

Breast Cancer Awareness Survey **Areej Ilyas¹, Taiba Zulfiqar² and Abid Ali³**

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ABSTRACT

Background: Breast cancer is the most frequent malignancy among women. Early detection of breast cancer is critical for reducing the disease's morbidity and mortality. Therefore, extreme cautions are required. And if it is discovered late, it may have a bad prognosis. **Objective:** The goal of this study was to establish whether university students were aware of breast cancer, its symptoms, and the risk factors associated with it, as well as the level of knowledge and awareness of BSE and mammography. **METHODS:** The current research employed a cross-sectional strategy. A questionnaire was self-administered to all the students. A total of 122 respondents completed the online survey that enrolled in various universities in Punjab. **Results:** The age of study participants was ranged between 21_30 years. Most of them were aware of breast cancer. (73.8%) (90) of students know about breast cancer through social media, being the most important source of information. Regarding different aspects of study 78.7% (96) had the knowledge of risk factor i.e. Breast cancer occurs mostly with increasing age. An adequate number of participants 77.9% (95) have the knowledge of self-examination. To educate people about breast cancer, we should host seminars, because raising awareness of cancer is essential for early identification and more proactive health-seeking. Despite the fact that breast cancer is relatively widespread in both developing and wealthy nations, broad public awareness is still low. No matter how old or young a woman is, breast care is a need.

Conclusion: According to this survey, majority of the participants have basic information about breast cancer and its risk factors. Many participants also know about breast self-examination as it is a simple, quick, non-invasive, and cost-free technique for women to check their own breasts for any changes that could be an early indicator of breast cancer in the early stages, when the disease can be treated successfully, boosting the survival rate from breast cancer. Any participants also have information about mammography and its advantages in detection of cancer. Hence students are aware of breast cancer.

Key words: Breast Cancer, Self-Examination, Mammography, Awareness

Article Information

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INTRODUCTION

Cancer is an abnormal development of cells that initially remains localized; with time, it metastasizes, leading to malignant tumor^[1]. It is the second-leading cause of death worldwide. Breast cancer arises from mutations in breast cells, owing to complex interactions

between lifestyle, reproductive and genetic risk factors. Increasing age, benign breast conditions, lifestyle (obesity, smoking and alcohol), reproductive factors and hormone exposure have been associated with increased breast cancer risk. About 5-10% of breast

cancer cases owes to family history, and the most common cause of hereditary breast cancer is due to mutations in the BRCA1 or BRCA2 genes. Yet, the knowledge into breast cancer development and its genetic landscape are still incomplete.^[2]

Breast cancer is the most prevalent cancer in women and generally the second most common cancer globally, with approximately 1.4 million cases diagnosed annually. In 2018, 2.1 million incident cases of breast cancer were diagnosed worldwide (second most common cancer overall after lung cancer) representing nearly 12% of all incident cancer cases and an estimated 627,000 deaths were expected to occur globally.^[3] In Pakistan, every ninth woman suffers from the disease, which is the highest incidence rate compared to other South Asian countries.^[4] Cancers in the young (15–34 years) tend to be more aggressive which is a cause of concern as this denotes the need for educative and awareness programs targeting younger members of the society, as early as 18 years, to implement early practices of breast self-examination (BSE) into their lifestyle. Screening is also an “alien” word for most people. Hence, naturally, this results in most people presenting only when symptomatic, most “symptomatic” cancers are Stage 2B and beyond. BSE is an important screening measure for detecting breast cancer. There is evidence that women who correctly practice BSE monthly are more likely to detect a lump in the early stage and early diagnosis has been reported to influence early treatment, to yield a better survival rate.^[5]

Material and Methods:

A cross-sectional approach was used in the current study. The study participants were all university students that were enrolled in the different universities of Pakistan. And the students were older than 18 years, and who gave their consent to participate in this study. A questionnaire was self-administered to all the students. The questionnaire consists of two parts. The first part comprised of demographic questions including age and gender While the second part comprised of questions regarding breast cancer risk factors, signs and symptoms, and the best time for breast examination.

