# Knowledge and Perception Regarding Breast Cancer Among Patients Attending Gynecological Department in Quetta Pakistan

Noman Ul Haq[1], Laraib Jameel[2], Aqeel Nasim[3]*, Sohail Riaz[3], Saima Afzal[1], Maria Tahir[3],

Muhammad Saood[1], Riffat Yasmin[1], Zaratsha Khaild[1], Wajeeha Siddique[1]

[1]Assistant Professor, Faculty of Pharmacy and Health Sciences University of Balochistan, Pakistan
[3] Pharmacy Department, University of Baluchistan Quetta, Pakistan
[3] M.Phil Pharmacy Practice, Faculty of Pharmacy and Health Sciences University of Balochistan

*Corresponding Author E-Mail: aqeel_nasim @ yahoo.com

*Abstract:* *Background: Breast cancer seems to be the illness of both developed and underdeveloped countries in the world. In Pakistani women, breast cancer has been the second important reason of cancer-narated death. The aim of this cross-sectional study was to define the level of awareness about breast cancer, and determine the health opinions regarding the template that assists in breast self-examination (BSE), clinical breast examination (CBE) and mammography in a group of women attending gynecological departments in Quetta. Patients and Methods: A cross-sectional study of women attending the gynecological department in 3 government hospitals of Quetta city located in Pakistan utilizing a self-reported questionnaire to study the participants regarding the symptoms of breast cancer, and their posture towards screening. A sample of 307 respondents who were willing to participate in the study was picked out. Results: The majority of women were graduated. Plenty of the women demonstrated a good awareness level. In participants, the most often told about risk factors was non-breast feeding. The more frequently reported symptom was pain or soreness in the breast. The majority of the respondents showed poor perception towards breast cancer. The family, friends and the educational institute were reported to be the most common source of knowledge. Conclusions: The study indicated the good cognizance of women attending the gynecological departments of breast cancer, and identified the issues negatively influencing on the perception of breast cancer. Accordingly, relevant educational programs and interrelation between women and health care providers to enhance the cognizance level of women concerning breast cancer were obligated.*

*Keywords:* *Knowledge, Screening, Breast Self-Examination*

INTRODUCTION

Breast cancer is the notable cancer present in female in the developed and the developing countries. The occurrence grades have been growing in a lot of countries (Sasco, 2001). Breast cancer has progressively turned into a problem of public health consequences. In the year 2000, there were 10 million new cases of cancer and 6 million cancer death throughout the world (Obaji, et al., 2013). Breast cancer is the highest prevalent cancer among females throughout the world (Ahmad, et al., 2011). Breast cancer is by far the major frequently identified cancer in females, and in the US, 202,964 females were identified with breast cancer,

and 40,598 ceased living from this illness (Siegel, Naishadham et al., 2012). While an increased chance of breast cancer in African countries has been reported (Balogun and Owoaje, 2007).

The main ratio of breast cancer in North America, North Europe, the superior ratio in South and Central America in addition to South and East Europe, and the inferior ratio in Africa and Asia have been reported (Sasco, 2001). In Pakistan females, breast cancer has been the usual cancer type accounted for almost one-third of the cancers in females (Ahmad, et al., 2011, Asif, Sultana et al., 2014). Pakistan has had a higher chance of the illness than the bordering throughout the world (Ahmad, et al., 2011).

The high random and destiny ratio of breast cancer, in addition to the lofty expense of therapy, necessitates that it ought to be a center of high consideration for health establishments and policymakers. The awareness and pursuing the posture for breast cancer supervisions have been so inadequate that most of the infected diseased persons get hospitalized, when slightly or in no way can be done for them (Obaji, et al., 2013).

Early discovery and quick treatment have been the major predictive factors in breast cancer. In Pakistan, late act, usually in the 3rd and 4th phase has been very common. Concealing training exercise like breast self - examination (BSE), clinical breast examination (CBE) and Mammography can decline the cancer phase (Ahmad, et al., 2011).

The best access to reduce the load of breast cancer unhealthiness is an impediment, and it would be achieved through awareness, knowledge and the practices among the females regarding breast cancer. Literature has had a gap considering the awareness and knowledge assessment of the females in Quetta, Pakistan, regarding breast cancer, therefore, the aim of this study was to assess knowledge and perception regarding breast cancer among the patients attending the gynecological departments in Quetta Pakistan.

## Methodology

### 1. Aims & Objectives:

The study was conducted to assess the knowledge and understanding of breast cancer amid the diseased persons visiting gynecological departments of the hospitals in Quetta located in the western regions of Pakistan.

