

Awareness on Breast Cancer among the Women of Reproductive Age

Shahanaz Chowdhury; M.P.H¹, Shaila Sultana; F.C.P.S²

¹ Department of Community Medicine, Bangladesh Institute of Health Science, Dhaka, Bangladesh

² Department of OBS & GYN, Bangladesh Medical College and Hospital, Dhaka, Bangladesh

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Abstract

Objective: To assess the level of awareness on breast cancer among women of reproductive age.

Materials and methods: A cross-sectional descriptive study was conducted in OPD of Dhaka Medical College Hospital among the 175 respondents by face to face interview using pretested semi structured questionnaire.

Results: One forth (23%) aged 21-25 years, mostly Muslim (86.3%), housewives (72.57%), had children (81.05%) and live in urban (69%) area. One third of them were illiterate and married at 16-20 years. Slightly less than half of their family income was taka 4500 to 5500. Six of 10 respondents (64%) knew that it was common cancer in women and almost all (94.29%) mentioned that breast cancer did not occur in old age. In addition half of them said that it was not inherited, signs and symptoms of breast cancer was spontaneous clear or bloody discharge from nipple often associated with a lump (61.14%), and it could not be cured (54.3%). Majority of them (78.9%) did not know that early diagnosis improves treatment outcome and the risk factor of breast cancer (65.14%). Half of them (57.5%) had knowledge that clinical breast examination as screening method of breast cancer but vast majority did not practice clinical breast examination. Only 16.67% of the respondents did BSE regularly and among them 83.33% did not know the best time for breast self examination. Practice breast feeding was universal among them but for less than 6 months.

Conclusion: The study found that women were not so much aware regarding breast cancer and also preventive measures, risk factors so on. So for better awareness, campaign and counseling program from both Government and NGOs is needed.

Keywords: Breast Cancer, Breast self Examination, Clinical Breast examination

Introduction

Breast cancer is an important health problem of women between the age of 40 and 50. Most cancers of the breast occur in the duct of the milk-secreting gland, while some originate at the gland itself. Early

sign is usually the appearance of a lump in the breast that slowly enlarges with passage of time. Seeking immediate medical advice is recommended should these signs is detected (1). Breast cancer is a malignant tumor that has developed from cells of the breast. A malignant tumor is a group cancer cells that may invade surrounding tissues or spread (metastasize) to distal areas of the body (2). Finding a breast cancer as early as possible improves the likelihood that treatment will be successful. Most doctors feel that early detection tests for breast cancer save many thousands of lives each year, and that

Correspondence:

Dr.Shahanaz Chowdhury, Department of Community Medicine,
Bangladesh Institute of Health Science, 125/1 Darus Salam Road,
Mirpur-1, Dhaka-1216, Bangladesh.

Tel: +88(02) 9010952

E-mail: jesmin_70@yahoo.com

many more lives could be saved if even more women and their health care providers took advantage of these tests. Breast cancer is still the most common female cancer and the second cause of cancer death among women (2, 3). No one knows exactly why a normal breast cell becomes a cancerous one, and however there is probably no single cause. It is thought, however, that breast cancer results from a combination of risk factors. These risk factors can be grouped into several categories:

Gender: being a female introduces a high risk. Most breast cancer occurs in women. **Age:** higher incidence occurs with women over 40 years of age and in the postmenopausal phase of life. **Race:** White, in the middle or upper socioeconomic class.