A total of 122 respondents have completed the survey that enrolled in different universities of

Punjab through an online survey. Google forms (Google LLC, California, United States) were used to create the questionnaire, and a link was shared with participants via social media platforms (Facebook, WhatsApp, and E-mail).

RESULTS:

Overall, 122 respondents participate in this study. Demographic characteristics are given in (Table 1). That the mean age of the participants was 21 _30 years. And most participants 107(87.7%) had age ranged from 21 to 25 years and the rest

of the participants 15 (12.3%) had age ranged was 26 to 30 years. 107 (87.7%) of were females who respond to this survey and rest of 15 (12.3 %) were males who respond to the survey (table 2) then we assessed how many participants have ever heard about breast cancer. Out of 122 participants 99(99.2%) respondents know about breast cancer and only 1 (0.8%) participant have not heard about breast cancer (table 3). Source of information about breast cancer in which 90(73.8%) participants knows about breast cancer through media, 14(11.5%) through hospital and 15(14.8%) through any friend or relative (table 4). we asked participant have any of your relative diagnosed with breast cancer and the response shows that 49 (40.2%) participants relative were diagnosed with breast cancer while 68(55.7%) participants relative were not diagnosed with cancer and rest of 5(4.1%) participants don't know about it (table 5). next we asked the participants can smoking increase the risk of breast cancer to which 73(59.8%) participants answers yes and 24(19.7%) answer no and 25(20.5%) participants don't have any information about it (table 6) when we assessed if participant knows that women with age are on the risk of breast cancer. And 96(78.7%) respond with knowing about it and 7(5.7%) answer with no and 10(15.6%) participants don't know about it (table 7). 65 (53.3%) participants respond to yes, 18(14.8%) respond to no and 39(32.0%) respond to don't know about women with no child are more at risk of breast cancer(table 8). 61(50.0%) respondents mark yes, 17(13.9%) mark no and 44(36.1%) mark don't know about women with late childbirth are more at risk of having breast cancer(table 9). over (77.9%) respond to yes, 20 (16.5%) respond to no and 7(5.7%) respond

to don't know about ever heard about breast self-examination (table 10).when we asked participants that have you been taught about breast self-examination(BSE) out of which 75(61.5%) has been taught about self-examination while 40(32.8%) have not been taught about self-examination and rest of 7(5.7%) don't know about it (table 11). 107 (87.7%) respond to yes that breast self-examination is an effective method for detecting cancer in its early stages. 4(3.3%) respond to no and 11(9.0 %) respond to don't know about it(table 12).88(66.4%) respond yes while 34(27.9%) respond no and rest of 7(5.7%) respond don't know to question if they ever heard about mammography (table 13).74(60.7%) mark yes to women should do mammography at the age of 40 while 12(9.8%) mark no to women should mammography at 40 and 36(29.5%) mark don't know about it (table 14). When we assessed participants about that breast cancer can occur in men majority of participants 61(50.0%) responded to yes ,31(25.4%)responded to no and 30(34.6%) responded to don't know about it (table 15).87(71.3%) respond yes,3(2.5%) respond no and 32(26.2%) respond don't know to having mammogram will help to find breast lump early(table 16).when we assessed the participants that early diagnosis improves the outcome of the treatment majority of participants 114(93.4%) participants agrees while 2 (1.6%) mark no and 6(4.3%) don't know about it (table 17).85(69.7%) participants respond yes, 19(15.6%) respond no and rest of 18(14.8%) respond to don't know when asked if there is any chance to get breast cancer if any of the family member diagnosed with it(table18).Majority of the participants 106(86.9%) results reveals that breast cancer can cause death while 8(6.6%) participants responded no and 8(6.6%) respond to don't know about that breast cancer can cause death(table 19).Lastly' we assessed if participants know the color of breast cancer awareness and majority of the participants 111(91.0%) revealed that the color of breast cancer awareness is pink ribbon(table 20).

