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Original Research Article

Knowledge, beliefs and practices about breast cancer and its self-examination procedure among urban and rural women of district Gurdaspur, Punjab, India: a cross sectional study

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ABSTRACT

Background: The entire world is at the risk of various dreadful diseases and cancer is one of them. Most of the victims seek medical interventions at advanced stage of breast cancer due to lack of awareness about its risk factors, symptoms, early detection methods and treatment. Present study was conducted to assess the knowledge levels, beliefs and the practices about breast cancer among both rural and urban women of Gurdaspur (Punjab) in an attempt to spread awareness and remove the fear of an unwarranted trauma among target population.
Methods: Data was generated by interviewing 300 Gurdaspur (Punjab) women (20-40 years) through a pre-structured questionnaire designed to collect information about their knowledge of breast cancer, its causative factors, screening methods, treatments and beliefs.
Results: Mean age of the participants was 41±5 years. More than 80% women had heard about breast cancer from family members or friends. About 70% women had knowledge about symptoms of this traumatic disease and more than half of them had heard about the practice of breast self-examination, though only 8.9% urban and 5.2% rural women had ever practiced it. Awareness of breast cancer was found significantly associated with age, marital status, educational level and socioeconomic status of the woman.
Conclusions: Participants had a very limited knowledge about symptoms, screening procedure, risk factors, treatment of breast cancer etc. Some public health intervention and evaluation programs are urgently required to educate women about early detection and treatment strategies of breast cancer to reduce mortality from this disease.

Keywords: Breast cancer, Beliefs and practices, Breast self-examination, Knowledge

INTRODUCTION

The entire world is at the risk of various dreadful diseases and cancer is one of them. Millions of people die every year from cancer only which constitutes 13% of total deaths occurring worldwide from different reasons.[1] Most of the victims seek medical interventions at advanced stage of breast cancer due to lack of awareness about its risk factors, symptoms, early detection methods and treatment. Breast cancer is one of the most common types of cancers which affects individuals of all ethnic groups at different levels of modernization; thus engulfing lives of hundreds of thousands of women every year. Like other malignancies, breast cancer victims continue to live

a normal life unless detected at an earliest stage.[2] According to National Cancer Registry (2012-14) of India, breast cancer is the most common cancer among Indian women. [3] In USA, one out of eight women has been suffering from breast cancer[4]. Though, overall incidence of breast cancer in India is less as compared to the States, India is not far behind US in terms of actual number of breast cancer cases. The burden of breast cancer in India has almost reached about two-third of US figures and this number/ratio is steadily rising. [5] The late marriage, birth of the first child at a later age, fewer children, and shorter periods of breast feeding etc., are most common reasons of breast cancer, particularly among urban educated women.

Breast cancer can be treated, if detected and diagnosed at an earlier stage. For early detection, there are available various screening methods like breast self-examination (BSE), clinical breast examination (CBE), mammography and ultrasound. The American Cancer Society (ACS) guidelines suggest some measures for early detection of breast cancer like yearly mammography starting at the age of forty, clinical breast examination (CBE) about every three years for women in their twenties and thirties, and every year for women at age forty and over and also recommend Breast Self-Examination (BSE) for women starting their twenties. [6] Breast cancer awareness programs are very limited and if available, they focus their strategic interventions more in the urban localities than in rural areas. Benefits of government or NGO programs aimed at breast cancer awareness have not percolated down to the remote and rural areas of the country.

The number of breast cancer patients has grown manifold in the recent years in the Punjab and the latest cancer atlas released by the Indian Council of Medical Research (ICMR) has found Punjab having the highest incidents of breast cancer in the country. [7] Hence the current study was conducted with an aim to assess the knowledge, beliefs and the practices regarding breast cancer and also to spread awareness about breast cancer to remove the fear of an unwarranted trauma among rural and urban women of Gurdaspur district of Punjab.

