AWARENESS AND ATTITUDE TOWARDS BREAST CANCER PREVENTION AMONG HOSTEL WORKERS IN KABARDINO-BALKARIA STATE UNIVERSITY

Musdaliva Hardinas Anwar, Saron Mersha Ashagre
Balkarian State University, Nalchik, Russia
Email: musdalivahardinas@gmail.com, srm19850103@gmail.com

Abstract

Breast cancer is the most frequent type of cancer in women and it was estimated that 2.3 million new breast cancer cases were diagnosed in 2020 (24% of all cancers); it ranks second overall (10.9% of all cancers). The amis of this research are to asses awareness and attitude for prevention of breast cancer in the field of research. Source of the population were all reproductive age women workers in university hostels. Study group consisted of all women of reproductive age (40–65 years) who had there is a chance to be randomly selected from the hostels, Community based cross-sectional study were carried out by using well-structured questioner. Many of the participants were not knowledgeable about breast cancer. Women older than 50 years of age are at higher risk, yet only 10 (12.5) respondents had good awareness, that is, they scored is greater than or equal to the mean. Twenty-six (32.5%) participants have no idea had factors that increase the likelihood of developing breast cancer. Similarly, twenty-one (26.3%) of participants confirmed that they had no information about the symptoms of breast cancer. More than three-fourths of the participants (85 %) disagreed with that screening helps in prevention of carcinoma of the breast.

Keywords: awarness, attitude toeards, breast cancer prevention

INTRODUCTION

Breast cancer is the most frequent type of cancer in women and it was estimated that 2.3 million new breast cancer cases were diagnosed in 2020 (24% of all cancers); it ranks second overall (10.9% of all cancers) (Arnold et al., 2022). It is the most common cancer both in developed and developing regions with around 690 000 new cases estimated in each of them (population ratio 1:4) (Ferlay et al., 2019; McTiernan, 2003). Incidence rates vary from 19.3 per 100 000 women in Eastern Africa to 89.9 per 100 000 women in Western Europe, and are high (more than 80 per 100 000) in developed regions of the world (except Japan) and low (less than 40 per 100 000) in most of the developing regions. Although developed countries have the highest incidence rates, in the transition countries as in Latin America the estimated rates are supposed to increase in the future. The rates vary worldwide being the highest in Europe, and they are increasing in Asian and Latin- American countries mainly due to the population ageing and screening practices. Incidence rates are produced by Population-Based Cancer Registries worldwide; however, they only cover from 1 to 5% of Asia, Africa and South America. Therefore, data on incidence is limited in these continents due to several factors as lack of resources, priority and lack of trained staff (Youlden, Cramb, Yip, & Baade, 2014; Zuhroh & Pratiwi, 2014).

The risk factors include female gender, increasing age, family history of BC, early menarche, late menopause, older age at first live childbirth, genetic mutation, diet, obesity, smoking, and alcohol consumption (Arifin, 2021).Nutritional and epidemiological surveys have shown that dietary and lifestyle factors such as obesity, smoking, alcohol consumption, and sedentary lifestyle play significant role as risk factors for breast cancer while breast feeding practice is protective against breast cancer (McTiernan, 2003; Sonnenschein & Soto, 2016).

