

Level of Awareness of Breast Cancer Among Adult Female in a Tertiary Level Hospital

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ABSTRACT

Background: Breast cancer is the leading and most prevalent form of cancer among the women in Bangladesh. The aim of the study was to assess the level of awareness of the breast cancer among adult female.

Methods: A descriptive cross-sectional study was conducted among 103 adult females in Out Patient Departments (OPDs) of Combined Military Hospital (CMH), Dhaka during July to December 2013. Data were collected purposively by face-to-face interview with a semi-structured questionnaire.

Results: A total of 103 adult females participated in the study with the mean (\pm SD) age was 36.26 ± 12.70 . Majority 39(37.9%) of the respondents were in age group 29-39. Most 82(79.6%) of the participants were married, 90(87.4%) were housewives, 31(30.1%) were HSC qualified. Maximum 31(88.35%) respondents had average knowledge on breast cancer. Education and occupational status was found significantly associated with level of knowledge of the respondents.

Conclusion: The overall knowledge of the respondents was found average. As it is a major health burden in women and incidence is very high in Bangladesh concern authority should take necessary action to adopt measures to increase the awareness on breast cancer.

Keywords: Breast cancer, Level of awareness, Adult females

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INTRODUCTION

Breast cancer is one of the most common types of cancer in women and is a worldwide public health problem.¹ It is one of the most important diseases that causes tumors in the mammary gland and disrupts the normal function of the tissue. Worldwide, one in ten new breast cancer diagnosed in each year and it is the most common type of cancer in women in both developed and developing countries. It is the leading cause of cancer-related deaths in women worldwide.² The latest global cancer statistics show that breast cancer is increasing rapidly in developing countries.³ The International Agency for Research on Cancer (IARC), part of the World Health Organization (WHO), shows in its recently published GLOBOCAN 2008 that the majority of cancer cases (56%) occur in developed countries. In 2008, 458,000 women worldwide died of breast cancer.⁴ The incidence of breast cancer varies greatly; there is a higher rate in developed countries and a lower rate in developing countries.⁵ Worldwide, One million women were diagnosed with breast cancer in 2018.⁶ In 2020, this number exceeded 3 million and accounted for 11.7% of new cancer cases worldwide.⁷ The World Health Organization (WHO) reported that there is 670,000 deaths worldwide by 2022, representing 15% of all cancer deaths worldwide in 2018.⁸ In 2007-2008 the NHS breast screening program detected more than 16,000 cases of breast cancer.⁹ It is the most common cancer in the United States and estimates 230,480 women and 2,140 men and 2,140 women and 450 men have been diagnosed with breast cancer in 2011.¹⁰ A study in South Asian countries found a total of 200,000 breast cancer cases among which 97,500 patients had died only in 2012.¹¹

The incidence of breast cancer is high in Bangladesh. It is the most important type of cancer in women after cervical cancer.¹² Breast cancer is the most common cancer in women worldwide, affecting 1 in every 8 women. The incidence of breast cancer in the last five years is 32.8%, and approximately 69% of it is the cause of death.¹³ In 2018 alone, 12,764 cases were reported. A recent study found that the overall incidence of breast cancer in Pakistan was 22.5 per, 100,000 women.¹⁴ However, women of childbearing age (15-49 years) have a higher risk of being affected by breast cancer; In Bangladesh, in 2010, the rate was 19.3 per 100,000 and the death rate was 21%.¹⁵ It is easy to understand that the mortality and morbidity of breast cancer is increasing rapidly. Approximately twenty-two thousand people receive treatment in Bangladesh every year.¹⁶⁻¹⁸ Breast cancer is responsible for 17% of cancer cases in women and causes the death of more than 22,000 women every year, 15,000 of whom die without treatment.¹⁹

However, previous research has shown that information about symptoms and risk factors is limited. There was an increase incidence of breast cancer among women in the community.²⁰ Clinical databases in Bangladesh are not rich,²¹ but data collected by various international organizations shows that the number of cases in Bangladesh is rapidly increasing. Additionally, breast cancer deaths among women are increasing due to lack of awareness, insufficient screening tests, outdated treatments, and people's distrust of treatment options.²²

Considering all these factors, it is important to evaluate the level of knowledge about breast cancer. There is little information about the awareness level of female adults, and this study aims to determine women's knowledge and

attitudes towards breast cancer. Therefore, this study will help to understand current trends and provide guidelines for research studies and strategies to reduce Breast Cancer among adult female.

