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Knowledge Towards Breast Self-Examination and Related Factors Among Women Aged Between 15-45 at Summit Health center Addis Ababa, Ethiopia 2020

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Abstract

A group of disorders known as cancer are characterized by unchecked cell growth and division. Despite the growing prevalence of breast cancer in Ethiopia, studies on the knowledge and associated factors of the backbone of preventative measures, breast self-examination, are scarce. Breast cancer is a type of cancer that arises from breast cells.

Objectives: This study aimed to assess knowledge and related factor of female patients towards breast self-examination at Semit health center.Methodology-A community-based cross-sectional study were conducted on women living in adiss abeba the data were collected using a self-administered written questionnaire. The sampling technique was convenient sampling, Data analysis was made using descriptive statistical methods .findings were presented with simple frequency, Perecentage, graph, and table.

Result: The survey included 200 respondents in total. Only 72 of them had good knowledge of this. It was discovered that occupational position and thorough awareness of BSE were factors influencing breast self-examination. The vast majority of study participants-156 out of 78.0-stated that there was no family history of breast cancer. Three of the individuals claimed that their aunts had breast cancer, whereas three claimed that their moms had the disease. Only 44 of the individuals had previously disclosed having breast cancer.

Conclusion: In our survey, more than half of participants made a significant case for women's inadequate understanding, negative attitudes, and poor practices about BSE. Along with a breast cancer awareness campaign, it was advised that emphasis be placed on improving women's attitudes and practices about breast self-examination and enhancing the implementation of comprehensive, systematic, and ongoing BSE educational programs.

Recommendation: As results show the practice of BSE and knowledge among these reproductive age group women was inadequate. Efforts should be made to strengthen community-based health education to increase knowledge related to breast cancer as well as the practice of breast self-examination. So, the Federal Ministry of Health and Ethiopian cancer association were responsible bodies to promote awareness creation at the community level on breast cancer and breast self-examination. Finally, additional community-based research should be needed for the future to improve.

Keywords: Knowledge; Practice; Breast self-examination; Associated factors; Ethiopia

Introduction

Cancer is a group of diseases characterized by uncontrolled growth and the spread of abnormal cells. Breast cancer is a kind of cancer that develops from breast cells and it is one of the non-communicable diseases and most common cancer in women worldwide. Breast self-examination is a process by which women examine their breasts regularly to detect any abnormal swelling in the breast. Breast cancer is the common cause of cancer-related death among women with 522,000 deaths in 2012 alone and it is the most frequently diagnosed cancer among women in 140 of 184 countries globally. Between 2008 and 2013, breast cancer incidence has increased by more than 20%, while mortality has increased by 14%. The incidence rate of breast cancer remains highest in more developed regions, but mortality is relatively much higher in less developed countries due to a lack of early detection and access to treatment facilities. The growth and aging of the population of the countries of low or middle-income countries, together with the westernization of lifestyle and the rapid growth of tobacco smoking, change in lifestyle habits and societal changes are leading to large increases in breast and colorectal cancer. In the United States, an estimated 246,660 new cases of invasive breast cancer are expected to be diagnosed in women in 2016, and about 40,450 of these women are expected to die [1].

The incidence rate of cancer is rising in many parts of the world. The international agency of cancer research estimated that for the year 2008 there were 12.4 million new cases of cancer, 7.6 million deaths from cancer. Breast, lung, and colorectal cancers represent 42.5% of the total deaths in women in developed countries. Cancer of the uterine cervix ranks first in less developed countries, with an estimated 275,000 cancer deaths followed by breast cancer with 252,000 deaths for accounting for 12.7%. Breast cancer is the most frequent cancer of women, with an estimated 1.15 million cases in 2002, ranking

the second overall. More than half of the cases are in industrialized countries about 361,000 in Europe 27.3% of cancers in women and 230,000 in North America 31.3%. Cancer is an emerging public health problem in Africa. About 715,000 new cancer cases and 542,000 cancer deaths occurred in 2008 on the African continent. The number of cases expected to double in the coming 20 years because of the aging and growth of the population. In several sub-Saharan Africa, Cervical cancer was commonly diagnosed in the past years and now breast cancer has become the most commonly diagnosed cancer in women [2].