1. Getting older. The risk for breast cancer increases with age; most breast cancers are diagnosed after age 50.
2. Genetic mutations. Inherited changes (mutations) to certain genes, such as BRCA1 and BRCA2. Women who have inherited these genetic changes are at higher risk of breast and ovarian cancer.
3. Reproductive history. Early menstrual periods before age 12 and starting menopause after age 55 expose women to hormones longer, raising their risk of getting breast cancer.
4. Having dense breasts. Dense breasts have more connective tissue than fatty tissue, which can sometimes make it hard to see tumors on a mammogram. Women with dense breasts are more likely to get breast cancer.
5. Personal history of breast cancer or certain non-cancerous breast diseases. Women who have had breast cancer are more likely to get breast cancer a second time. Some non-cancerous breast diseases such as atypical hyperplasia or lobular carcinoma in situ are associated with a higher risk of getting breast cancer.
6. Family history of breast or ovarian cancer. A woman's risk for breast cancer is higher if she has a mother, sister, or daughter (first-degree relative) or multiple family members on either her mother's or father's side of the family who have had breast or ovarian cancer. Having a first-degree male relative with breast cancer also raises a woman's risk (Sonnenschein & Soto, 2016).
7. Previous treatment using radiation therapy. Women who had radiation therapy to the chest or breasts (like for treatment of Hodgkin's lymphoma) before age 30 have a higher risk of getting breast cancer later in life.
8. Women who took the drug diethylstilbestrol (DES), which was given to some pregnant women in the United States between 1940 and 1971 to prevent miscarriage, have a higher risk. Women whose mothers took DES while pregnant with them are also at risk.

Early diagnosis of cancer can effectively improve the chance of early detection of breast cancer in early stages and successful treatment resulting in improvement survival rate and quality of life (Prayoga, 2019). In this regard, early detection of disease through clinical breast exams such as mammography and breast self-examination as simple and inexpensive approaches provides the best approaches for reducing the risk of dying from breast cancer. Accordingly, correct knowledge about early warning signs and screening methods of disease plays an effective role towards developing and employing early detection programs in a community (Elmore, Armstrong, Lehman, & Fletcher, 2005; Shang & Xu, 2022).

Early detection is the cornerstone of breast cancer prevention. Mammography is an effective screening method to use low energy X-rays to obtain high-resolution images of the breast. The entire testing process only lasts for 20 minutes and it does not require any contrast-enhancing agent. Since the first recommendation for breast cancer screening by Professor Forrest, over 70% of women (aged 50-74 years) in America have been undergone breast cancer screening via mammography every 2 years (Tsugane, 2004).

Purpose of the study to assess awareness and attitudes towards breast cancer and highlight breast cancer to be considered a problem public health in the field of research.

RESEARCH METHOD

This study was carried out in Nalchik, in the Kabardino-Balkaria State University of Russia, in November 2020. Community based cross-sectional study were carried out (Spector, 2019). The source of populations were all reproductive age group women who were working in hostels of kabardino balakarian state university. The study group consisted of all women of reproductive age (40–65 years) who had there is a chance to be randomly selected from the hostels. All reproductive age group women who were working in hostels randomly selected in

kabardino balkarian state university were included in the study. The total sample size of study was 80. The outcome measures of this study were awareness and attitude of reproductive age women towards breast cancer. The independent variables include socio-demographic characteristics and related issues (Iwasaki & Tsugane, 2011; Maffini, Soto, Calabro, Ucci, & Sonnenschein, 2004).

An adapted and structured, pretested, interviewer-administered questionnaire was employed to collect data from the participants. First, the questionnaire was prepared in English and it was translated into Russian language, and then back to English to check its consistency.

Participants' awareness of breast cancer was assessed by listing questions related to risk factors, infection, cigarette smoking, family history of breast cancer and other vulnerable factors in women (Sørensen, Hørby, Friis, Pilsgaard, & Jørgensen, 2002). Questions are asking about risk factors, vulnerability, signs and symptoms, prevention.

For individual item, the participants were asked to choose one of the three options: "Yes," "No," or "I Don't know.") The scale was then taking that "Yes" was considered as 1 and No/Don't know as 0. A total knowledge score for all the items was computed by adding up. Total score was then categorized as poor knowledge (score of 0–5), fair knowledge (score of 6–15), and good knowledge (16–25).

Participants' attitude was assessed by asking them to rate each of the following statements: (1) carcinoma of the breast is highly prevalent and cause of deaths amongst most malignancies in Russia (2) any woman including you can acquire breast carcinoma; (3) carcinoma of the breast cannot be transmitted from one person to another.

Respondents were asked to choose one of the following options for each of the statements listed above: "strongly agree," "agree," "neither agree nor disagree," "disagree," or "strongly disagree.

