Original Research Article

Breast cancer screening practices among Afghan women visiting Istiqlal and Jumhuriat hospitals in Kabul city, Afghanistan

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ABSTRACT

Background: The incidence of breast cancer is rising in developed and developing countries. Early detection, screening, awareness of early signs, and symptoms are critical to improve breast cancer by seeking diagnosis and treatment. The aim of this study is to examine practices regarding breast cancer among Afghan women, visiting Istiqlal and Jumhuriat hospitals in Kabul city.

Methods: A cross-sectional descriptive study was conducted among 410 Afghan women aged 18 years and above who visited Istiqlal and Jumhuriat national hospitals in Kabul city, Afghanistan. The data was collected using self-administrative methods and face to face interviews from February to March 2020. A standard questionnaire was used for the study and it was translated from the English language to Pashto and Dari languages. The data was analyzed using SPSS version 24.

Results: The majority of Afghan women who participated in this study had weak screening practices of breast cancer. Only 27.6% of participants were practicing breast self-examination, 14.9% of them practiced clinical breast examination during the past one year and 13.9% of them performed mammograms in the past 2 years. The commonest reason for not practicing breast self-examination was that they have never taught how to perform breast self-examination. The reason for not performing clinical breast examination was that they were shy to go for clinical breast examination and the other common reason was that the clinics were far from them. The education level had a significant association with their practices of breast self-examination (p=0.001) and clinical breast examination (p=0.031).

Conclusions: Overall the findings of this study indicate that Afghan women who participated in this study had weak practices of breast cancer screening. It is important to increase future screening programs and improve the awareness level about screening methods of breast cancer among Afghan women through appropriate health education campaigns.

Keywords: Afghan women, Breast cancer, Kabul city, Practice, Screening

INTRODUCTION

Breast cancer is the most common and frequent type of cancer among women both in developed and developing countries; however, breast cancer incidence is increasing in developing countries. In low and middle-income countries breast cancer diagnoses in late stages and the key to improve breast cancer outcome and survival is awareness and its early detection by screening.¹ The risk of death from breast cancer can be reduced by its early detection which can result in better treatment and reduce the risk of death, however, screening tests for breast cancer rapid diagnosis is an important measure.² Screening practices of breast cancer are the key to early detection and survival from breast cancer. Breast cancer is almost completely curable at its early stages by seeking medical care in the course of the disease. Breast self-examination (BSE), clinical breast examination (CBE),
and mammography are three main options for early detection of breast cancer, however that mammography is the most accurate option, but BSE and CBE are also helpful and accessible. According to WHO in 2018, breast cancer is impacting 2.1 million women each year and it is estimated that 627,000 women died from breast cancer which is 15% of all cancer deaths among women in the world. In recent decades its prevalence increased all over the world. In Asia, breast cancer has a 5-year prevalence of 2.6 million, 38% of world breast cancer in 2018, related to this, a mortality rate of 49.6% of all world breast cancer, 3.1 thousand people by 2018. Breast cancer is the most common cancer in Afghanistan among women, and due to lack of knowledge and awareness, breast cancer results in death among women. However, that there has not been done any study and there is no accurate data available concerning breast cancer and its burden in Afghanistan but there are limited data and estimations from GLOBOCAN. According to WHO estimates of 2012, except for Pakistan, Afghanistan has the highest number of (breast cancer) cases compared to its neighboring countries such as Iran, China, India, Uzbekistan, Tajikistan and Turkmenistan. Moreover, it is estimated that out of 20,000 cancer patients in Afghanistan, 7,000 of these are breast cancer cases. There is no national cancer policy or action plan, and similarly, there is a lack of cancer registries. Studies in many other countries showed that lack of awareness and misbelieve is one of the leading causes of breast cancers. The practice of breast cancer among Afghan women is not known yet. The aim of the study is to examine practices regarding breast cancer among Afghan women, visiting Istiqlal and Jumhuriat hospitals in Kabul city.

METHODS

Study design and location

A cross-sectional descriptive study was conducted among women aged 18 years and above who visited Istiqlal and Jumhuriat hospitals in 2020. Both hospitals are tertiary hospital and located in Kabul city of Afghanistan. Kabul city is the capital and the most populated city of Afghanistan, located in the eastern part of the country with a population of 4.222 million out of 37 million.

Study tool

A standard questionnaire was used in this study and modified to suit this study. The questionnaire was translated from the English language in simple and understandable languages both in Pashto and Dari, the official languages in Afghanistan. The questionnaire consisted of two parts: socio-demographic data and practices regarding breast cancer. The first part consisted of 6 questions about socio-demographic characteristics such as age, education level, occupation, marital status, number of children, and residence city. The second part was consisted of three questions to examine the practice level regarding breast cancer screening methods.

Data collection procedure

Trained female students were volunteered to collect data from both Istiqlal and Jumhuriat hospitals from February to March 2020. The data was collected through self-administered and face to face interview was done for illiterate participants who could not read and write. About twenty minutes were given to participants to complete the questionnaire. The questionnaire was collected immediately once the participants completed it. Female 18 years and over who were visiting outpatient clinics of Istiqlal and Jumhuriat hospitals and willing to participate during data collection period were included and female with any breast complaints, breast cancer history and also female with medical background were excluded from study.

