to two patients (1.5%).

Early detection of breast cancer

Out of the total number of participants, 98 (77.7%) knew that the early detection of breast cancer could increase the chances of cure. Only 45 patients (35.7%) had heard about self breast examination. However, only 5 (3.9%) patients declared that they practiced it regularly. There were 15 (11.9%) patients who practiced self breast examination, but not regularly.

Spread of cancer

There were 88 (69.8%) patients who knew that breast cancer can spread to the other sites of the body. Most of them did not know how it occurs (46.8%). Twenty two patients (17.4%) knew that breast cancer spreads via blood and 6 (4.7%) knew that lymphatics were a mode of spread.

Treatment of breast cancer

Surgery as a treatment for breast cancer was known to 97 (76.9%). Radiotherapy as a mode of therapy was known to 60 patients (47.6%). Only 32.5% knew about chemotherapy. Eleven patients (8.7%) did not have any idea about what kind of therapy was available for breast cancer.

All aspects of knowledge assessed in this study except nulliparity as a risk factor had a significant association with the educational standards ($p < 0.05$). The knowledge declined with the decrease in the educational standards (Table 1).

Table 1 - The distribution of knowledge about the factors assessed according to the level of education.

Factors assessed	Higher education (n=8)	GCE Advanced Level (n=49)	GCE Ordinary Level (n=36)	Grade 5-10 (n=21)	Grade 1-4 (n=9)	No education (n=3)
	n(%)	n(%)	n(%)	n(%)	n(%)	n(%)
Awareness about breast cancer*	8(100)	41(83.6)	22(61.1)	11(52.3)	4(44.4)	2(66.6)
Knowledge on symptoms						
Breast lump*	8(100.0)	38(77.6)	32(88.9)	11(52.4)	3(33.3)	2(66.7)
Ulceration*	3(37.5)	5(10.2)	3(8.3)	2(9.5)	1(11.1)	2(66.7)
Nipple discharge*	5(62.5)	23(46.9)	17(47.2)	6(28.6)	0(0.0)	1(33.3)
Change in shape*	4(50.0)	9(18.4)	8(22.2)	1(4.8)	0(0.0)	0(0.0)
Pain*	5(62.5)	8(16.3)	7(19.4)	2(9.5)	0(0.0)	0(0.0)
Knowledge on risk factors						
Positive family history*	5(62.5)	23(46.9)	19(52.7)	5(23.8)	1(11.1)	0(0.0)
Exposure to radiation*	5(62.5)	10(20.4)	4(11.1)	0(0.0)	0(0.0)	0(0.0)
Nulliparity	3(37.5)	15(30.6)	7(19.4)	2(9.5)	0(0.0)	0(0.0)
Knowledge on treatment						
Drugs*	5(62.5)	19(38.7)	9(25.0)	5(23.8)	2(22.0)	1(33.3)
Surgery*	7(87.5)	43(87.0)	31(86.1)	11(52.3)	3(33.3)	3(100)
Radiotherapy*	7(87.5)	26(53.0)	16(44.4)	8(38.0)	3(33.3)	0(0.0)
Knowledge on						
Spread of cancer*	8(100)	41(83.6)	22(61.1)	11(52.3)	4(44.4)	2(66.6)
Early detection*	7(87.5)	44(89.7)	29(80.5)	13(61.9)	4(44.4)	1(33.3)
Self breast examination*	7(87.5)	14(28.50)	13(36.1)	7(33.3)	3(33.3)	1(33.3)

*Association was significant at $p < 0.05$

Discussion

Formal education provides an advantage in the understanding of various health issues¹. This study reveals that the majority seeking treatment for breast cancer in the study sample had a minimum of G.C.E. O/L as an educational qualification. There were only three patients who had no formal education. This is a reflection of the high literacy rate in Sri Lanka. It was 89.7% for females in the Year 2001⁵. Galle district which is served by the Teaching Hospital, where the study was conducted had a literacy rate of 91.5% for females in the same year which was higher compared to the rate for the whole country⁵.

This study reveals that the print and electronic media were the leading source of information on breast cancer for the patients included in our study. The print media which was one of the sources of information for most of the patients (61.9%) in the sample can be explained by the high literacy rate. A health personnel as a source of information was admitted by only 33.3% of patients. Friends and relations has been the source for 30.1% of patients. The role played by healthcare personnel in educating women about breast cancer cannot be claimed unsatisfactory but can be improved.

A high proportion of patients (88%) were aware of breast cancer and a 77.7% were aware that early detection of cancer increases the chances of cure. The possibility of breast cancer spreading to other sites of the body was known to 69.8%. Therefore, a high proportion of patients in the study had a fair knowledge about breast cancer.

Self referral being the commonest among the referral methods, it is consistent with the satisfactory knowledge of the population studied. However, other than a positive family history, the risk factors of breast cancer were not very well known. A study done in Ireland had shown very much similar results with regard to the awareness of breast cancer, leading sources of information and risk factors⁶.

The knowledge about self breast examination among the study population was poor compared to the others factors assessed. Most women in the study population had referred themselves to the hospital following to accidental finding of a breast lump.

Although breast self-examination is often advocated as a non-invasive screening test, most women do not regularly perform it. A large study conducted over 10 years showed that a formal programme of teaching breast self-examination has no effect on breast cancer mortality but may produce a small reduction in overall mortality⁷. A Cochrane review concluded that breast self-examination has no beneficial effect and actually increase the number of biopsies performed⁸. Therefore, some authors do not recommend regular self breast examination.

The National Health Service (NHS), United Kingdom emphasises the importance of "Breast Awareness" which is about encouraging women to become more aware of their bodies generally and to get to know their own breasts. They emphasize that there is no scientific evidence to show that a formally taught, ritual self-examination performed at the same time each month, reduces the death rate from breast cancer or is more effective than breast awareness⁹.

NHS Breast Screening Programme and Cancer Research UK, sets out a five- point plan for women¹⁰.

1. Know what is normal for you.
2. Look and feel.
3. Know what changes to look for.
4. Report any changes without delay.
5. Attend for breast screening if aged 50 or over.

The last step is not applicable in Sri Lanka at the moment as we are yet to set up a National Breast Cancer Screening Programme. However, to be "breast aware" women need to know the importance of it. Therefore, it is essential to have a satisfactory knowledge of breast cancer.

Conclusions

A satisfactory knowledge was present among the females participated. The decrease in the knowledge of breast cancer with the decrease in the educational level emphasizes the need to strengthen the public awareness programmes concentrating more on the women with a lower educational background.

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