Table 1:

Age	Frequency	Percent
21_25 years old	107	87.7
26_30 years old	15	12.3
Total	122	100.0

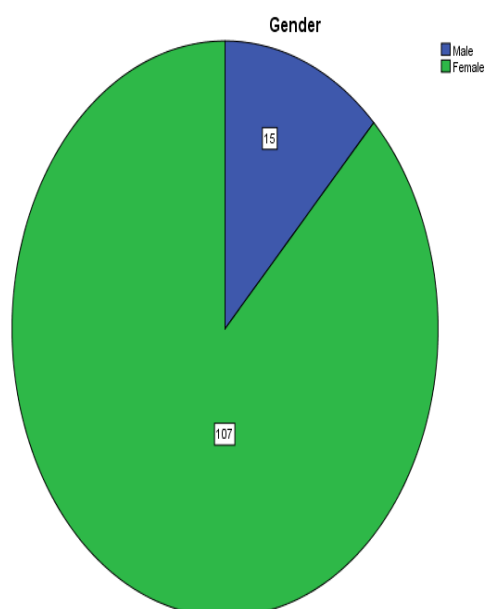
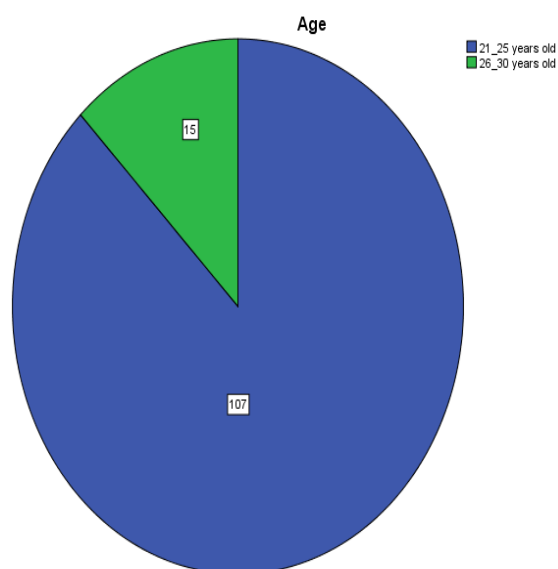
Table 2:

Gender	Frequency	Percent
Male	15	12.3
Female	107	87.7
Total	122	100.0

FREQUENCY	PERCENTAGE
Have you heard about Breast Cancer	121 (99.2%)
Yes	1 (0.8)
No	
Source of information about Breast Cancer	90 (73.8%)
Media	14 (11.5%)
Hospital	18 (14.8%)
Friends/ Relatives	
Have any of your relative been diagnosed with Breast Cancer	49 (40.2%)
Yes	68 (55.7%)
No	5 (4.1%)
Don't Know	
Can smoking tobacco appears to increase the risk of Breast Cancer	73 (59.8%)
Yes	24 (19.7%)
No	25 (20.5%)
Don't know	
Women with increasing age are on risk of Breast Cancer	96 (78.7%)
Yes	7 (5.7%)
	19 (15.6%)

No Don't know	
Women with no child are more at the risk for Breast Cancer Yes	65 (53.3%) 18 (14.8%) 39 (32.0%)
No Don't know	
Ever heard about Breast self-examination Yes	95 (77.9%) 20 (16.4%) 7 ((5.7%)
No Don't know	
Have you been taught how to do Breast self-examination Yes	75 (61.5%) 40 (32.8%) 7 (5.7%)
No Don't know	
Do you think Breast self-examination is a useful tool for early detection of Cancer Yes	107 (87.7%) 4 (3.3%) 11 (9.0%)
No Don't know	
Have you ever heard about Mammography Yes	81 (66.4%) 34 (27.9%) 7 (5.7%)
No Don't know	
According to you, does every Women should do Mammography at the age of 40 Yes	74 (60.7%) 12 (9.8%) 36 (29.5%)
No Don't know	
Do you think Breast Cancer can occur in Men Yes	61 (50.0%) 31 (25.4%) 30 (24.6%)

No Don't know	
Having a mammogram will help me to find breast lumps early Yes	87 (71.3%) 3 (2.5%) 32 (26.2%)
No Don't know	
Do you think early diagnosis can improves outcome of the treatment Yes	114(93.4%) 2 (1.6%) 6 (4.9%)
No Don't know	
Do you think anyone can has more chance to get Breast Cancer if they anyone from their family diagnosed with it Yes	85 (69.7%) 19 (15.6%) 18 (14.8%)
No Don't know	
Do you know Breast Cancer can cause death Yes	106 (86.9%) 8 (6.6%) 8 (6.6%)
No Don't know	
What color is the ribbon for Breast Cancer awareness Pink ribbons Blue ribbons Black ribbons	111 (91.0%) 4 (3.3%) 7 (5.7%)