Analysis of data

Data Analysis was done by Statistical Package for the Social Sciences (SPSS) version 24. A descriptive analysis was done.

Ethical considerations

The ethical approvals were obtained from the Ankara Yıldırım Beyazıt University ethic committee and the Institutional Review Board of the Ministry of Public Health of Afghanistan. Oral and written informed consent was obtained from the participants before the questionnaires were given to be filled out.

RESULTS

Socio-demographic characteristics

A total of 410 women aged 18 years and above agreed to participate in this study. The mean age was 33.81±13.08 with a median age of 31, the minimum age of participants in this study was 18 years and the maximum age was 77 years. A higher percentage of participants 192 (46.8%) were between were aged between 18-29 years, 85 (20.7%) aged between 30-39 years, and 133 (32.4%) of women aged 40 years and over. A high proportion of participants 176 (42.9%) were illiterate while 79 (19.3%) attended Madrasa and only 67 (16.3%) had tertiary education such as certificates from teacher training institutes, a diploma from technical institutes, bachelors, masters or PhD degrees. Half of the participants 302 (50.7%) were married and 102 (24.9%) were single. The majority of participants were housewives and unemployed while only 25 (6.1%) were formally employed. The maximum number of children a woman had was 11, 170 (41.5%) of women had 1 to 5 child, 110 (26.8%) had more than 5 children and 130 (31.7%) did not have any child. More than half of the participants were speaking in Dari and 35.6% were speaking in Pashto. Majority of participants 79.3% were the residence of Kabul city while 20.7% of them were coming from other cities.
Table 1, presents the socio-demographic characteristics of the participants.

### Table 1: Participants’ socio-demographic characteristics (N=410).

| Category                  | Frequency | Percentage (%) |
|---------------------------|-----------|----------------|
| **Age group**             |           |                |
| 18-29 Years               | 192       | 46.8           |
| 30-39 Years               | 85        | 20.7           |
| 40≤ Years                 | 133       | 32.4           |
| **Education background**  |           |                |
| Illiterates               | 176       | 42.9           |
| Madrasa                   | 79        | 19.3           |
| Primary school            | 45        | 11             |
| High school               | 43        | 10.5           |
| Tertiary education        | 67        | 16.3           |
| **Occupation**            |           |                |
| Student                   | 42        | 10.2           |
| Self-employed             | 41        | 10             |
| Formally employed         | 25        | 6.1            |
| Unemployed and Housewife  | 302       | 73.7           |
| **Marital status**        |           |                |
| Single                    | 102       | 24.9           |
| Married                   | 208       | 50.7           |
| Divorced                  | 51        | 12.5           |
| Widowed                   | 49        | 12             |
| **Number of children**    |           |                |
| Did not have child        | 130       | 31.7           |
| 1-5 child                 | 170       | 41.5           |
| 5<child                   | 110       | 26.8           |
| **Residence city**        |           |                |
| Kabul                     | 325       | 79.3           |
| Other provinces           | 85        | 20.7           |
| **Language**              |           |                |
| Pashto                    | 146       | 35.6           |
| Dari (Persian)            | 264       | 64.4           |
| **Mean age (±SD): 33.81±13.08** | Median age: 31 | Minimum age: 18 | Maximum age: 77 |

### Table 2: Descriptive data of respondents on practices regarding breast cancer (N=410).

| Questions on practices of breast cancer                                      | Answer         | n   | (%)  |
|-------------------------------------------------------------------------------|----------------|-----|------|
| Have you ever practiced breast self-examination?                             | Yes            | 113 | 27.6 |
|                                                                                | No             | 297 | 72.4 |
| If yes how often?                                                            | Monthly        | 36  | 8.8  |
|                                                                                | Every six months | 35  | 8.5  |
|                                                                                | Yearly         | 42  | 10.2 |
|                                                                                | Never practiced | 297 | 72.4 |
| If you never practiced breast self-examination give reasons why?             | Forgetting     | 36  | 8.8  |
|                                                                                | Not sure how to do it | 71  | 17.3 |
|                                                                                | Difficult to perform | 39  | 9.5  |
|                                                                                | Never taught how to do it | 151 | 36.8 |
| Have you ever visited a doctor for a clinical breast exam in the past one year? | Yes            | 61  | 14.9 |
|                                                                                | No             | 349 | 85.1 |
| If no give reasons for not visiting a doctor for clinical breast examination  | Never taught it is important | 26  | 6.3  |
|                                                                                | Staying far from the clinic | 60  | 14.6 |
|                                                                                | Too busy       | 78  | 19   |
|                                                                                | Too shy to be examined | 94  | 22.9 |
|                                                                                | It is painful to be examined | 6  | 1.5  |
|                                                                                | Other          | 85  | 20.7 |
|                                                                                | No answer      | 61  | 14.9 |
| Have you done a mammogram in the past 2 years?                               | Yes            | 57  | 13.9 |
|                                                                                | No             | 353 | 86.1 |
Practices of breast cancer screening methods

There were three questions investigating about practices on breast cancer screening methods among participants. The questions were about breast self-examination (BSE) including two items, clinical breast examination (CBE) including one item and about mammogram practices.