Demographic characteristics, knowledge and attitude of breast cancer screening were described using descriptive statistics including percentages, frequencies, mean, median, standard deviation (SD). All analyses were conducted using the software SPSS version 21.

RESULT AND DISCUSSION

Socio-demographic characteristics

The total size of research subjects who were actual respondents to the moment of data collection amounted to 75 people. Thus, the percentage of respondents to the poll was calculated as 98%. The age of the participants ranged from 40 to 65 years old. The three main continents of the study were middle level workers 57 (76%), heads of office 8 (10.7 %) and the remaining 10 (10.3 %) were cleaners. The average monthly income of respondents was $ 179.38 with standard deviation ± 209.10 US dollars. Most, 50 (80.6%) of respondent's monthly income is 51.43-243.86 US dollars.

Table 1. Socio-Demographic Characteristics Of Informants

Variable background	Categories	Frequency	%
Age of respondents (n = 75)	>60	53	66.2 %
	50- 60	14	18.7%
	40- 49	8	10 %
Marital status (n= 75)	Married	27	33.75%
	Single	22	29.3 %
	Divorced	21	28 %
	Widowed	5	6.7 %
Monthly income in dollars USA (n = 75)	<70	20	26.7 %
	70–150	31	41.3 %
	151–200	15	20 %
	>200	9	12 %
Number of children (n=75)	0	10	13.3%
	1-2	53	70.6%
	>2	12	16 %

Participants' Awareness about breast Cancer

Many of the participants were not knowledgeable about breast cancer. Women older than 50 years of age are at higher risk, yet only 10 (12.5) respondents had good awareness, that is, they scored is greater than or equal to the mean. Among of women who report the disease is preventable, about half of respondents indicated that early detection and treatment are means preventing breast cancer (Raidanti & Wijayanti, 2022). Risk reduction were also methods prevention of breast cancer, as indicated by 15 (18.8%) respondents. Twenty-six (32.5%) participants have no idea had factors that increase the likelihood of developing breast cancer. Similarly, twenty-one (26.3%) of participants confirmed that they had no information about the symptoms of breast cancer (Lee et al., 2014)

Participants' Attitudes towards breast Cancer

More than three-fourths of the participants (85%) disagreed with that screening helps in prevention of carcinoma of the breast. Overall, only 6 (7.5%) respondents agreed that they would have screening done if it was free and caused no harm.

Table 2. Participants' attitudes towards cervical cancer.

Statements describing attitudes of the participants towards breast cancer.	Agree, n (%)	Neither agree nor disagree n (%)	Disagree, n (%)
1. carcinoma of the breast is highly prevalent	8 (10)	32 (40)	40(50)
2.young woman including you can get breast carcinoma.	14 (17.5)	24 (30)	42 (52.5)
3.carcinoma of the breast cannot be transmitted from one person to another.	26 (32.5)	15(18.75)	39 (48.75)
4. screening have contribution in prevention of carcinoma of the breast.	7 (8.8)	16 (20)	57 (71.3)
5. screening causes no harm to the client	17 (21.3)	21 (26.3)	42 (52.5)
6. The screening for breast cancer is not expensive	13 (16.3)	28 (35)	39(48.8)

.

The study viewed awareness and attitudes as a starting point for prevention and control of breast cancer. The results of this study showed that less half of the participating workers had a low level of comprehensive knowledge from aggregate score for vulnerable groups, risk factors, signs and symptoms, and methods of prevention of breast cancer. Less than half of the respondents believed that all women are at risk of getting sick breast cancer while others did not know which women were at risk get sick with this disease. This finding showed that participants had much more low level of awareness of risk groups compared with the results of others studies that were used as a reference. Most of the participants did not were able to name the risk factors for breast cancer. This result indicates that behavioral interventions to prevent and disease control has received little attention as women have tried to point out reasons why they are not screened, so that women's awareness of screening behavior is low.