METHODS

Present study was conducted on 300 women, aged ≥ 20 years, selected randomly from urban and rural areas of district Gurdaspur (Punjab). A pre-tested structured questionnaire was used to collect the needed information from the respondents with an aim to fulfill the aim and objectives of proposed study. In-depth interviews were conducted with participants to extract their knowledge and beliefs about the breast cancer, its symptoms, risk factors, screening practices, available treatments and types of barriers that comes in the way of its early detection. The age-group, marital status, education level, occupation and socioeconomic status of all the respondents were noted and their beliefs and awareness towards breast cancer and its screening or treatment practices, were studied according to these socio-demographic variables. For calculating socioeconomic status, modified Prasad scale was used. After completion of interview, correct information was provided to participants and their queries were resolved up to their satisfaction. Women were also taught about actual procedure of breast self-examination with use of pamphlet. The responses to various queries were encoded in numbers and their frequency distribution was calculated using SPSS software (Version 21.0 IBM)[8]. Chi-square was applied to test the significance level of differences between responses of different socio-demographic classes of respondents.

RESULTS

Present study was conducted in urban and rural area of district Gurdaspur (Punjab) to assess the knowledge, beliefs and screening practices in women regarding breast cancer**.** Present study results can be classified into following sub-groups:

Socio-demographic characteristics of the respondents

The mean age of the subjects was around 41±5 years, and the highest number of subjects (42.7%) belonged to the age group of 36 - 55 years, followed by the age group of 20 -35 years (41.3%). More than 80% respondents were married and 11% of them were widows. About 40% rural women were illiterate and 38% urban women were educated up to graduation or above. Most of the interviewed women were housewives (84%) followed by 11.3% employed in govt. or semi-govt. jobs, 3.3 % were students and 1.3% of them were unemployed. More than one-third women (37.3%) belonged to upper middle class while 24.4% of them belonged to middle lower class or lower class (Table 1).

Awareness about breast cancer and its spread

Both rural and urban women were equally aware about the disease of breast cancer and 81% of them had heard about it (Figure 1). Nearly half (47.3%) of the participants knew that breast cancer can spread to other parts of body whereas 18.9% responded negatively. The urban women were more aware about its spread to other body-parts, probably due to better access to awareness programs or their education level. Rural women were more in numbers to opine that breast cancer don't spread to other areas of human body. Almost one third respondents were totally unaware about any kind of its spread to other body parts (Table 2). Friends and family members (59.6%) were reported as the major source of information about breast cancer, followed by television (21.8%), peer-groups or magazines (10.6%) and newspapers (2.4%) as depicted in Figure 2.

Table 1: Distribution of participants according to their socio-demographic characteristics.

		Urban (n=150)	Rural (n=150)	Total (n=300)
Age-group (years)	20-35	68 (45.3)	56 (37.3)	124 (41.3)
	36-55	58 (38.7)	70 (46.7)	128 (42.7)
	>55	24 (16)	24 (16)	48 (16)
Marital status	Married	124 (82.7)	125 (83.3)	249 (83)
	Unmarried	9 (6)	8 (5.3)	17 (5.7)
	Widow	17 (11.3)	17 (11.3)	34 (11.3)
Education level	Illiterate	15 (10)	60 (40)	75 (25)
	Primary	10 (6.7)	21 (14)	31 (10.3)
	Middle	14 (9.3)	24 (16)	38 (12.7)
	Higher	19 (12.7)	24 (16)	43 (14.3)
	Secondary	35 (23.3)	7 (4.7)	42 (14)
	Graduation & Above	57 (38)	14 (9.3)	71 (23.7)
Occupation	Housewife	119 (79.3)	133 (88.7)	252 (84)
	Student	8 (5.3)	2 (1.3)	10 (3.3)
	Employed	23 (15.3)	11 (7.3)	34 (11.3)
	Unemployed	-	4 (2.7)	4 (1.3)
Socioeconomic status	Upper Class	40 (26.7)	13 (8.7)	53 (17.7)
	Upper Middle Class	83 (55.3)	29 (19.3)	112 (37.3)
	Middle Class	24 (16)	41 (27.3)	65 (21.7)
	Lower Middle Class	3 (2)	53 (35.3)	56 (18.7)
	Lower Class	-	14 (9.3)	14 (4.7)

*Percentage in parentheses.

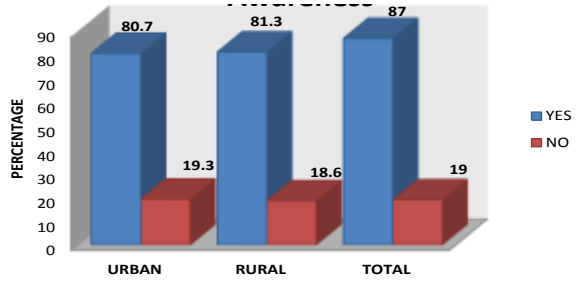

Figure 1: Information level about breast cancer.