Hereditary or genetic: It has long been known that women whose mother or sisters had breast cancer have a higher risk of developing in the disease themselves. Recently, it has been discovered that breast cancer can develop when a woman inherits a breast cancer susceptibility gene from one of her parents. The gene accounts for about 10 percent of all breast cancer cases and in families that have this gene, the risk of breast cancer can be very high. However, it is important to realize that 85-90 percent of breast cancers are NOT hereditary. **Hormonal:** The female hormones estrogen and progesterone are involved in breast cancer formation. For example, it is known that women who start to menstruate at an early age, or who have a late menopause have a higher risk of breast cancer than women who do not. It is also known that women who take hormone replacement therapy after menopause have an increased risk of breast cancer (2,4). Studies show that out of three available screening methods (mammography, clinical breast examination, and breast self-examination), only mammography for women 50-69 years of age has been effective at reducing mortality, and has done so by an estimated 23% (5). There are three methods of treatment: Surgery, Chemotherapy and Radiation. Surgery is the most common treatment for breast cancer namely Lumpectomy and mastectomy. Lumpectomy removes only the breast lump and a surrounding margin of normal tissue. And mastectomy, the surgeon removes the entire breast, including the nipple, but does not remove underarm lymph nodes or muscle tissue from beneath the breast. Chemotherapy drugs are medications that kill rapidly growing cells such as cancer cells. Chemotherapy is also treatment with anticancer drugs that may be

given intravenously (injected into a vein) or by mouth. The drugs travel through the bloodstream to reach cancer cells in most parts of the body. Chemotherapy medications are very powerful and can have many side effects. Chemotherapy can also be used as the main treatment for women whose cancer has already spread outside the breast and underarm area at the time it is diagnosed or spreads after initial treatments. The length of these treatments are not definite, but depend on how much, if at all, the cancer shrinks. In general, chemotherapy is used for large tumors or for cancers that have spread to the under arm lymph nodes. Chemotherapy given before surgery is called neoadjuvant therapy. The major benefit of neoadjuvant chemotherapy is that it can shrink large cancers so that they are small enough to be removed by lumpectomy instead of mastectomy. Another possible advantage of neoadjuvant chemotherapy is that doctors can see how the cancer responds to chemotherapy. If the tumor does not shrink, then different chemotherapy drugs may be substituted. The time between giving the chemotherapy drugs is generally every 2 weeks or every 3 weeks. Some drugs are given more often. These cycles generally last for a total time of 3 to 6 months (6). To bring people's awareness regarding the breast cancer, different organizations and the Government of Bangladesh has taken various steps. But still people are not aware about breast cancer. The purpose of this study is to identify the level of awareness regarding the breast cancer among the reproductive age group. And to identify deficiency which could be addressed by education and training, that might be useful to grow awareness among people.

Materials and methods

A cross sectional descriptive research design was utilized during this study among 175 (feasible sample size) reproductive age group women selected purposively who attended OPD (GOPD, OPD and MOPD) at the Dhaka Medical College Hospital (DMCH), Bangladesh for their treatment during the period started from May to August 2008 of data collection.

Instruments of Data Collection: A pre-design questionnaire was developed to use as data collection instrument. The questions were a combination of closed ended and open-ended questions.

Data Collection Technique: The investigator collected data in the morning during three hours from 9am to 12noon. During the investigation the

investigator was present all the time to avoid the potential bias from the participants talking to each other about the questionnaire. If a participant was unable to write, the investigator completed the questionnaire form in front - of them. To avoid any chance of bias when the questionnaire completed by the investigator for the illiterate women, the investigator then read each question aloud then written only what the participant responded. This technique was continued until the 175 participants were completed.

Data Analysis: The data obtained from this study were analyzed using the software program Statistical Package for Social Science (SPSS) of version 11. Descriptive statistics was used to summaries and describe the raw sample data in order to help to make data readily comprehensive. According to the appropriate scale of measurement, frequency distributions and percentage was used to describe the data. The data were analyzed according to the variables and presented using tables and figures.

