

## Perceptions on Breast Cancer Pattern: Medical Help Seeking Among Breast Cancer Patients

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### Abstract

Perception on breast cancer influences the help seeking pattern of breast cancer patients. Negative perception causes delay in help seeking. Outcome or survival rate of breast cancer has a relation on perception. A cross sectional study was done during July 2015-June 2016, to assess the perception on breast cancer and to find out the help seeking pattern and extent of help seeking time among breast cancer patients. A total of 200 patients were selected following the convenient method of sampling from National Institute of Cancer Research and Hospital, Dhaka. Face to face interviews were taken from the diagnosed breast cancer patients admitted in the hospital. Forty five percent patients were illiterate and 83% were house wife. The mean age was 42 and mean monthly family income was around 9000 taka. Two thirds of the respondents were present with locally advance stage (stage III) and three fourth of the patients identified the lump as 1<sup>st</sup> symptom. Four of 10 patients first sought help to homeopathy for their cancer diagnosis and treatment. Mean help seeking time was 11 months. Nine out of 10 patients were agreed with the statement, 'I was healthy'. Maximum respondents (81.0%) agreed with the statement, 'wait and see what would be happened'. Results showed that there was a relationship between delay help seeking and the statement of perception. There were significant associations between the perception on expensive treatment, perception on 'I am healthy', perception on 'lump related with menstruation', perception on 'wait and see what would be happened', perception on 'feared to do operation, it may cause death' and perception on family income and the delay in help seeking. Along with perception on breast cancer use of alternative medicine, lack of social support, health care delivery system, economic factor etc. influence the pattern and delay in help seeking. Further to the existing efforts to correct the perception for early diagnosis and treatment to overcome this problem is suggested.

**Keywords:** Breast cancer, Perception, Help seeking time, Help seeking pattern

### Introduction

Cancer is predicted to be an increasingly important cause of morbidity and mortality in Bangladesh in the next few decades.<sup>1</sup> As a result of increased life expectancies, globalization, and life style changes, demographic transition<sup>3</sup> the incidence of breast cancer has been consistently increased globally.<sup>2-4</sup> Each year, breast cancer is newly diagnosed in more than 1 million women worldwide and more than 400,000 women die from it.<sup>5,6</sup> The decision to seek help is influenced by perception on the disease.<sup>7</sup> Negative

perceptions cause delay in medical help seeking of breast cancer patients. Perceptions depend on high degree of religious, cultural and social diversity. In South East Asian Region, it has a unique socio-cultural environment which influences people's perceptions, attitudes, and behaviours in daily life.<sup>8</sup> They also held more negative perception about breast cancer and its treatment.<sup>9</sup> They are more likely to believe that their symptom is harmless and does not require action.<sup>10</sup> The majority of patients perceived medical treatment of cancer involving

frightening medical procedures, particularly surgery. For that reason, disease is diagnosed at advanced stage. The treatment of advanced stages of breast cancer is generally more expensive than treatment in earlier stages.<sup>11</sup> Bangladesh has low level of public awareness of importance of early diagnosis and treatment. Breast cancer mostly has a superficial presentation by lump for that increase awareness, knowledge and early detection of breast cancer can be diagnosed easily. By early detection survival rate will be increased. Delay in help seeking is likely to affect prognosis and survival of patients. Due to metastasis and its complications 90% of breast cancer patients died. There is an inverse association between delay and survival times, one third of the mortalities can be avoided by early diagnosis and treatment.<sup>12</sup> This premature death or disability causes social, economical or disability burden to the nation. By identifying responsible factors, interventions can be given. Delay in seeking medical help and their perceptions on breast cancer is one of the burning issues among breast cancer patients. To achieve management success in breast cancer need to provide correct identification of potential breast cancer symptoms among target populations. Correct identification is an important predictor to seek medical care.<sup>10</sup> In Bangladesh, regarding this topic, there may be some information available but major issues are not covered. Data are very urgently needed for decision making. It is an upcoming priority problem and priority health need. This information will be helpful for further research and in policy implication. The objectives of the study were to assess the perception on breast cancer and to find out the help seeking pattern and extent of help seeking time among breast cancer patients.