Knowledge about symptoms and risk factors

Out of total 69.9% women having knowledge about symptoms of breast cancer, urban respondents were comparatively more aware than the rural ones. The presence of lump (painful/painless) in the breast was reported as the mostly known symptom of breast cancer (68.7%), followed by pain in breast (42.7%); though a very few (2.4%) of them reported a change in color of breast as one of cancer symptoms. Urban females (8.2%) were more aware about the change in breast size as a symptom than the rural ones (1.6%).The highest reported risk/causative factor for breast cancer was use of pesticides (88.8%) followed by early menarche or late menopause (86%) and the obesity (67.9%). Almost two third of participants (61.7%) mentioned that no breast feeding was one of risk factors for development of breast cancer among young mothers whereas 54.7% women were of the opinion that diet (54.7%) rich in fat causes breast cancer. Nearly one fourth of the participants identified alcohol (27.9%) and 21.3% termed heavy smoking as major risk factors for breast cancer among women (Figure 3). The increasing age, family history and exposure to X-rays during mammography was also cited other reasons for development of this dreadful disease (Table 3).

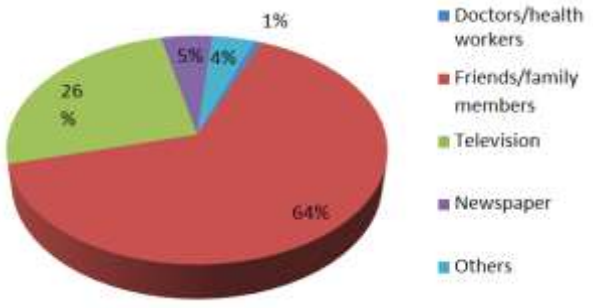

Figure 2: Sources of information to the patients.

Awareness about practice of screening methods

Nearly half of the participants were aware about BSE (51%) and CBE (46%) as screening techniques for this disease. However, about one fifths (22%) of the participants were aware about mammography as one of the modern modalities to screen breast cancer. The rural participants had low level of information about screening methods. Out of total 46% women having knowledge about BSE, only 8.9% urban and 5.2% rural females had

practiced BSE to assess the risk, though not on regular basis. None of the participants having knowledge of CBE and mammography had ever undergone these screening methods (Table 4).

Table 2: Distribution of participants according to awareness about breast cancer and its spread.

		Urban (n=150)	Rural (n=150)	Total (n=300)
Heard about breast cancer	Yes	121 (80.7)	122 (81.3)	243 (81)
	No	29 (19.3)	28 (18.7)	57 (19)
		(n=121)	**(n=122)**	**(n=243)**
Spread to other body parts	Yes	64 (52.8)	51 (41.8)	115 (47.3)
	No	18 (14.8)	28 (22.9)	46 (18.9)
	Don't know	39 (32.2)	43 (35.2)	82 (33.7)

*Percentage in parentheses.

Table 3: Distribution of participants according to knowledge about symptoms and risk factors of breast cancer.

	Urban (n=121)	Rural (n=122)	Total (n=243)
Know about symptoms	**88 (72.7)**	**82 (67.2)**	**170 (69.9)**
Symptoms			
Ump (painful/painless)	85 (70.2)	82 (67.2)	167(68.7)
Pain in breast	54 (44.6)	50 (40.9)	104(42.7)
Nipple discharge	15 (12.3)	14 (11.4)	29 (11.9)
Redness	6 (4.9)	6 (4.9)	12(4.9)
Change in breast size	10 (8.2)	2 (1.6)	12(4.9)
Change in colour	4 (3.3)	2 (1.6)	6(2.4)
Risk Factors			
Pesticides	112 (92.5)	104 (85.2)	216 (88.8)
Early menarche/late menopause	110 (90.9)	99 (81.1)	209 (86)
Obesity	86 (71)	79 (64.7)	165 (67.9)
No breast feeding	73 (60.3)	77 (63.1)	150 (61.7)
Diet	74 (61.1)	59 (48.3)	133 (54.7)
Alcohol intake	33 (27.2)	35 (28.6)	68 (27.9)
Increasing age	29 (23.9)	21 (17.2)	50 (20.5)
Smoking	24 (19.8)	28 (22.9)	52 (21.3)
Positive family history	25 (20.6)	20 (16.3)	45 (18.5)
Exposure to x-rays/mammography	16 (13.2)	10 (8.1)	26 (10.6)
Regular exercise	-	2 (1.6)	2 (0.8)