From 410 participants only 113 (27.6%) of them practices breast self-examination, however, from women who practiced BSE, 36 (8.8%) of them were practicing monthly. From 297 (72.4%) who never practiced BSE, most of them 151 (36.8%) never taught how to perform BSE, while 39 (9.5%) indicated that it is difficult to do BSE.

Among 410 participants, only 61 (14.9%) of them visited a doctor for clinical breast examination during the past year. While, from 349 (85.1%) who did not visit a doctor for CBE, 60 (14.6%) indicated living far from clinics is the reason for not performing CBE. 94 (22.9%) responded that they were too shy to be examined.

From 410 participants 113 (27.6%) of them were practicing breast self-examination, 36 (8.8%) were practicing monthly, 35 (8.5%) were practicing every six months, and 42 (10.2%) of them were practicing breast self-examination. Those who never practiced BSE, 151 (27.6%) of them stated that they have never taught how to do BSE, 71 (17.3%) responded that they are not sure how to do it, 39 (9.5%) of them stated that it is difficult to do BSE, and 36 (8.8%) responded that they are forgetting to do BSE. However, from all 410 study participants, only 57 (13.9%) of them performed mammograms in the past 2 years and the majority 353 (86.1%) of them did not perform mammograms in the past 2 years.

There was a significant association between the education level of participants and their practices of breast self-examination (p=0.001) and clinical breast examination (p=0.031). However, the association between education level and mammogram (p=0.315) was not significant. The relationship between screening methods and occupation (p=0.190) and marital status (p=0.621) was not significant. Moreover, the relationship between screening methods of breast cancer and the age of participants was significant (p<0.001) (Table 2).

DISCUSSION

Practicing screening methods of breast cancer play a vital role in early detection and seeking treatment of breast cancer. This study was conducted to evaluate the screening practices of breast cancer among Afghan women who visited Istiqal and Jumhuriat hospitals in Kabul city, Afghanistan. The results of the study revealed that only 113 (27.6%) of participants were practicing breast self-examination, only 61 (14.9%) of them practiced clinical breast examination during the past one year and 57 (13.9%) of them performed mammogram in the past 2 years. The common reason for not practicing BSE was that they never taught about BSE and were not sure of how to perform BSE. The common reason for not performing CBE was that they were shy to go for CBE and the other common reason was that the clinic was far from them. A study conducted by Mehra S et al, among Afghan immigrant women residing in Northern California, revealed that Afghan immigrant women had a low rate of breast cancer screening which results to late diagnosis and put women in higher risk. The study by Mehra S et al, indicated that lack of knowledge about breast cancer among Afghan women is a major barrier for breast cancer screening. A similar study conducted in Addis Ababa, Ethiopia by Wurjine TH et al, among female health workers, revealed that 79.9% were practicing breast self-examination, 46.6% had practiced clinical breast examination and 24.2% had a mammographic screening. The result of the study by Wurjine TH et al, indicated a higher practice level than the current study and the common reason for the difference was that it was among health workers, however, that in the current study the target was public. A similar study done by Shiryazdi S M et al, revealed that 65.8% of participants had a weak practice of breast cancer screening in Yazd city in Iran. However, 59.4% of participants indicated that not being aware of the correct practice of BSE is the common reason for not performing BSE. Raza R et al, conducted a similar study among women attending civil Hospital and Jinnah Postgraduate Medical Center in Karachi, Pakistan which the result revealed that 22.5% of women were practicing BSE and 9.4% were practicing monthly, however, education level was significantly associated (p<0.001) with practicing screening of breast cancer. In the current study also, the association between screening methods of breast cancer and the age of participants was significant (p<0.001). Moreover, the relationship between screening methods and variables such as occupation and marital status was not significant. In addition, there was a significant association between the education level of participants and their practices of breast self-examination (p=0.001) and clinical breast examination (p=0.031). However, the association between education level and mammogram (p=0.315) was not significant. Also, there was no significant association observed between screening methods and occupation (p=0.190) and marital status (p=0.621) of participants in this study.4-11

The limitations of this study were a small sample size which participants were attending only the hospitals and may not represent the general population or all Afghan women.

CONCLUSION

Overall the findings of this study indicate that Afghan women who participated in this study had weak practices of breast cancer screening. The education level had a significant association with their practices of breast self-examination (p=0.001) and clinical breast examination.
A small proportion of participants were practicing screening methods regularly which the common reason was lack of knowledge about screening methods.

**Recommendations**

It is crucial to increase future screening programs and improve the awareness level about screening methods of breast cancer among Afghan women through appropriate health education campaigns. However, there is a need for different health sectors, the Ministry of Public Health and other health care organizations to have collaboration to raise awareness and make breast screening methods as a culture and routine to be able to reduce the incidence and morbidity due to breast cancer.

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