In Ethiopia, around 60,000 new cases of cancer are diagnosed annually. Currently, cancer accounts for 4% of all deaths. Hong Kong Sophia and her cliques have done an astounding job in improving breast cancer awareness among women in Hong Kong by using a community-based outreach program. Seven hundred and seventy-seven women with a wide range of age years old have participated in this study which investigates the level of awareness of Hong Kong women before and after the breast health education program. The content of the program conducted was designed to be easily understandable, culturally appropriate with simple and clear instructions on how to conduct BSE correctly. The understanding of the participants on breast carcinoma was compared by answering the questionnaire before and after the program. As expected, almost every participant was able to give correct answers after the educational outreach program and correctly narrate the exact time and proper technique in conducting BSE. Most participants knew they had to use fingertips while performing BSE and they knew 2-3 days post-menstruation is the best day to practice BSE They also stated correctly that bathing is the most appropriate time to practice BSE. The majority of participants also state their willingness to share the breast health knowledge from the program with family and friends 92. Ready to practice BSE routinely and ready to seek medical advice upon discovery of abnormal symptoms. This study was good in terms of the two-in-one approach as the understanding of the public is promoted along with a research purpose. Sill we cannot rule out the gap in comparing the pre-test and post-test results as this may create bias due to the survey being taken at a highly motivated state of the respondents. There is a strong possibility that participants view BSE as burdensome within few months or few years resulting in neglecting their breast health. However, we do acknowledge the efforts of the researchers in the study [3].

Australia Based on the study done to examine eighty-three Australian women's estimation of getting breast cancer by Humpel and Jones, most of the women were highly overestimated their risk of getting breast cancer. While the risk of breast cancer occurring among Australian women at that time was 8%, 43% of the respondents greatly overestimate they were having a 50% or higher chance of getting breast cancer.

Many low and middle-income countries now face a double burden of breast cancer and cervical cancer which together represent the highest deaths in women over the age of 30 years.

In Africa, breast cancer was also the most commonly diagnosed cancer and the second leading cause of death among women in 2008. There are 92,600 cases and 50,000 deaths were reported that year. Cancer is a growing burden and continues to receive relatively low public health priority in Africa, because of limited resource and more attention given to communicable disease.

In Ethiopia, cancer cases are rising and the disease is becoming a public health burden. Currently, about 60,000 new cases of cancer are

diagnosed each year and each day around ten to fifteen new patient is seen. The study conducted by Addis Ababa city cancer registry from mentioned breast self- examination or clinical breast self- examination are methods of breast 2011 -2014 found out that there were 5,701 cancer cases. Breast cancer is the leading type among females and accounts for 33% of all cases of cancer. According to the Addis Ababa city cancer registry, breast cancer is the most commonly leading cancer among females accounting for 33% of the cases followed by cervix uteri which accounts for 17% [4].

The frequent age affected by breast cancer in Ethiopia is the age group between 30 - 39 accounting for 32% followed by the age group between 40 - 49 accounting for 29% and 20-29 aged only 10%. Each year, on average, 216 cases of breast cancer are reported according to Tikur Anbessa Specialized Hospital. Mammography is the best screening method to prevent breast cancer morbidity and mortality but in countries like Ethiopia, where resources are scarce, BSE should be encouraged for early detection of breast cancer. An across-sectional study was conducted in Nigeria, in 2006 on knowledge, attitude, and practice of breast cancer screening from a total of 393 female health workers showed that 55% had poor knowledge about risk factors and low level of breast cancer screening. Many participants were aware of mammography as a breast cancer diagnostic and 45.8% was cancer screening.