Knowledge and beliefs about treatment of breast cancer

Around two third of respondents (65.8%) believe that breast cancer can be cured and about 20% of them responded negatively to this query; whereas 14.4 % reported that they have no idea about it. Participants responding positively reported that this type of cancer is treatable in hospitals. Majority (97.5%) of them held the belief that breast cancer can be cured with allopathy; with oral medicines (80.8%), surgically (59.6%) and radiotherapy (10.9%). Urban women (23.1%) were more aware about chemotherapy as a treatment technique than the rural ones (2.7%). About 15% women believed that breast cancer can be cured with ayurvedic medicines while 10.6% reported that homeopathy can cure it (Table 5).

Beliefs about best way to detect breast cancer

Around (30.8%) of the surveyed population reported that they don't know about the best way to detect breast cancer. However, around one-fifth (18.5%) participants believed that clinical breast examination is the best method followed by other beliefs (16.8%) including visit to a doctor, BSE and prompt reporting (14.8%) or ultrasound (13.5%). Belief about clinical breast examination was more prevalent in urban population (28.9%) than rural population (8.1%) (Table 6).

Beliefs about barriers in early detection of breast cancer

Lack of knowledge about symptoms and screening methods for breast cancer was stated as a major barrier in early detection of the disease by more than 94% respondent women (Figure 4). The costs of screening for

detection of the disease were reported as next common barrier by 75.7% of the participants. About 66% subjects don't want to talk or go for screening due to anticipatory fears of having cancer to them, and 19.7% participants cited ignorance as one of barriers. People either go to local healers in early stages of cancer or they usually to a doctor only when the symptoms aggravate, believe that it's part of their destiny to have breast cancer to them (Figure 4).

Table 4: Distribution of participants according to awareness and practice of screening methods.

			Urban (n=121)	Rural (n=122)	Total (n=243)
Awareness	BSE		67 (55.3)	57 (46.7)	124 (51)
	CBE		79 (65.2)	33(27)	112 (46)
	Mammography		38 (31.4)	16(13.1)	54 (22)
Practice	BSE		(n=67)	(n=57)	(n =124)
		Yes	6 (8.9)	3 (5.2)	9 (7.2)
		No	61(91.1)	54 (94.8)	115 (92.8)
	CBE		(n=79)	(n=33)	(n =112)
		Yes	-	-	-
		No	79(100)	33(100)	112(100)
	Mammography		(n=38)	(n=16)	(n =54)
		Yes	-	-	-
		No	38 (100)	16(100)	54(100)

*Percentage in parentheses **BSE= Breast Self-Examination, CBE = Clinical Breast Examination.

Table 5: Distribution of participants according to knowledge and beliefs about treatment of breast cancer.

		Urban (n=121)	Rural (n=122)	Total (n=243)
Breast cancer can be cured	Yes	84 (69.4)	76 (62.3)	160 (65.8)
	No	21(17.3)	27 (22)	48 (19.8)
	Don't Know	16(13.2)	19 (15.6)	35(14.4)
		(n=84)	**(n=76)**	**(n=160)**
Breast cancer is treatable in hospital		84 (100)	76 (100)	160 (100)
Cured by[#]	Allopathy	82 (97.6)	74 (97.4)	156 (97.5)
	Ayurveda	7 (8.3)	17 (22.4)	24 (15)
	Homeopathy	7 (8.3)	10 (13.2)	17 (10.6)
		(n =82)	**(n =74)**	**(n=156)**
In allopathy[#]	Chemotherapy	19 (23.1)	2 (2.7)	21 (13.6)
	Surgery	57 (69.5)	36 (48.6)	93 (59.6)
	Oral medicines	64 (78)	62 (83.8)	126 (80.8)
	Radiotherapy	13 (15.9)	4 (5.4)	17 (10.9)
	Don't know	2 (2.4)	6 (8.1)	8 (5)

*Percentage in parentheses # Multiple response type.