### 2. Study Design:

A cross-sectional study was conducted for evaluation of breast cancer regarding the awareness and perception amid the patients attending the gynecological departments of the hospitals in Quetta Pakistan.

### 3. Study Population:

The total number of participants was 307.

Each participant who was present at the time of the data collection, and also interested to participate, was questioned to finish a list of questions made ready by the researcher to bring out the socio-demographic information cognizance, and the perception regarding breast cancer among the patients attending the gynecological departments of

- Sandeman provincial hospital Quetta
- Bolan medical complex hospital Quetta
- Christian hospital Quetta

### 4. Study duration:

The study was conducted during May2015-June2015

### 5. Study tool:

The questionnaire consisted of four sections:

i. Demographic section
ii. Knowledge related to risk factors for breast cancer
iii. Knowledge regarding the symptoms of breast cancer
iv. Practice towards breast cancer

6. **Study techniques:**

To obtain the sample, 3 hospitals were chosen by the stratified sampling method.

Every participant was questioned to complete the list of questions made ready by the researcher.

7. **Inclusion criteria:**

Married, (inpatients & outpatients), understanding Urdu, and willing to participate in the study were included.

8. **Exclusion criteria:**

Unmarried, emergency patients and who were not willing to participate in this study, were excluded.

9. **Statistical analysis:**

The details were computed and examined utilizing IBM statistical product for social sciences

Version 22 (IBM SPSS version 22). The descriptive analysis was done. The results for

each item on the questionnaire were reported as frequencies and percentages.

## Results

### Demographic Characteristics:

Table no 1 shows the demographic details. The education level showed that the majority of the patients 74 (24.1%) were graduate. The majority of the respondents 95 (30.9%) were in the age of first pregnancy stages from 21-24 years. Most of the respondents 186 (60.6%) were those who had pregnancies ranged from 0-2. The question related to the family history associated with breast cancer was responded negatively by the majority (273, 88.8%).

**Table 1:** Demographic characteristics

| Descriptive | Frequency | Percentage |
|---|---|---|
| Education | | |
| Primary | 23 | 7.5 |
| Secondary | 31 | 10.1 |
| Metric | 63 | 20.5 |
| Inter | 50 | 16.3 |
| Graduate | 74 | 24.1 |
| Uneducated | 66 | 21.5 |
| Age of first pregnancy | | |
| 12-16 | 26 | 8.5 |
| 17-20 | 93 | 30.3 |
| 21-24 | 95 | 30.9 |
| 25-28 | 70 | 22.8 |
| 29-32 | 16 | 5.2 |
| 33-36 | 7 | 2.3 |
| Number of pregnancies | | |
| No child | 15 | 4.9 |
| 1-4 | 247 | 80.5 |
| 5-8 | 36 | 11.7 |
| 9-12 | 9 | 2.9 |
| Positive family history of breast cancer | | |
| Yes | 34 | 11.1 |
| No | 273 | 88.9 |

### Responses to Breast Cancer Knowledge:
### Knowledge related to risk factors

The information related to the knowledge was scored and analyzed. There were various questions regarding the knowledge on breast cancer. The majority of the respondents (109) (35.5%) did not know that breast cancer occurs by increasing age. Positive family history regarding breast cancer among the respondents

showed that the majority of respondents 273 (88.9%) had no such history. One hundred (32.6%) respondents showed that breast cancer may occur due to obesity/ high-fat diet. One hundred and twenty-nine (42.0%) respondents said that working-class women are not a case of breast cancer disease. One hundred and fifty-six (50.8%) respondents did not know that bearing the first child at the late age is the reason for breast cancer disease. Late menopause is the reason for breast cancer stated by 131 (42.7%) respondents. Forty-five (14.7%) respondents showed that stress can not be the reason for breast cancer disease. One hundred and thirty-six (44.3%) respondents did not know that the large breast is the cause of breast cancer disease. One hundred and twenty-two (39.7%) respondents answered that the use of contraceptive pills is the cause of breast cancer disease. Ninety-one (29.6%) respondents don't know that no breastfeeding can lead to breast cancer disease.