### **Materials and Methods**

A cross sectional study was done to assess the perception on breast cancer and to find out the help seeking pattern and extent of help seeking time among breast cancer patients. A total of 200 patients were selected following the

convenient method of sampling at the National Institute of Cancer Research and Hospital, Dhaka from July 2015 to June 2016. Face to face interviews were taken from the diagnosed breast cancer patients, admitted in the hospital using a pretested semi structured questionnaire. Ethical Clearance was obtained from the Institution Review Board (IRB) of National Institute of Preventive and Social Medicine, (NIPSOM) and permission was also obtained from hospital authority for conducting the study. Patients of breast cancer fulfilling the selection criteria were enrolled. To avoid recall bias newly diagnosed primary carcinoma patients were selected. Perspectives of the study were explained to the respondents and informed consent was taken from each respondent. The questionnaire included socio demographic characteristics current treatment status of the respondents, medical help seeking time of treatment, perception about cancer symptom and treatment and reasons for negative perception, clinical information such as stage of disease, type of surgical management was obtained from a review of medical records. Perception may be defined as the way of thinking about or understand something by breast cancer patients and delay included both patients delay and providers delay. Seeking help means to seek medical help from health care service provider. Perception questionnaire was prepared by reviewing literatures of qualitative study which was done in South East Asian Region and from various models.<sup>7,13-17</sup> Analyses of data were done by "Statistical Package for Social Science" (SPSS) version 21. Association was assessed between help seeking time and other variables by Pearson's Chi-square ( $\chi^2$ ) at  $p < 0.05$  level of significance.

### **Results**

Among 200 respondents, maximum 90 (45.0%) patients were illiterate and 83.0% were housewives. The mean age was 42. Of them, 85 (42.5%) respondents' monthly family income was 6000-10000 taka. Some 75% patients identified their lump as 1<sup>st</sup> symptom (table I).

Help seeking time was more than 12 months among more than one third of the respondents. Mean help seeking time was 11 months. Maximum respondents that is 87.0% were taken chemotherapy. Majority of the patients 66.5% were in advanced stage.

Forty percent respondents 1<sup>st</sup> sought help from the homaopathy. A total of 63 (31.5%) patients were diagnosed as breast cancer in 1<sup>st</sup> visit. All most half of the patients (47.0%) were diagnosed in 2<sup>nd</sup> visit. Out of 200 patients, no one started treatment in 1<sup>st</sup> visit. Twenty three percentage patients were started treatment in 2<sup>nd</sup> visit. Around three fourths of the respondents sought help to private hospital for diagnosis as well as 41 (20.5%) respondents sought help to different public hospitals and only few patients 13 (6.5%) 1st time sought help to cancer hospital.

**Table I:** Socio demographic characteristics and present illness history

Socio demographic characteristics	Frequency (n)	Percentage
<b>Education</b>		
Illiterate	90	45.0
Primary (1-8)	69	34.5
Secondary(SSC)and above	41	20.5
<b>Occupation</b>		
Housewife	166	83.0
Service	34	17.0
<b>Family income (in taka)</b>		
1000-5000	78	39.0
6000-10000	85	42.5
More than 10000	37	18.5
Mean± SD	8937± 880	
<b>Age in years</b>		
26-30	27	13.5
31-35	29	14.5
36-40	43	21.5
41-45	34	17.0
46-50	35	17.5
More than 50	32	16.0
Mean ± SD	42±9	
<b>Present illness history Help seeking time (in months)</b>		
1-6	69	34.5
7-12	58	29.0
More than 12 months	73	36.5
Mean	11	SD±8.6
<b>Type of present treatment</b>		
Chemotherapy	170	85.0
Surgery and Radiotherapy	30	15.0
<b>Stage of breast cancer</b>		
Stage I	0	0.0
Stage II	34	17.0
Stage III	133	66.5
Stage IV	33	16.5
<b>1<sup>st</sup> Symptom present by breast cancer patients</b>		
Breast lump	149	74.5
Lump on the axilla	26	13.0
Disfiguration of breast or nipple	25	12.5
Total	200	100.0

Maximum respondents not agreed with that tatement ‘It was contagious’; ‘It was related with enstruation’; ‘It was related to breast feeding’; ‘There was no treatment for breast cancer’. Around 91% women were agreed with the statement, ‘I

was healthy’. 162 (81.0%) agreed with the tatement, ‘wait and see what would be happened’.