MATERIALS AND METHODS

This was a descriptive type of cross-sectional study conducted at Combined Military Hospital (CMH), Dhaka during July to December 2013. Adult women attending the various outpatient departments of CMH, Dhaka were the study population. Adult females willing to participate

were included and critically ill women were excluded from the study. Data were collected with a semi-structured questionnaire using purposive sampling technique.

To assess the prevailing knowledge of adult women, Likert scale was used.²³ To assess the level of knowledge on breast cancer, respondents were asked 22 statements about breast cancer questionnaire according to the Likert Scale which is simply a measuring of either positive or negative responses to a statement. The level of agreement or disagreement were measured by five ordered response levels as Strongly agree=5, Agree=4, Undecided=3, Disagree=2, Strongly disagree=1. Finally, all the scores according to their opinion were calculated. For this study minimum score is 22 (minimum score for each statement is 1) and maximum score is 110 (maximum score for each statement is 5). Score 22-54 indicate poor knowledge, 55-89 indicate average knowledge and 90-110 indicate good knowledge.

Data were analyzed by Statistical Package for the Social Sciences (SPSS) version 20.0. Chi-square test was used to see the association between the level of knowledge and

socio-demographic characteristics of the respondents. P value <0.05 was considered as the statistical significance.

RESULTS

This descriptive type of cross-sectional study was conducted at Combined Military Hospital (CMH), Dhaka during the period of July to December 2013. Total 103 adult females who attended various outpatient departments of CMH, Dhaka were selected for the study.

Table-I: Socio-demographic characteristics of the respondents (n=103)

Variables	Frequency	Percent
Age		
18-28	32	31.1
29-39	39	37.9
40-50	15	14.6
51-61	11	10.7
>61	6	5.8
Mean±SD : 36.26±12.70		
Profession		
Housewife	90	87.4
Service	5	4.9
Student	8	7.8
Education		
Class I-V	7	6.8
Class VI-VIII	27	26.2
SSC or Equivalent	21	20.4
HSC or equivalent	31	30.1
Graduation and above	17	16.5
Marital status		
Unmarried	8	7.8
Married	82	79.6
Widow	13	12.6

Table-I shows that maximum 39(37.9%) respondents were in age group 29-39 and mean age was 36.26±12.70. Regarding educational status most of the respondents 31(30.1%) were HSC qualified and maximum 82(79.6%) respondents were married.

Table-II: Distribution of respondents by obstetric history (n=103)

Variables	Frequency	Percent
No of children		
No child	3	3.10
Single child	19	20.0
Two or more	73	76.9
Age of mother during delivery of their first baby		
20 years or less	47	51.09
20-25 years	43	46.74
25-30 years	2	2.17
Practice of breast feeding of the baby		
Irregular	11	11.96
Regular up to 2 years	81	88.04
Oral Contraceptive pill		
Yes	49	51.06
No	46	48.94

Table-II reveals that maximum 73(76.3%) respondents had two or more children; most of them were aged 20 years or less at the time of their first baby. Majority 81(88.04%) of the respondents had practice on breast feeding up to 2 years. 49(51.06%) respondents used oral contraceptive pill.

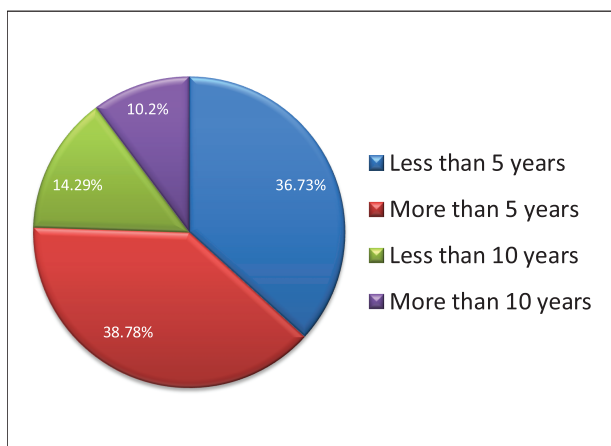


Fig-1: Distribution of respondents by duration of taking oral contraceptive pill (n=103)

Fig-1 depicts that majority 38.78% of the respondents had taken oral contraceptive pill more than 5 years and only 10% took more than 10 years.