Results

This specific descriptive cross sectional study was conducted among 175 women of reproductive age who attended the out-patient department of Dhaka Medical College Hospital to assess their awareness regarding breast cancer. Majority 40 (23%) respondents were below 26 years whereas only 09% were above 09% years of age. Mostly (69%) lived in urban. According their literacy status, highest number (36%) were illiterate and only (2%) were degree and above. Majorities (86.3%) were Muslim and (87%) were married and only (12%) were unmarried. Majority (37.25%) age were below 21 during marriage, (81.05%) women had children, (36.29%) had 2 children, and (44.35%) women child were 6-10years of age of last child. According their occupational status mostly (72.57%) was house wife (Table 1)

Majority (64%) mentioned that breast cancer is common in women, and almost all (94.29%) mentioned that breast cancer is not occur in old aged, (only (6.29%) respondents mentioned that breast cancer occurs in old age and (51.43%) indicated that breast cancer is curable if detected early. More than half (54.29%) of the respondents indicating that breast cancer is not inherited and (48%) told breast cancer is not caused by evil spirit. Regarding the knowledge on signs and symptoms of breast cancer all participants gave multiple answers, (61.14%) said that Spontaneous clear or bloody discharge were the

Table 1: Distribution of respondents by socio-demographic characteristics

Demographic Characters	respondents (n)	Percentage (%)
Age distribution of the respondents		
16-20	28	16
21-25	40	23
26-30	35	20
31-35	34	19
36-40	22	13
41-45	16	9
Total	175	100
Religion of the respondents		
Muslim	151	86.3
Christian	7	04
Hindu	17	9.7
Total	175	100
Marital status of respondents		
Married	153	87
Unmarried	22	12.6
Total	175	100
Age of respondents during Marriage		
12-15	33	21.57
16-20	57	37.25
21-25	41	26.80
26-30	22	14.38
Total	153	100.0
Having children of respondents		
Having children	124	81.05
Having no children	29	18.95
Total	153	100.0
Number of children		
1	26	20.97
2	45	36.29
3	33	26.61
4	20	16.13
Total	124	100.0
Age of last child		
6months to 1 year	6	4.84
2-5years	27	21.77
6-10 years	55	44.35
11-15 years	29	23.39
16 - 18 years	7	5.65
Total	124	100.0
Occupation of respondents		
House wife	127	72.57
Service	19	10.86
Students	19	1.71
Daily labor	3	1.71
Others	7	4.0
Total	175	100.0

signs and symptoms of breast cancer , more than fifty percent women (54.3%) told breast cancer can not cure, (45.7%) told that breast cancer can cure. Only (21.1%) women were agreed that early diagnosis

improve outcomes of treatment, (28%) were not agreed and remarkably (50.9%) did not know anything in this regards (Table 2).

Contraceptive whereas majority (76.57%) did not used, Among 175 responded only (23.43%) used (75.61%) used oral pill, Majority (46.43%) used only one year and only 2.43% used more than 5 years. In context of occurrence of breast cancer due to prolonged use of oral contraceptive greater part (88.57%) of oral contraceptive greater part (88.57%)

Table 2: Distribution of respondents by regarding knowledge on breast cancer

Knowledge about breast cancer	Frequency	Percent
Common cancer in women		
Common	112	64.0
Not common	63	36.0
Total	175	100.0
Breast cancer occur in old age		
Yes	11	6.29
No	164	94.29
Total	175	100.0
Breast cancer is curable		
Curable if detected early	90	51.43
Non-curable, controlled	18	10.29
Don't know	58	33.14
Curable	9	5.14
Total	175	100.0
Breast cancer is inherited		
Yes	14	8.0
No	95	54.29
Don't know	65	37.71
Total	175	100.0
Caused by evil spirit		
Caused by evil spirit	31	17.71
Not caused by evil spirit	84	48.57
Don't know	60	34.29
Total	175	100.0
Sign Symptoms of breast cancer		
Spontaneous clear or bloody discharge from nipple, often associated with a breast lump Retraction or indentation of nipple	107	61.14
Change in the size of contours of breast over breast	87	49.71
Any flattening or indentation of the skin	41	23.43
Redness or pitting of the skin over breast, like the skin often orange	61	34.86
101	57.71	
Multiple answers		
Can cure breast cancer		
Yes	80	45.7
No	95	54.3
Total	175	100.0
Early diagnosis that improves treatment outcome		
Improves	37	21.1
Not improves	49	28
Don't know	89	50.9
Total	175	100.0

of respondents had no knowledge; only (11.43%) had knowledge on occurrence of breast cancer due to prolonged use of oral contraceptive. Among 175 respondents maximum i.e. (85.7%) had menarche at the age >12 years only (14.3%) had menarche at the age of <12 years. In respect of knowledge about risk factors of breast cancer out of 175 women, (65.14%) had no knowledge about risk factors, in respect of sign and symptoms of breast cancer. All women gave multiple answers (Table 3).