Comparative analysis of knowledge level among rural and urban women

Participants who scored in range of 15-21 towards knowledge of risk factors, symptoms and treatments of breast cancer were stated to have good knowledge and only 1.6% urban and rural women had such good knowledge. Participants who scored in range of 8-14 were tipped to have average knowledge and 45.4% urban and 37.7% rural respondents had average knowledge about various aspects of breast cancer. Respondents scoring below 8, were selected to have poor knowledge score and such a knowledge level was found prevalent more among rural females (60.6%) than the urban ones (52.8%). The difference between knowledge levels regarding breast cancer of urban and rural women was not found statistically significant (p=0.467) (Table 7).

Comparative awareness of breast cancer in different socio-demographic groups

The awareness about breast cancer was found comparatively better among younger age-group participants of 20-35 years (46.5%), married women (85.1%) educated up to graduation or above (26.7%) and the participants belonging to upper middle socioeconomic status (39.5%). The awareness of breast cancer was found significantly correlated with the age, marital status,

educational level and socioeconomic status of the participants. No significant relationship was found between awareness and residence or occupation of the respondents (Table 8).

Table 6: Distribution of participants according to beliefs about best way to detect breast cancer.

	Urban (n=121)	Rural (n=122)	Total (n=243)
BSE and prompt reporting	10 (8.2)	26 (21.3)	36 (14.8)
Mammography	5 (4.1)	6 (4.9)	11 (4.5)
CBE	35 (28.9)	10 (8.1)	45 (18.5)
Ultrasound	17(14)	16 (13.1)	33 (13.5)
Biopsy	2 (1.6)	-	2 (0.8)
Other	21 (17.3)	20 (16.3)	41 (16.8)
Don't know	31(25.6)	44 (36)	75 (30.8)

Table 7: Comparative analysis of knowledge level among rural and urban women.

Level	Urban (n=121)	Rural (n=122)	Chi-square (p value)
Poor	64 (52.8)	74 (60.6)	1.523 (0.467)
Average	55 (45.4)	46 (37.7)	
Good	2 (1.6)	2 (1.6)	

Table 8: Relationship between awareness of breast cancer and socio-demographic variables.

Variables		Aware (n=243)	Not aware (n=57)	Total (n=300)	Chi-Square and p -value
Age	20-35	113 (46.5)	11 (19.3)	124 (41.3)	$\chi^2 = 27.39$ p value = .000**
	36 - 55	103(42.4)	25 (43.8)	128 (42.7)	
	>55	27 (11.11)	21 (36.9)	48 (16)	
	Total	243 (81)	57 (19)	300	
Marital status	Married	207 (85.1)	42 (73.6)	249 (83)	$\chi^2 = 9.488$ p value = .009**
	Unmarried	15 (6.1)	2 (3.5)	17 (5.7)	
	Widow	21 (8.6)	13 (22.8)	34 (11.3)	
	Total	243 (81)	57 (19)	300	
Education level	Illiterate	49 (20)	26 (45.6)	75 (25)	$\chi^2 = 19.056$ p value = .004**
	Primary	27 (11.11)	4 (7)	31 (10.3)	
	Middle	30 (12.3)	8 (14)	38 (12.7)	
	Higher	36 (14.8)	7 (12.2)	43 (14.3)	
	Secondary	36 (14.8)	6 (10)	42 (14)	
	Graduation & above	65 (26.7)	6 (10)	71 (23.6)	
	Total	243(81)	57 (19)	300	
Occupation	Housewife	199(81.8)	53 (92.9)	252 (84)	$\chi^2 = 5.403$ p value = .145
	Employed	31 (12.7)	3 (5.2)	34 (11.3)	
	Student	10(4)	-	10 (3.3)	
	Unemployed	3(1.2)	1 (1.7)	4 (1.3)	
	Total	243(81)	57 (19)	300	
Socioeconomic status	Upper class	47(19.3)	6 (10.5)	53 (17.6)	$\chi^2 = 24.013$ p value = .000**
	Upper middle class	96 (39.5)	16 (28)	112 (37.3)	
	Middle class	39 (16)	26 (45.6)	65 (21.7)	
	Lower middle class	49 (20)	7 (12.2)	56 (18.7)	
	Lower class	12 (4.9)	2 (3.5)	14 (4.6)	
	Total	243 (81)	57 (19)	300	
Residence	Urban	121 (80.7)	29 (50.8)	150 (50)	$\chi^2 = 0.022$ p value = .883
	Rural	122 (81.3)	28 (49)	150 (50)	
	Total	243 (81)	57 (19)	300	