**Knowledge related to symptoms**

One hundred and eighty-six (60.65) respondents answered that lump in the breast is a sign of breast cancer disease. 17 respondents (5.5%) did not agree that discharge from breast occurs in breast cancer disease. The sign of pain/soreness in the breast was responded by 216 (70.4%). The change in the size of breast is a sign of breast cancer stated by 190 (61.9%) respondents. One hundred and eighty seven (60.9%) respondents saw ulceration in breast assign. The majority of the respondents 159 (51.8%) showed weight loss as a sign of breast cancer. The change in shape as a sign of breast cancer was described by 191 (62.2%) respondents. Swelling was recorded by 168 (54.7) as a sign of breast cancer, and swelling under the armpit was answered by 184 (59.9) as a sign of breast cancer.

**Table 2:**  Responses to Breast Cancer Knowledge

| Questions | Yes N (%) | No N (%) | Don't Know |
|---|---|---|---|
| **Knowledge Related To Risk Factors** | | | |
| Increasing age | 107 (34.9) | 91 (29.6) | 109 (35.5) |
| Positive family history of breast cancer | 31 (10.1) | 273 (88.9) | 3 (1.0) |
| High fat diet/obesity | 100 (32.6) | 89 (29.0) | 118 (38.4) |
| Working class women | 56 (18.2) | 129 (42.0) | 122 (39.7) |
| First child at late age | 96 (31.3) | 55 (17.9) | 156 (50.8) |
| Late menopause | 131 (42.7) | 28 (9.1) | 148 (48.2) |
| Stress | 132 (43.0) | 45 (14.7) | 130 (42.3) |
| Large breast | 79 (25.7) | 92 (30.0) | 136 (44.3) |
| Use of contraceptive pills | 122 (39.7) | 38 (12.4) | 14 (47.9) |
| No breast feeding | 195 (63.5) | 21 (6.8) | 91 (29.6) |
| **Knowledge Related To Symptoms** | | | |
| Lump in breast | 186 (60.6) | 21 (6.8) | 100 (32.6) |
| Discharge from breast | 179 (58.3) | 17 (5.5) | 111 (36.2) |
| Pain or soreness in breast | 216 (70.4) | 5 (1.6) | 86 (28.0) |
| Change in size of breast | 190 (61.9) | 9 (2.9) | 108 (35.2) |
| Discoloration of breast | 187 (60.9) | 10 (3.3) | 110 (35.8) |
| Ulceration of breast | 186 (60.6) | 14 (4.6) | 107 (34.9) |
| Weight loss | 159 (51.8) | 31 (10.1) | 117 (38.1) |
| Change in shape of breast | 191 (62.2) | 5 (1.6) | 111 (36.2) |
| Swelling or enlargement of breast | 168 (54.7) | 13 (4.2) | 126 (41.0) |
| Lump under armpit | 184 (59.9) | 7 (2.3) | 116 (37.8) |

**Responses to Breast Cancer Perception**

Two hundred and thirty (74.9%) respondents stated no to (SBE) as a method to diagnose breast cancer disease. Two hundred and sixty-nine (87.6%) respondents responded that (CBE) is the method to diagnose breast cancer disease. Mammography method for the diagnosis of breast cancer disease was positively responded by 258 (84.0) respondents. The majority of the respondents 258 (84.0%) knew the ultrasound

techniques for the diagnostic purpose of breast cancer disease. 201 (65.5) knew the age SBE should be started. 223 (72.6) respondents showed that neither they performed SBE nor they knew how to perform it.

Table 3. Responses to Breast Cancer Perception

| Questions | Yes N (%) | No N (%) | Don't Know |
|---|---|---|---|
| Do you think self-breast examination (SBE) is a method to diagnose breast cancer? | 39 (12.7) | 230 (74.9) | 38 (12.4) |
| Is that your opinion that clinical breast examination (CBE) is a method to diagnose breast cancer? | 269 (87.6) | 2 (0.7) | 36 (11.7) |
| Do you think mammography is a method to diagnose breast cancer? | 258 (84.0) | 6 (2.0) | 43 (14.0) |
| Do you believe ultrasound is a method to diagnose breast cancer? | 258 (84.0) | 5 (1.6) | 44 (14.3) |
| Do you know at what age SBE should be started? | 62 (20.2) | 201 (65.5) | 44 (14.3) |
| If you perform SBE then do you know how to perform it? | 46 (15.0) | 223 (72.6) | 38 (12.4) |
| Do you know how often sb should be done? | 2 (0.7) | 27 (8.8) | 160 (52.1) |

## Sources of Information

Considering the source of information, it was revealed that the noticeable source of information regarding breast cancer was given through the educational institute; however, the majority of the respondents had other sources of information including family, and friends.