Among 40 women those who had knowledge about screening methods (57.5%) told mammogram, (15%) breast self examination, (2.5%) clinical breast self examination and (25%) mentioned others. Among those known about breast self examination only 1(16.67%) performed regularly, greater part (83.33%) did not performed regularly, (83.33%) women did not know the time which is the best time for breast self examination, only 1(16.67%) knew the best time for breast self examination. All most all of the women (99.43%) did not practice clinical breast examination, only (0.57%) women were practicing clinical breast examination. 174 women were asked why they are not practicing clinical breast examination majority told they did not know anything about this, (20.69%) told that they had no breast problem and (14.94%) did not think that they should do. Among 175 women, majority (77.71%) had no knowledge about breast self examination is useful in early diagnosis, only (22.29%) women had knowledge in this regard. Among 124 women those who had child majority (90.32%) were used to breast fed their child but (9.68%) were not used to feed breast milk to their child. About duration of breast feeding all most all (98.2%) used to feed to their child less than 6 months, only (1.8%) women used to breast feed to their child more than 6 months (Table 4). Regarding reasons of attending the OPD of the hospital, Majority (18.86%) of the respondents attended with different types of uterus problems. and same percent (18.86%) attended with pregnancy related problem. Most of the respondents (38.29%)

that every women need to visit physician if she feels any breast problem, but (8%) women were not agree in this regard and all most all women agreed that they can easy access for their treatment or visit doctor. Regarding receiving counseling on breast cancer prevention provided from Govt. or NGO only (14.9%) received both from Govt. and NGO, (53.7%) not receiving either GOVT or NGO and (31.4%) did not know about this (Table 5).

Table 3: Distribution of respondents according to knowledge on risk factors of breast cancer

Distribution of respondents	Frequency	Percent
Use of Contraceptive		
Yes	41	23.43
No	134	76.57
Total	175	100.0
Methods Used		
Oral Pill	31	75.61
Condom	1	2.43
Intrauterine Devise (IUD)	9	21.95
Total	41	100.0
Duration of Contraceptive		
6 months	1	2.43
1 year	19	46.43
2 Years	13	31.71
3 Years	5	12.60
4 Years	2	4.89
> 5 Years	1	2.43
Total	41	100.0
Age of menarche		
<12 years	25	14.3
>12 years	150	85.7
Total	175	100.0
Knowledge on Risk factors Of breast cancer		
Yes	61	34.86
No	114	65.14
Total	175	100.0
Knowledge of chance of breast cancer for prolonged use of hormonal contraceptive		
Yes	20	11.43
No	155	88.57
Total	175	100.0
Risk factor of breast cancer		
Age more than 50	43	24.57
Personal history of BC	55	31.43
Family history	27	15.43
Radiation exposure	19	10.86
Excess weight	11	6.29
Hormonal therapy	12	6.86
Smoking	61	100.0
Late menopause	7	4
Early onset of menstrual cycle	1	0.57
Birth control pills	20	11.43
First preg at older age	61	100.0
Total	61	
Multiple answer		

A high majority (77.14) of the respondents had no knowledge about screening method; only (22.86) had the knowledge about screening method. Almost all (96.60%) of the respondent had no knowledge regarding the BSE. Majority (64.37%) of the

Table 4: Distribution of respondents according to attitude preventive measure on breast cancer