DISCUSSION:

Breast Cancer incidence is growing 12 months by year. The total direct clinical value of breast most cancers is greater than 7 billion dollars according to 12 months. Early detection remains the priority for countrywide cancer control programs.^[6]

The target of this study was to investigate the breast cancer awareness among different university students of Punjab. The results indicates that 99.2% participants had been aware of breast cancer while only 1 participant does not know about it. according to our study the major source of information of breast cancer was media 73.3% participant gets information about breast cancer through media

which includes many social sites such as Facebook, WhatsApp and tv as these sources are easy and rapidly approached to gain information about breast cancer. And 11.5% participants know about it though hospital. With growing evidence of the link between cancer and modifiable danger elements, along with obesity, hypertension, smoking, alcohol intake, diabetes, and dyslipidemia, it's far vital to growth public awareness of these factors and devise strategies to introduce early life-style adjustments on a worldwide degree. Eleven–sixteen Smoking, alcohol use, in addition to low fruit and vegetable consumption, have been suggested to be the leading threat factors for demise from cancer global.^[6]

In our conducted study majority of participants 59.8% agrees to the statement that smoking Tabaco increase the risk of breast cancer. Then we assessed another risk factor of breast cancer i.e., increasing age of women our majority of participants 78.7% was aware of it. Next, we asked about breast self-examination to participants. 77.6% participants know about breast self-examination In addition, in contrast to our findings, an Egyptian study of female university students found that 74.2 percent knew about BSE and 52.1 percent knew about mammograms.^[7] while in our study only 66.4% knows about mammography.

Early detection of breast cancer is facilitated by breast cancer awareness and regular practise of BSE, which improves the chances of survival and better health results.^[5] Although 60.7% knows that women should get done their mammogram at the age of 40yrs. And 71.3% participants are aware of that mammogram helps to find lump early. 93.4% respondents know early diagnosis improves the outcome of the treatment. Breast cancer can also cause in male, but their ratio is much less than females. So according to our survey breast cancer in men 50.0% of the respondents knows about it. and majority of respondents 86.9% is aware about the death caused by breast cancer.

The participants in this study have a good understanding of breast cancer and self-examination. Every woman should be familiar with the appearance and feel of her breasts in order to detect any changes.

The rise in cancer incidence in recent years, as well as its impact on various physical, mental, and social aspects of human life, has elevated cancer to a serious challenge of the century.

In affluent countries, the prevalence of this condition ranges from 1 to 2% with a nearly 5% annual increase in less developed countries. Cancer kills more than 7 million people worldwide, according to estimates. By 2020, the number of new cancer cases is expected to increase from 10 to 15 million. Breast cancer, on the other hand, is the most common malignant tumour in women.

CONCLUSION:

Breast cancer is an illness that affects the sufferer, their family, and their community, as well as wasting a lot of money and spiritual resources. This cancer develops in the tissues of the breast, particularly the ducts (tiny tubes that deliver milk) and lobules (milk-producing glands). Breast cancer is not gender specific, but it affects men seldom. Although there is no known cause for breast cancer, several risk factors have been found. There are distinct risk factors for different types of cancer. Some

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- of these risk factors, such as cigarette smoking, alcohol consumption, and diet, are modifiable and dependent on one's lifestyle. Other elements, such as age, ethnicity, gender, and family history, are, on the other hand, permanent and immutable. It is not necessary to have one or more of these risk factors to be infected.
- According to this survey, majority of the participants have basic information about breast cancer and its risk factors. Many participants also know about breast self-examination as it is a simple, quick, non-invasive and cost-free technique for women to check their own breasts for any changes that could be an early indicator of breast cancer in the early stages, when the disease can be treated successfully, boosting the survival rate from breast cancer. Many participants also have information about mammography and its advantages in detection of cancer. Hence students are aware of breast cancer.
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