Table-III: Percentage of the respondents by level of knowledge (n=103)

Variables	Good (%)	Average (%)	Poor (%)
Knowledge on sign symptoms	17.4	73.8	8.7
Knowledge on diagnostic methods	10.33	44.0	45.66
Knowledge on types of treatment	8.73	50.47	40.80
Knowledge on common risk factors	6.8	33.0	60.2

Majority (73.8%) of the respondents had average knowledge on sign symptoms, 45.66% had poor knowledge on diagnostic methods, 50.47% had average knowledge on types of treatment and 60.2% had poor knowledge on common risk factors of breast cancer as shown in Table-III.

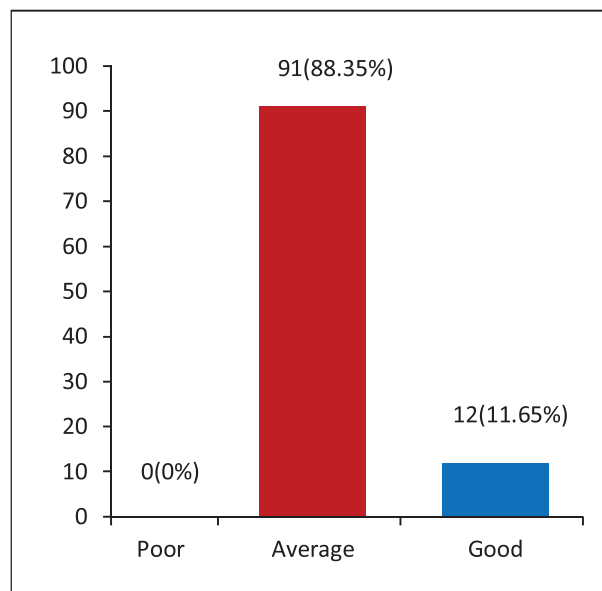


Fig-2: Distribution of respondents by overall level of knowledge on breast cancer (n=103)

Fig-2 depicts that maximum 31(88.35%) respondents had average knowledge on breast cancer.

Table-IV: Association between level of knowledge and socio-demographic characteristics (n=103)

Variable	Level of Knowledge		Significance
	Average n(%)	Good n(%)	
Age (in years)			
18-28	27(84.4)	5(15.6)	p=0.369
29-39	37(94.9)	2(5.1)	
40-50	13(86.7)	2(13.3)	
>50	14(82.4)	3(16.6)	
Educational Status			
Class I-X	33(97.05)	1(2.95)	p=0.000
SSC or equivalent	21(100)	0	
HSC or Equivalent	29(93.5)	2(6.5)	
Graduation and above	8(47.05)	9(52.95)	
Occupational Status			
House wife	84(93.3)	6(6.7)	p=0.000
Service	1(20)	4(80)	
Student	6(75)	2(25)	
Marital status			
Unmarried	6(75)	2(25)	p=0.272
Married	85(89.47)	10(10.53)	

Statistically significant association was found between levels of knowledge on breast cancer with educational status, occupational status of the respondents ($p < 0.05$) as shown in Table-IV.

DISCUSSION

The purpose of the study was to carry out the level of awareness of breast cancer among adult female in a tertiary level hospital. In this study revealed that majority of the respondents 39 (37.9%) were within the age group of 29 to 39 years and ranged in between 18 to 69 years. The mean (\pm SD) age of the respondents was 36.26 (\pm 12.70) years. The findings were not consistent with Islam N, Rahman ANMW and Azad T24-26 where majority of the women seeking antenatal checkup at outpatient department of Dhaka Medical College Hospital were in the age group of 26 to 30 years because the participants were surveyed at general OPD.