Distribution of Respondents	Frequency	Percent
Screening Methods		
Breast self examination	6	15
Clinical breast examination	1	2.5
Mamogram	23	57.5
Others	10	25
Total	40	100.0
Performing breast self Examinationregular		
BSE regularly	1	16.67
BSE not regularly	5	83.33
Total	6	100.0
Reason for not practicing breast Self examination		
Don't have breast problem	2	40
Don't think should do	0	0
Don't think will find anything	0	0
Carelessness	1	1
Don't know	2	40
Total	5	100.0
Best time for breast self examination		
Before 1 week of menstruation	0	0.0
During menstruation	0	0.0
Just after menstruation	0	0.0
After 1 week of menstruation	1	16.67
I don't know	5	83.33
Total	6	100.0
Practicing clinical breast examination		
Yes	1	0.57
No	174	99.43
Total	175	100.0
Reason for not practicing clinical Examination		
Don't have breast problem	36	20.69
Don't know that I should do	26	14.94
Don't know	112	64.37
Total	174	100.0
Breast self examination is useful in early Diagnosis		
Yes	39	22.29
No	136	77.71
Total	175	100.0
Breast feeding status		
Breast fed	112	90.32
Not breast fed	12	9.68
Total	124	100.0
Duration of breast feeding		
< 6 months	110	98.2
>6 month	2	1.8
Total	112	100.0

respondent did not know about clinical breast examination, 20.69% don't have breast problem and 14.94% did not know that she should do (Figure-1).

In respect of knowledge about breast self examination is useful in early diagnosis only (22.29%)

Table 5: Distribution of the respondents regarding access to health service and source of information on breast cancer

Distribution of respondents	Frequency	Percent
Reasons for attending the OPD		
Problems of GIT	26	14.86
Problems of uterus	33	18.86
Problems of menstruation	25	14.29
Pregnancy related problem	33	18.86
Fever	30	17.14
Ovarian tumor	11	6.29
Chest pain	05	2.85
Headache	05	2.85
Others	07	4.0
Total	175	100.0
Advice for attending the OPD		
FWA/HA	06	3.43
Doctor	39	22.29
Nurse	05	2.86
Relatives/Friends	67	38.29
Herself	52	29.71
Others	06	3.42
Total	175	100.0
Suffer from breast problems		
Yes	0	0.0
No	175	100.0
Total	175	100.0
Physician visit in case of breast problem		
Yes	161	92
No	14	8
Total	175	100.0
Easy access for treatment or physician visit		
Yes	169	96.5
No	6	3.43
Total	175	100.0
Receiving counseling on breast cancer prevention provided from Govt/ NGO		
Received	26	14.19
Not received	94	53.7
Don't know	55	31.4
Total	175	100.0
Awareness campaign by Govt. or NGO in Their community		
Yes	1	0.57
No	113	64.6
Don't know	61	34.9
Total	175	100.0

had knowledge about breast self examination, whereas majority (77.71%) had no knowledge in this regards (Figure 2)

Discussion

The study of socio demographic factor revealed that majority of the respondents were within the age of 21-25 years and mean age of the women was

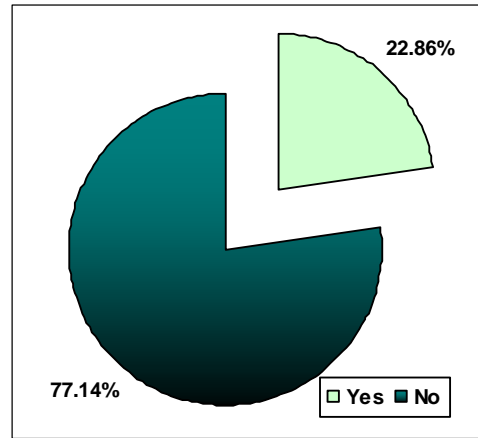


Figure 1: Distribution of respondents regarding knowledge on screening method for breast cancer

estimated as 29.66 (± SD 8.11).

The present study result showed that 18.86% of the women reported that they came to OPD with uterus problem and similar percent came with pregnancy related problems. No body came with breast problem and rest of the participants came with different types of problems. This study is not consistent with the study of Gomes (7). found that 10% came with breast problem.