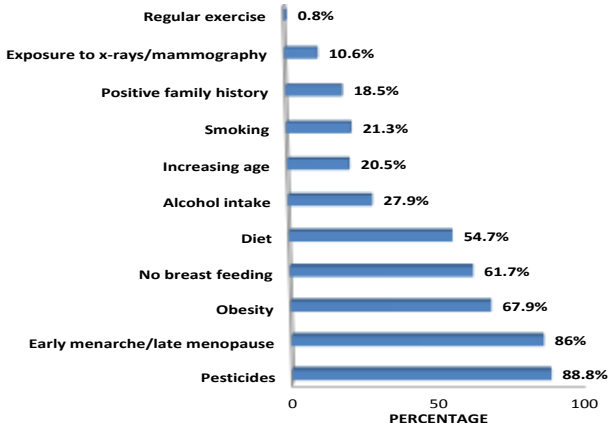

Figure 3: Major risk factors cited by patients towards breast cancer.

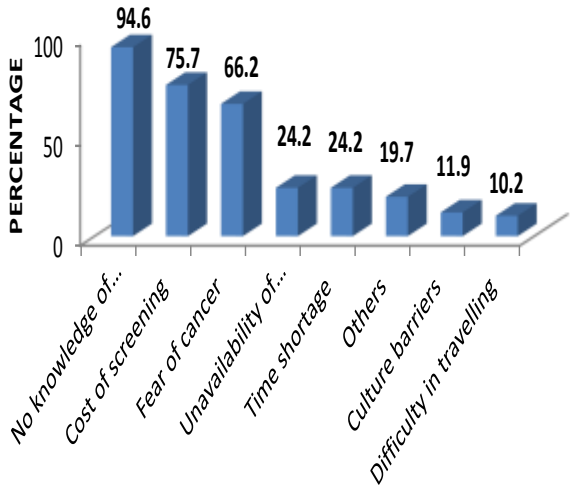

Figure 4: Major barriers towards breast cancer knowledge.

DISCUSSION

Present study was conducted to assess the knowledge level and beliefs about breast cancer and its screening practices/methods among urban and rural women of Gurdaspur district in an attempt to spread awareness about early detection of breast cancer and reduce its fear among women. Higher proportion of the respondent women (42.7%) were in the age group of 36-55 years with a mean age of 41±5 years and this analysis was found in agreement with the study conducted by Adelekan and Edoni [9] in Nigeria which reported that 65.3% respondents were in the age-group of 35-54 years with a mean age of 43.4 ± 9.2 years. It shows that both the studies have focused their study observations on the women around 40 years of age (nearing menopausal age) when the chances of development of breast cancer are comparatively higher [10]. Present study revealed that about 25% of the participants were illiterate. Similarly, Oluwatosin and Oladepo [11] had found that 56.5% Nigerian women (as respondents on breast cancer) had no formal education. It implies that we must be extra cautious about the literacy level of the respondents before generalizing our findings about their knowledge and beliefs towards breast cancer. In present study, 81% women, from urban as well as rural area, had some information about breast cancer and this percentage was comparatively higher than the Jharkhand women (75.9%) studied by Kumar and Kashyap [12], though Malaysian [13] and Tanzanian [14] women had much higher awareness i.e., 99.5% and 98.2%, respectively, than present study subjects.