And yet another study done among female health science students at Adama science and Technology University showed knowledge and practice of breast self- examination was low. The knowledge of the student regarding breast self -examination was assessed and only 5.5% of the respondents practiced breast self- examination. This survey showed that only 8.7% of the respondent had good knowledge and the rest 91.3% have satisfactory to poor knowledge regarding breast self-examination screening. Few studies were done in Ethiopia regarding knowledge, attitude, and practice of breast self- examination. Women don't have adequate knowledge about risk factors, early detection measures, and warning signs of breast cancer. The case is also similar in most African countries.

According to studies carried out in Ethiopia, there are several factors often cited by study participants as reasons for them not performing BSE. The prominent ones constitute a lack of adequate awareness about the disease, not knowing the techniques, not seeing problems such as lumps on their breasts, and having little or no information about BSE and its importance [5].

Statement of problem: Breast Ca is one of the most commonly diagnosed cancer globally which accounts for 1.7 million cases in 2012 and there were 6.3 million women diagnosed with breast cancer in the previous five years.

Early diagnosis remains an important early detection strategy, particularly in low and middle-income countries where breast cancer is diagnosed in late-stage and resources are scarce. Currently, cancer accounts for four percent of all deaths in Ethiopia. Many of these deaths can be avoided if cancer can be detected and treated early. In Ethiopia, breast cancer is fatal because of women's inadequate knowledge and awareness of breast cancer signs. Moreover, women reach health care facilities late after the disease has spread [14]. Advanced breast cancer has the lowest survival rate and requires a huge resource to make treatment available.

Regarding early detection of breast cancer, mammography, CBE and self-breast examination are the main screening methods usually employed. Mammography cannot be applied always in countries

with limited health service resources like Ethiopia. Clinical breast examination also needs professional skills and women should visit health facilities. Breast self-examination is still recommended and easy to apply, inexpensive method for early detection of breast cancer in events of a limited resource.

In Ethiopia, around 60,000 new cases of cancer are diagnosed annually. Because of this disease burden raised our country planned strong initiatives designed by the government whose objective is to expand oncology departments in five regional university hospitals including Jimma, Gondar, Hawassa, Mekelle, and Harmony Study conducted in Adama, health science and technology university showed that knowledge and practice of breast self -examination was low which accounts respectively. The gaps are women in a community lack awareness and knowledge about breast cancer screening methods, breast cancer warning signs, breast cancer risk factors, and perception towards breast cancer. So, this study might fill the gap based on these findings.

Significance of the study: The study significantly contributes to educating women at the Summit Health Center who are between the ages of 15 and 45 about relevant factors. It is crucial to raise women's knowledge and awareness in order for the government and other responsible bodies to adopt policies for the prevention and control of breast cancer through enhanced awareness. The study could also help future researchers and policymakers build on this research by acting as a fundamental study for anyone desiring to conduct similar community studies.

This study will determine the present level of public awareness on self-breast examination knowledge and awareness for early diagnosis. Additionally, it will identify the informational gap that must be closed to raise community knowledge. Finally, since it helps public and commercial health facilities create health education programs and awareness-raising seminars, it can be a valuable benefit. The government created a national non-communicable illness strategic action plan in 2014 to address issues connected to cancer and other non-communicable diseases as the incidence of breast cancer rises today. Therefore, this study may have a positive impact by increasing public knowledge of early breast cancer signs and symptoms and early diagnosis or identification of the disease [6].

Methodology

Study area and period: The study was conducted from April-August 2020 among women aged between 15-45 at, Addiss ababa Ethiopia in summit health center this facility serves 25,000 peoples it found in summit condominium.

In which Addis Ababa, also spelled Addis Abeba, capital and largest city of thiopia It is located on a well-watered plateau surrounded by hills and mountains in the geographic centre of the country. Only since the late 19th century has Addis Ababa been the capital of the Ethiopian state. Its immediate predecessor, Entoto, was situated on a high tableland.

Study design: A community-based cross-sectional study was conducted from April-August 2020 Gc Population

Source population and study population: All adult female patients aged between 15-45 at Semit health center during the data collection period were considered as the study population.

Inclusion and exclusion criteria

Inclusion criteria

All women who were 15–45 age group visssting to semit health center and Those who are volunteer were Included.

Exclusion criteria

In this study women who are excluded

- Women with physical and mental impairments who might cause problems during the interview.