The result from this study also showed that there was a clear link between education of women and their family income. That being women with a higher level of education lived in households with a higher level of income. It can also be assumed that there was not a large amount of information regarding breast cancer.

The result from this study also showed that there was a clear link between education of women and their rescinding place. It can also be assumed that there was not a large amount of information regarding breast cancer. It is evident from this study that 59% women heard about breast cancer and 41% did not hear. With regards to the source of information regarding breast cancer, out of 59% women who hared about breast cancer, majority 43% women hared it from relatives. This present study is not consistent with the study of Matin who found hundred percent respondents heard the name of breast cancer (8). But this present study can compared with the study of Gomes showed 55.90% respondents heard about breast cancer (7). It was revealed from the study that regarding the signs and symptoms of breast cancer all respondents gave multiple answers. But Matin showed that 24.32% had poor knowledge about the signs and symptoms breast cancer (8). The

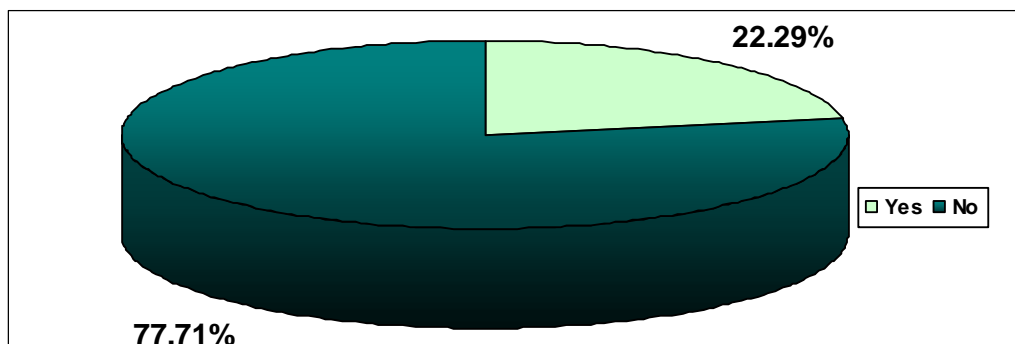


Figure 2: Distribution of respondents regarding knowledge on breast self examination as early diagnosis of breast cancer

study also found that majority 77.14% of the women had no knowledge on screening methods of breast cancer, only 22.86% (n= 40) women had knowledge on screening methods of breast cancer. Among 40 women majority 57.5% had knowledge on screening methods of memogram. And rest of others knew about Breast self examination, Clinical breast examination and others. In relation to the knowledge regarding curability of breast cancer half 50.9% of the women did not know anything about early diagnosis that improves treatment of outcome. 28% were not agreed and only 21.1% were agreed with this regards. The result of this study showed that there appeared to be a link between education of women, their family income and occupation. It can also be assumed that there was not a large amount of information regarding the result of early detection of breast cancer. The study also found that among 175 women, nobody have breast problem. This study is different from Gomes showed 24% had breast problem (7). According to the study findings, it was reflect that out of 175 women 92% women agreed to visit physician for breast problem and 8% did not agree. The result of the study indicated that there is a need to gain more knowledge of women by which they will aware about breast cancer. It is recommended that the aim and effort should be directed towards the growing awareness and motivation of making available care of breast cancer for both women and also for their family. This can be achieved by providing proper health education on breast cancer to the community as well as to the hospital within an in patients department. The finding of the study could be placed to the decision and policy-making authority to develop strategy and plans so as to improve service delivery system in future. The study findings showed that awareness of breast cancer among the reproductive age women is very

low they are not aware about breast cancer. The finding of the study result can be compared with Gomes who found that in rural area people are not aware about breast cancer (9). The study results also indicate that there is a large gap of information, which had not been disseminated properly.

Conclusion

This study has yielded some valuable information. On the basis of the findings of this study it is clear that the level of knowledge and awareness of the participants regarding breast cancer was poor and inadequate. There are needed to take appropriate measures to improve them. They require an intensive health education program to improve their status of knowledge and to lead a healthy life.

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