The friends and family members or the relatives of present study respondents (59.6%) were the major source of information about this dreadful disease as also observed by Kumar and Kashyap [12]. Somdatta et al.,[15] and Alharbi et al.,[16] reported television (42%) and health professionals/workers (98.2%) as the most common sources of information to the respondents. Nearly half (47.3%) of present participants knew that breast cancer can spread to the other parts of body and these observations were in consensus with Morse et al.,[14] and Alharbi et al.,[16] studies wherein 53.3% and 59.7% subjects, respectively, agreed that breast cancer can also spread other body parts. The presence of lump (68.7%) and pain (42.7%) in the breasts were identified as the most commonly known symptoms of breast cancer to present study subjects and these observations were similar to a study by Puri et al.,[17] who found that percentage of mass of lump (47.2%) and pain (41.2%) in breast were cited as initial symptoms. The presence of lump mass dominated the pain in breast as first symptom of fear of cancer for Gurdaspur women. Present study reported the use of pesticides (88.8%) as the most known risk factor while positive family history (18.5%) and exposure to x-rays/mammography (10.6%) as the least known risk factors of breast cancer. A study conducted among Oman females by Al Junaibi et al.,[18] reported that the most widely known risk factor for breast cancer was the family history of the disease (86.6%) and least known was early menstruation (49%). Use of pesticides and family history of disease were thought as main contributory factors for breast cancer by Gurdaspur and Oman women, respectively.

More than half of respondents were aware of breast self-examination (BSE) as a screening method of breast cancer and these findings were in agreement with the studies conducted by Ahuja and Chakrabarti [19] and Morse et al.,[14] who reported that 42% Maharashtrian and 56% Tanzanian women, respectively, had knowledge about BSE as a method of self examination. Fotedar et al.,[20] found that majority of the Himachal women were aware about breast screening methods like clinical breast examination (CBE) (78%) and mammography (89%) which was significantly higher than present study observations, probably due to the fact that most of participants in their study were from Shimla, an urban area. Breast self-examination was practiced regularly by the 91.9% undergraduate students of Klang valley, Malaysia[13]. However, in present study, only 9 (7.2%) women had ever tried BSE though none of them did it on

regular basis. These differences might be due to differences in the level of education between participants of two studies. The Breast Health Survey Technical Report [21] reported that 62.4% Australian women accepted that breast self-examination is the best method to detect breast cancer. However, 18.5% present study participants endorsed the clinical breast examination (CBE) as a better method than BSE.

More than 65% Gurdaspur women believed that breast cancer can be cured whereas 86% Nigerian females[22] were optimistic that breast cancer can be treated if detected in early stage by screening methods like BSE, CBE, mammography etc. A study conducted by Dey et al.,[23] reported that majority (73.8%) of Delhi women believed that surgical removal of lump in the breast is the best treatment for breast cancer. In present study, 80.8% women accepted that oral medicines is the best option to treat breast cancer whereas 59.6% of them opined that surgical removal of breasts is the last and best option to get rid of breast cancer. Like Tripathi et al., [24], the lack of knowledge to rural women was found as major barrier in early detection of breast cancer in present study. A statistically significant relationship was found between awareness of breast cancer and the age, marital status, educational and socioeconomic status of the participants. The participants, who were in age group of 20-35 years, married, having higher educational and upper middle socioeconomic status, had comparatively more information than the others. Kumar and Kashyap[12] had reported that awareness of breast cancer was more in higher age group, higher educational level, in urban communities and among higher socioeconomic class people.

CONCLUSION

From the aforementioned results and discussions, it may be concluded that present study participants had limited knowledge of the symptoms, risk factors, screening methods and treatment options of breast cancer. The target group women were found more frightened even to talk about breast cancer and there were lots of myths and misconceptions about breast cancer which demanded an urgent need to educate the community about this disease. Breast self-examination, which is the most inexpensive method for early detection of breast cancer, was known to only few of the participants. Therefore, a continuous effort is required to improve women's information level about breast cancer so that early detection and reporting of breast cancer may offer them better treatment opportunities by the doctors. The financial constraints and unavailability of screening methods were found as major barriers for early detection of breast cancer. There is an urgent need to ensure affordability and accessibility of screening services and treatments to all women, at least by government hospitals. An extensive study is required to have a more candid scenario of breast cancer in cancer belt area of Punjab so that more lives can be saved timely by spreading awareness and knowledge about this dreadful disease.