The results of this study showed that most 82(79.6%) of the respondents were married and

majority (92.2%) were Muslim which is more or less similar with the result of Gomes MR who found 89% married and 87.26% were Muslim in his study.²⁷

Regarding educational status, out of 103 participants, 31(30.1%) had completed HSC or equivalent and only 6.8% were class I-V qualified. This finding is dissimilar with the findings of Islam N24, Rahman ANMW25, Azad T26 where they found 16.1% were illiterate, 63.3% had primary education and 28% had higher level of education among 112 respondents. Rahman ANMW found in his study that among 107 respondents 68.2% were illiterate, 16.8% had primary and 1.8% had secondary level of education. Azad T found 25.9% were illiterate and 53.2% had primary level of education. This result is also not consistent with the result of Begum M, who found 36% illiterate.²⁸ This is probably due to the study population of the present study belong to Armed Forces families whose socio-economic background was good and they were minimum class-V qualified.

The study revealed that 87.4% women were housewife, 4.9% were service holder and 7.8% were students. This result is more or less consistent with the study of Begum M, who found 72.57% housewife.²⁸

Among the married 82(79.6%) women, 51.06% used oral contraceptive pill, of them 38.78% were taking for more than 5 years. This result is more or less similar with the result of Gomes JA and Ghosh G who found 68.4% used oral pill and 31.6% were taking contraceptive for 5 years.²⁹

Study revealed that 17.4% had good, 73.8% had fair and 8.7% had poor knowledge on sign symptoms of breast cancer. This was more or less similar with the study of Matin SM who

found only 2.70% housewives had good knowledge, 72.97% had fair knowledge and 24.32% had poor knowledge.³⁰ This is not similar with the study of Gomes JA and Ghosh G showed that 73.7% and 40.85% of the respondents claimed that they do not know any warning signs of breast cancer.²⁹ This may be due to the study population were rural people and study population of present study were from Armed Forces families who are highly supported with standard healthcare service.

This study showed that 10.33% had good, 44.0% had fair and 45.66% had poor knowledge on diagnostic method of breast cancer. This finding is dissimilar with the study findings of Azad T²⁷ and Gomes JA and Ghosh G²⁹ who found 45.8% and 38.1% respondents had good knowledge. Dissimilarities were found among the respondents because many of them had knowledge on diagnostic method of breast cancer but they did not know thoroughly about all procedures of diagnostic method.

Regarding the treatment of breast cancer, respondents had 8.73% good, 50.47% fair and 40.8% poor knowledge on types of treatment on breast cancer. This were not consistent with the study of Gomes JA and Ghosh G who found majority (90.7%) of the respondents did not know anything about types of treatment of breast cancer.²⁹

Regarding the knowledge on common risk factors of breast cancer, out of 103 respondents 6.8% had good knowledge and 33.0% had fair knowledge of risk of developing breast cancer after 50 years of age and 60.2% had poor knowledge about the age of occurrence of breast cancer. These findings were consistent with the study of Azad T where she found that out of 1621 respondents 62.3% had knowledge on breast cancer and among them 22.8% mentioned about 41-50 years as the age of occurrence of breast cancer.²⁷

This study revealed the overall knowledge level of breast cancer of adult women in relation with different socio-demographic characteristics. Majority of the respondents were in age group 29-39 years. Among them only 5.1% had good level of knowledge. No statistically significant association was found between age and level of knowledge of the respondents ($p>0.05$).

According to this study higher educational level were found to have better level of knowledge. Statistically significant association was found between educational status and level of knowledge on breast cancer ($p<0.05$). This finding is similar with the study done by Begum M.²⁸

Among the housewife 93.3% had fair and only 6.7% had good knowledge had good knowledge level, among the students only 25% had good knowledge. Statistically significant association was found between occupation and level of knowledge ($p<0.05$) but no significant association was found between level of knowledge and marital status ($p>0.05$).

CONCLUSION

The overall knowledge found in this study was most of the respondents had average knowledge regarding breast cancer. However, the remaining needs education to upgrade their level of knowledge. This study yielded some valuable information which will definitely help the concern authority to take necessary action to adopt measures to increase the awareness on breast cancer. An intensive health education program can improve the knowledge status to lead a healthier safer life.

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