Table 4. Sources of Information

| Source of information | Frequency | Percentage |
|---|---|---|
| Educational institute | 70 | 17.5 |
| Health care providers | 31 | 7.8 |
| Seminar / Workshops | 62 | 15.5 |
| Newspaper / Articles / Media | 35 | 8.8 |
| TV | 46 | 11.5 |
| Other (family friends) | 158 | 39.0 |

## Knowledge score group:

The Cut off level was ≤10, and the total knowledge questions were 20, and the scoring (knowledge) less than or equal to 10 was considered as poor knowledge, and the scoring (knowledge) greater than 10 was considered as the adequate knowledge.

The results displayed that most of the participants (168, 54.7%) had sufficient awareness about breast cancer.

Table 5. Knowledge scores

| Knowledge | Frequency | Percentage |
|---|---|---|
| Poor Knowledge | 139 | 45.3 % |
| Adequate Knowledge | 168 | 54.7 % |

## Perception score group:

The Cut off level was ≤3, and the total symptoms related to the questions were 6, and the scoring less than or equal to 3 was considered as the poor practice, and the scoring (practice) greater than 3 was considered as the adequate practice.

The results displayed that most of the respondents (201 being 65.5%) had the vulgar practice regarding breast cancer.

**Table 6.** Perception scores

| Practice | Frequency | Percentage |
| --- | --- | --- |
| Poor Perception | 201 | 65.5 % |
| Adequate Perception | 106 | 34.5 % |

## Discussion

The results showed that although the majority of the respondents were graduated, the knowledge related to the risk factors for breast cancer among the patients attending the gynecological departments was good, some characteristics were answered positively by the majority including no breast feeding, late menopause, stress and the use of contraceptive pills as increasing the risk of breast cancer, while they negatively marked the working-class woman as the reason of the disease. The results about the knowledge related to the symptoms revealed that the respondents knew more about the symptoms of breast cancer as compared to the risk factors. Although, the whole knowledge was adequately related to the risk factors and symptoms.

About the perception of breast cancer disease, the majority of the respondents responded positively towards the (CBE) as compared to (SBE). Moreover, the respondents also answered positively that mammography and clinical ultrasound were accurate diagnostic tools for the detection of breast cancer. The minority of the respondents were aware of the exact age at which the (SBE) should be performed, and the majority of them did not perform the (SBE) neither they knew how to perform it. Considering the perception of breast cancer, the majority of the respondents did not know that how often they should perform (SBE) perform, while the flow of the remaining respondents was towards the weekly examination.

According to the results, the respondents revealed that the noticeable source of their information was educational institute, family and friends.

The same cross-sectional study was performed related to the training exercise of breast self-examination and awareness of breast cancer amid 2186 female university students in Korea. The breast cancer and genetic scale were utilized; the assembled data were examined using descriptive statistics and logistic regression. 27% of the students were reported to be engaged in (SBE (Organization 2011). The participants displayed a medium level score on knowledge about breast cancer (Organization, 2011).

Another similar study was conducted in London, UK titled as the women's knowledge and belief regarding breast cancer. There were 1830 defendants (Organization, 2011). The consequences of the statistical study presented that in spite of the point that British females had a good awareness of some points of view of breast cancer, there was deficient knowledge of other significant problems, including the awareness of non-swelling breast sign and lifelong risk of improving the illness. The most of the females surveyed recognized a painless breast swell as a sign of breast cancer. Half of the sample recognized dimpling of the breast skin, as a sign of breast cancer. All of these situations, anyway, were reasonable to guarantee the hospital source of information in the important ratio of women. Most of the respondents anyway had contrary perceptions regarding the length of cure, and the attending negative effects. It was expected that their understanding was related to the surgical and chemotherapeutic cure manner, as these were the procedures most regularly referred (Organization, 2011).

Another study was done on the educators doing duties in female schools in Buraidah, Saudi Arabia utilizing a self-administered list of questions to scrutinize partakers' awareness regarding the risk agents of breast cancer, their treatment, and screening the concealing conducts. A sample of 376 female educators was incidentally chosen. A list of question was formed based on the meditation objectives. It comprised the questions related to the personal data and the history of the health events. The list of question also scrutinized the awareness and treatment of the educators related to the breast cancer, and their training exercise of the concealing methods (Organization, 2011). The data collection process was performed by a pre-trained woman on the medical students while they were preparing a course of academic phase. The mostly reported risk factor by the participants was non-breastfeeding pursued by the use of women's sex hormones.