**Table II:** Help seeking pattern of breast cancer patients (N=200)

Help seeking pattern of breast cancer patients	Freq(n)	(%)
<b>First contact with health care service provider</b>		
Homeopathy	80	40.0
Post graduate physician	64	32.0
MBBS physician	43	21.5
Local health care service provider	13	6.5
<b>Number of consultation(s) for diagnosis of disease</b>		
First visit	63	31.5
Second visit	94	47.0
Third visit	33	16.5
Fourth and fifth visit	10	5.0
<b>Number of consultations for start treatment</b>		
Second visit	46	23.0
Third visit	90	45.0
Fourth visit	44	22.0
Fifth and sixth visit	20	10.0
<b>First diagnostic institution</b>		
Private Hospital	146	73.0
Public Hospital (Medical College and District Hospital)	41	20.5
Cancer Hospital	13	6.5
Total	200	100.0

**Table III:** Perceptions on breast cancer (N= 200)

Perceptions on breast cancer	Agreed n (%)	Not agreed n (%)
It was contagious	7 (3.5%)	193 (96.5%)
It was related with meanstruation	35 (17.5%)	165 (82.5%)
It was related with breastfeeding	11 (5.5%)	189 (94.5%)
I was healthy	181 (90.5%)	19 (9.5%)
There was no treatment for breast cancer	22 (11.0%)	178 (89.0%)
It was expensive treatment	26 (13.0%)	174 (87.0%)
Wait and see what would be happen	162 (81.0%)	38 (19.0%)
It was a results of previous sin	27 (13.5%)	173 (86.5%)
God would cure	91 (45.5%)	109 (54.5%)
Fear of operation	80 (40.0%)	120 (60.0%)
It would be hampered the marital relation	7 (2.5%)	192 (96.0%)
Death would be obvious, no need of treatment	12 (6.0%)	188 (94.0%)
<b>Perceptions on breast cancer treatment outcome</b>		
Cure	159	79.5
Partially cure	29	14.5
Never cure	12	6.0
Total	200	100

Perception on breast cancer treatment outcome was summarized as, 159 (79.5%) patients perceived that cancer would be cure by treatment, 29 (14.5%) respondents perceived to partially cure and 12 (6.0 %) perceived never cure (table III).

Association of delay with present treatment of the respondents was analyzed using Pearson’s Chi-square ( $\chi^2$ ) method and results showed that there was a relationship between delay and caner stage ( $p<0.0001$ ) , 1<sup>st</sup> contact of health care service provider ( $p<0.0001$ ) and number of consultation for diagnosis and treatment ( $p<0.0001$ ).

**Table IV:** Association of help seeking time with present treatment of the respondents (N=200)

Variables	Total delay		Comment $\chi^2$ , df=1
	Within 6 months n (%)	More than 6 months n (%)	
Cancer stage			
Early stage	25 (73.5%)	9 (26.5%)	27.614
Late stage	44 (26.5%)	122 (73.5%)	$p<0.0001$
1 <sup>st</sup> Health care service provider			17.645
Physicians	51 (73.9%)	56 (42.7%)	$p<0.0001$
Other than physicians	18 (26.1%)	75 (57.3%)	
1 <sup>st</sup> diagnostic centre			3.558
Private	56 (81.2%)	90 (68.7%)	$p=0.059$
Public	13 (18.8%)	41 (31.3%)	
Number of consultation for diagnosis	36 (26.3%)	101 (73.7%)	12.821
	33 (52.4%)	30 (47.6%)	$p<0.0001$
Number of consultation for treatment	43 (27.9%)	111 (72.1%)	13.013
		20 (43.5%)	$p<0.0001$

Association between perceptions and delay in help seeking of the respondents was analyzed using Pearson's Chi-square ( $\chi^2$ ) method (table V).

**Table V:** Association with perception and their help seeking time (N=200)

Variable: Perceptions	n (%)	n (%)	Comments $\chi^2$ , df=1
Expensive treatment and help seeking time	4 (15.4%)	22 (84.6%)	4.832, $p=0.028$
	65 (37.4%)	109 (62.6%)	
"I am healthy" and help seeking time	57 (31.5%)	124 (68.5%)	7.630, $p=0.006$
	12 (63.2%)	7 (36.8%)	
"lump related with menstruation and help seeking time	6 (17.1%)	29 (82.9%)	5.656, $p=0.017$
	63 (38.2%)	102 (61.8%)	
"wait and see what would be happened" and help seeking time	42 (25.9%)	120 (74.1%)	27.738, $p<0.0001$
	27 (71.1%)	11 (28.9%)	
"feared to do operation, it might cause death" and help seeking time	18 (22.5%)	62 (77.5%)	8.497, $p=0.004$
	51 (42.5%)	69 (57.5%)	
Family income and perception	96.9%(158)	3.1%(5)	6.893, $p=0.021$
	86.5%(32)	13.5%(5)	