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REFERENCES

1. World Health Organization. Cancer. Accessed from http://www.who.int/mediacentre/factsheets/fs297/en/ on 14.10.2016.
2. Breast Cancer. Accessed from http://www.nationalbreastcancer.org/ breast-cancer-facts on 10/1/2016.
3. Statistics of breast cancer in India. Accessed from http://www.breastcancerindia.net/statistics/stat_global. html on 10/1/2016.
4. U.S. Breast Cancer Statistics. Accessed from http://www.breastcancer.org/symptoms/understand_bc/statistics.
5. Agarwal G, Ramakant P. Breast Cancer Care in India: The Current Scenario and the Challenges for the Future. Breast Care. 2008;3(1):21-7.
6. American Cancer Society. Cancer statistics.CA: A Cancer Journal for Clinicians. 52, 10-11.
7. Assessed from link http://indiatoday.intoday.in/story/state-of-cancer/1/433195.html on 12/1/2016 .
8. IBM SPSS Statistics for Windows, Version 21.0, Armonk, NY: IBM Corp; 2012
9. Adelekan A L, Edoni R E. Awareness, Knowledge and Practices of Breast Cancer Prevention among Women with Family History of Breast Cancer in Ede, Osun State, Nigeria. IOSR-JDMS. 2012;2(2):42-47.
10. Surakasula A, Nagarjunapu AC, Raghavaiah KV. A comparative study of pre- and post-menopausal breast cancer: Risk factors, presentation, characteristics and management. J Res Pharm Pract. 2014; 3:12-18.
11. Oluwatosin OA, Oladepo O. Knowledge of breast cancer and its early detection measures among rural women in Akinyele Local Government Area, Ibadan, Nigeria.BMC Cancer. 2006;6:271
12. Kumar M, Kashyap V. Awareness about breast cancer among women attending obstetrics and gynaecology department in a tertiary care hospital of Jharkhand, India. Int J Community Med Public Health.2016;3:938-43
13. Akhtari-Zavare M, Juni M, Ismail I, Said S, Latiff L. Barriers to breast self examination practice among Malaysian female students: a cross sectional study. Springer Plus. 2015;4:692.
14. Morse E, Miesfeldt S, , Maegga B, Joseph , Miesfeldt S. Breast Cancer Knowledge, Beliefs, and Screening Practices among Women Seeking Care at District Hospitals in Dar es Salaam, Tanzania.

Breast Cancer: Basic and Clinical Research. 2014:8 73–79
15. Somdatta P, Baridalyne N. Awareness of breast cancer in women of an urban resettlement colony. Indian J Cancer .2008;45(4).
16. Alharbi N, Alshammari M, Almutairi B, Makboul G, El-Shazly M. Knowledge, awareness, and practices concerning breast cancer among Kuwaiti female school teachers. Alexandria Journal of Medicine. 2012;48(1):75-82.
17. Puri S, Mangat C, Bhatia V, Kalia M, Sehgal A, Kaur A.Awareness of risk factors and aspects of breast cancer among North Indian women. Internet J Health. 2008;8(2).
18. Al Junaibi RM, Khan SA. Knowledge and awareness of breast cancer among university female students in muscat,sultanate of oman—a pilot study.Journal of Applied Pharmaceutical Science. 2011; 1(10): 146–149.
19. Ahuja S, Chakrabarti N. To determine the level of knowledge regarding breast cancer and to increase awareness about breast cancer screening practices among a group of women in a Tertiary Care Hospital in Mumbai, India. IJPH. 2009;1(1).
20. Fotedar V, Seam RK, Gupta MK, Gupta M. Knowledge of Risk Factors & Early Detection Methods and Practices towards Breast Cancer among Nurses in Indira Gandhi Medical College, Shimla, Himachal Pradesh ,India. Asian Pacific J Cancer Prev. 2013;14:117-20.
21. Jones SC, Iverson D, Steel D, Zorbas H, Nehill C, Villaneuva E .NBCC 2003 breast health survey technical report. National Breast Cancer Centre, Sydney. 2005.
22. Ibrahim NA, Odusanya OO. Knowledge of risk factors, beliefs and practices of female healthcare professionals towards breast cancer in a tertiary institution in Lagos, Nigeria. BMC Cancer. 2009;9:76.
23. Dey S, Mishra A, Govil J, Dhillon PK. Breast Cancer Awareness at the Community Level among Women in Delhi, India. Asian Pac J Cancer Prev. 2015;16:5243-51.
24. Tripathi N, Kadam YR, Dhobale RV, Gore AD. Barriers for early detection of cancer amongst Indian rural women. South Asian J Cancer. 2014;3:122-7.

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