CONCLUSION

This study showed the benefit of raising awareness, promoting an active search for medical information and experience in obtaining information about breast cancer from any source. The received data also strongly indicate that women may require different strategies disseminating health information to increase awareness and attitudes towards prevention and control of breast cancer. Finally, research is needed to fully understand the issues affecting women who have not had screening behavior for the prevention and control of breast cancer.

REFERENCES

Arifin, Zainal. (2021). *Smart Energy System Market and Business in Indonesia*. Researchgate.

Arnold, Melina, Morgan, Eileen, Rumgay, Harriet, Mafra, Allini, Singh, Deependra, Laversanne, Mathieu, Vignat, Jerome, Gralow, Julie R., Cardoso, Fatima, & Siesling, Sabine. (2022). Current and future burden of breast cancer: Global statistics for 2020 and 2040. *The Breast*, *66*, 15–23.

Elmore, Joann G., Armstrong, Katrina, Lehman, Constance D., & Fletcher, Suzanne W. (2005). Screening for breast cancer. *Jama*, *293*(10), 1245–1256.

Ferlay, Jacques, Colombet, Murielle, Soerjomataram, Isabelle, Mathers, Colin, Parkin, Donald M., Piñeros, Marlon, Znaor, Ariana, & Bray, Freddie. (2019). Estimating the global cancer incidence and mortality in 2018: GLOBOCAN sources and methods. *International Journal of Cancer*, *144*(8), 1941–1953.

Iwasaki, Motoki, & Tsugane, Shoichiro. (2011). Risk factors for breast cancer: epidemiological evidence from Japanese studies. *Cancer Science*, *102*(9), 1607–1614.

Lee, Hui, Li, Jia Yuan, Fan, Jin Hu, Li, Jing, Huang, Rong, Zhang, Bao Ning, Zhang, Bin, Yang, Hong Jian, Xie, Xiao Ming, & Tang, Zhong Hua. (2014). Risk factors for breast cancer among Chinese women: a 10-year nationwide multicenter cross-sectional study. *Journal of Epidemiology*, *24*(1), 67–76.

Maffini, Maricel V, Soto, Ana M., Calabro, Janine M., Ucci, Angelo A., & Sonnenschein, Carlos. (2004). The stroma as a crucial target in rat mammary gland carcinogenesis. *Journal of Cell Science*, *117*(8), 1495–1502.

McTiernan, Anne. (2003). Behavioral risk factors in breast cancer: can risk be modified? *The Oncologist*, *8*(4), 326–334.

Prayoga, Ami Ashariati. (2019). *Manajemen Kanker Payudara Komprehensif*. Airlangga University Press.

Raidanti, Dina, & Wijayanti, Rina. (2022). *Full Efektivitas Penyuluhan dengan Media*

Promosi Leaflet dalam Pencegahan Kanker Serviks.

Shang, Chao, & Xu, Dongkui. (2022). Epidemiology of Breast Cancer. *Oncologie*, 24(4).

Sonnenschein, Carlos, & Soto, Ana M. (2016). Carcinogenesis explained within the context of a theory of organisms. *Progress in Biophysics and Molecular Biology*, 122(1), 70–76.

Sørensen, L. T., Hørby, J., Friis, E., Pilsgaard, B., & Jørgensen, T. (2002). Smoking as a risk factor for wound healing and infection in breast cancer surgery. *European Journal of Surgical Oncology (EJSO)*, 28(8), 815–820.

Spector, Paul E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34(2), 125–137.

Tsugane, Shoichiro. (2004). Dietary factor and cancer risk--evidence from epidemiological studies. *Gan to Kagaku Ryoho. Cancer & Chemotherapy*, 31(6), 847–852.

Youlden, Danny R., Cramb, Susanna M., Yip, Cheng Har, & Baade, Peter D. (2014). Incidence and mortality of female breast cancer in the Asia-Pacific region. *Cancer Biology & Medicine*, 11(2), 101.

Zuhroh, Diana, & Pratiwi, Cindy. (2014). Penentuan harga jual stratejik terhadap produk dengan strategi biaya rendah dan diferensiasi. *Jurnal Siasat Bisnis*, 18(1), 133–142.