Results showed that there was a relationship between delay in help seeking and statement of perception. Perception on expensive treatment was associated with delay help seeking ( $p=0.028$ ), perception on "I am healthy" was associated with delay ( $p=0.006$ ), perception on "lump related with menstruation" was associated with delay ( $p=0.017$ ), perception on "wait and see what would be happened" was associated with delay ( $p<0.0001$ ), perception on "feared to do operation, it may cause death" was associated with delay ( $p=0.004$ ) and perception was also related with family income ( $p=0.021$ ).

## Discussion

In this study, 83.0% patients were housewives and 45.0% were illiterate, A study which was conducted by Rahman M et al with the objective to assess the socio demographic characteristics, tumor pattern and risk factors that affect the Bangladeshi women in Dhaka, found that 92% were housewives, 51.4% were illiterate.<sup>18</sup> Other study showed 60% cases were illiterate which was conducted by Jabeen at with the objective to determine risk factors associated with breast cancer.<sup>19</sup> Some twenty two percent were in middle age group and mean age was 42 years  $\pm$ SD was 7 (range 26-69 years, which is consistent with other studies.<sup>18-19</sup> According to age structure, maximum female populations are in middle age group. It is around 20% (33,266,733 vs. 166,280,712) of total population.<sup>20</sup> This is the reason for prevalence of breast cancer more in the middle age group.

Out of 200 respondents, 190 patients of breast cancer assumed that delay in help seeking was due to negative perceptions. Results indicated that the majority of women disagreed with the statement (such as contagious, menstruation, breastfeeding, expensive treatment, previous sin, hamper marital relation and death was obvious) and were not to blame for the occurrence of their breast symptoms. A study showed that maximum women disagreed that due to internal factor (such as germ, virus, diet, genetics, own behaviour, state of mind) might be cause cancer.<sup>16</sup>

After feeling symptom, what their perceptions on breast cancer were asked, out of 10, almost 9 respondents were perceived that they were healthy. There was a significant difference between delay and that statement ( $p=0.006$ ). Fear to do operation 80(40.0%) had significant relationship with delay in help seeking ( $p=0.004$ ). There was also an association with family income and perception ( $p=0.021$ ). Out of 10, almost 8 respondents perceived to wait and see what would be happened. That statement had significant relationship with delay help seeking ( $p=<0.0001$ ). Some 80% of the respondents perceived that they would be cure after treatment. In a study, it was found that 262 (59.3%) respondents thought that the breast symptom would improve in time.

Majority of the women 235 (53.8%) in that sample agreed that the symptom occurred by a chance. A study showed that those who perceived “my breast symptom is likely to be permanent rather than temporary ( $p=0.022$ ) had significant difference with delay in help seeking. My breast symptom will last for a long time had also a significant difference with delay in help seeking ( $p=0.008$ ).<sup>20</sup> Though the socio-demographic characteristics of the respondents were almost same, significant difference was not found with delay help seeking but in a study by Friedman LC by multivariate analysis with objective to find out the delay in seeking medical help, it was found that younger age ( $p \leq 0.05$ ), less education ( $p \leq 0.01$ ), absence of a lump ( $p \leq 0.05$ ), lower perceived risk ( $p \leq 0.001$ ), less spirituality ( $p \leq 0.01$ ) and not wanting to think about breast symptom(s) ( $p \leq 0.05$ ) were related to delay.<sup>21</sup> Due to geographical variation, perception varies region to region, which could not be compared in this study.

### Conclusion

Management success in breast cancer need to provide appropriate knowledge on perception. Perception of the respondents is the first step to guide and take correct decision from where they first seek medical help. It should ensure easy availability of diagnostic facilities at primary level of health care system and to raise the awareness in breast cancer at community level.

### Acknowledgement

Authors acknowledge the valuable suggestions of Professor Md. Ziaul Islam, Department of Community Medicine, NIPSOM and Professor Md. Mizanur Rahman, Department of Surgical Oncology, NICRH, Mohakhali, Dhaka to conduct this study.

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