Regarding the acknowledgement of the concealing procedures, BSE was the most well-known process, clinical breast examinations (CBE) came next (28.2%). Mammography was the final recognized process (Organization, 2011).

A similar study already has been carried out named as " Awareness treatment and training exercise of Pakistani women group concerning breast cancer" at Holy Family Hospital, Rawalpindi in Pakistan from January to May 2009. One thousand incidentally chosen mature women were demonstrated as diseased persons (except those with breast finding fault), and they were questioned formally. The preparatory test, was formed of a list of questions, comprising of 34 (open and closed-ended) questions, along with their demographic outline data which was examined by utilizing SPSS version 13. More than 50%-partakers were conscious of cancer's connection with the increasing age, short of breastfeeding, obesity, swelling without pain, and smoking. Excluding breast swelling, over 50% partakers had awareness regarding breast cancer sign. >50% subjects had awareness about identifying the disease modes, attitude and its association to the result as compared to the study conducted in Quetta city (Organization, 2011).

A similar study was held in seven teaching hospitals of Karachi Pakistan utilizing layer unplanned sampling with the proportional allocation. A whole of 609 licensed female medical caretakers were questioned formally utilizing a formed list of question accommodated from the Stager's understanding Breast Cancer Knowledge Test. The awareness on breast cancer risk agents was categorized into good, equitable and poor categories. Thirty-five percent of the nurses in the sample had good awareness, 40% had fair knowledge, while 25% nurses had poor knowledge of breast cancer risk factors. The credibility coefficient (KR-20) for the device was 0.1, which was measured absolutely low (Organization, 2011). There was a need to emphasize on the health programs at the grass root level along with the principles of primary health care.

## Conclusion

In conclusion, the current examination showed that awareness of BC as an object, and most of the other components of awareness was not low among the respondents in the studies reviewed. It also showed that the level of awareness domains did not always directly influence the performance of breast cancer screening procedure among the respondents. The study concluded that although the knowledge scores on breast cancer were measured at good level, the most detective risk factor was no breast feeding. The most known symptom related to breast cancer was pain or soreness in breast, and another common symptom marked was the change in the shape of breast. A method used for cancer breast screening among the participants was (CBE), however the majority never practiced it. The result displayed the poor perception. And, the family and friends were found to be the major source of breast cancer knowledge. The study recommended a greater focused breast cancer education program to improve the knowledge about breast cancer, and change the misconceptions about risk factors, as these have been the basis for sound attitudes and behaviors, and increase the awareness of the participants of the study, and of (SBE) as it is the best option for the interval screening among the women of all ages. Breast cancer awareness programs should be developed in universities including lectures, seminars, workshops, and on hand trainings. The concept of National Month of Breast Cancer Awareness should also be embraced in Quetta, Pakistan as it is the case in most Western countries.

### Limitations:
- The study was conducted in three hospitals of Quetta, and hence, the results of the research could not be generalizable to the complete population of Pakistan. There is need for more data from other cities of Pakistan.
- The limitation included financial limits and time constraints.

## References

1. Ahmad, S., A. Riaz, M. Rizwan, N. Qureshi and S. Atta (2011). "Knowledge, attitude and practice for breast cancer risk factors and screening modalities in staff nurses of Ayub teaching hospital Abbottabad." J Ayub Med Coll Abbottabad 23(3).pp.127-9.
2. Asif, H. M., S. Sultana, N. Akhtar, J. U. Rehman and R. U. Rehman (2014). "Prevalence, risk factors and disease knowledge of breast cancer in Pakistan." Asian Pac J Cancer Prev 15: 4411-4416.
3. Balogun, M. and E. Owoaje (2007). "Knowledge and practice of breast self-examination among female traders in Ibadan, Nigeria." Annals of Ibadan Postgraduate Medicine 3(2): 52-56.
4. Obaji, N., H. Elom, U. Agwu, C. Nwigwe, P. Ezeonu and O. Umeora (2013). "Awareness and Practice of Breast Self. Examination among Market Women in Abakaliki, South East Nigeria." Annals of medical and health sciences research 3(1): 7-12.
5. Organization, W. H. (2011). "The world medicines situation report 2011." The world medicines situation report 2011.
6. Sasco, A. J. (2001). "Epidemiology of breast cancer: an environmental disease?" Apmis 109(S103): S80-S92.
7. Siegel, R., D. Naishadham and A. Jemal (2012). "Cancer statistics, 2012." CA: a cancer journal for clinicians 62(1): 10-29.