- Women who choose not to volunteer for study participation.

- Women aged below 15 and above 45

Sample size determination and calculation

The actual sample size for the study was determined using single population proportion formula. with the assumption of 87.3% knowledgeable of BSE

The sample size of this project will be determined by using a single population formula.

$$n = (Z\alpha/2)2 \ p \ (1 - p) \quad = n= (1.96)2(0.536) \ (0.464) \ / \ (0.05)2$$
$$3.84(0.248704/0.0025 = 382 \ d2$$

Where, N=maximum sample size to represent large population;

Z=with 95% confidence level (Z=1.96);

D= margin of sample error: 5% which is d= 0.05.

Where $Z\alpha/2$ (critical value) =1.96 for 95%;

P= prevalence of knowledge (87.3%)

BY adding 10% contingency will be calculated for non- response rate the total sample size required for the study will be 420(38 +382)

Sampling technique and procedure

The sample size of this project was determined by using a single population formula.

Data collection procedure

Data collection instrument and technique

Data was collected by using structured questionnaires for A community-based cross-sectional study all study participants was interview by data collectors from the prepared structured questionnaires.

Study Variable

Dependent variable

Independent variable

Socio-demographic characteristics

- Age

- Marital status

- Educational level

- Occupational status

- Ethnicity

- Breast cancer history

- Family history of breast cancer

- Personal history of breast cancer

- Knowledge of breast self-examination

Operational definition: BSE is the term used to describe a woman's examination of her breasts to look for lumps or other alterations. Or BSE is defined as the practice of local women palpating and inspecting their breasts and the area around them with their hands to check for any anomalies.a question with a 70% or higher response rate indicates solid expertise. Lack of knowledge: The question's response was less than 70% [7].

Adequate knowledge: It refers to participants who scored mean and above values 8 from the provided 12 close-Ended questions about the knowledge of BSE. Inadequate knowledge: It refers to participants who scored below mean values 8 from the provided 12 close- Ended questions about the knowledge of BSE. Favorable attitude: It refers to participants who scored mean and above values 6 for attitude-related questions, Towards BSE, which was measured by the provided 12 questions. Unfavorable attitude: It refers to participants who cored below mean values 6 for attitude-related questions. Towards BSE, which was measured by the provided 12 questions? Good practice: It refers to those who checked or per- form BSE at least once per month just a week after each menses. Poor practice: It refers to those who practice BSE other than the correct time in the cycle.

Data entry and analysis: Data were entered using Epi data version 4.6 software and analyzed using SPSS version 25. Data cleaning and cross-checking were done before analysis. Descriptive statistics were summarized using the mean, and stand- ard deviation. Frequencies and percentages were used in the presented table, figures and text. Multivariate logistic regression analysis were used to identify factors where p-value < 0.87 was declared as significantly asso- ciated with knowledge of breast self-examination

Data quality assurance and management: After the study started, we regularly reviewed the questionnaire to ensure its accuracy, completeness, and clarity. The questionnaires are created using interviewing techniques that are both Amharic and English while maintaining the confidentiality of the data and other fundamental data gathering principles. At the end of each day, the adviser verified the questionnaires' accuracy and the researcher double-verified the results.

Dissemination result: The study's results are presented to the Keamed Medical College, and at the end of the academic year, college students' G.C.s deliver their report in front of an advisor and, if feasible, an evaluator. A copy of the project's results is then distributed to the stakeholders.

Ethical consideration: The Kea Med Medical College of Health Science's ethical review committee granted its approval after assuring that the study's goal was both explicit and conveyed to its participants. Each respondent was asked to give their written consent after reading and signing the consent form before the data gathering procedure could begin.

Results

Socio-demographic characteristic of respondents: A total of 200 participants were included. The mean age of respondents was 30.3 years old with a [SD ±8.4]. Regarding their marital status, half of the study participants 112 were married followed by singles which accounts for 67and 17 divorced also 4 widowed. The educational status achieving secondary education and above 141, 26 of the participant is illiterate. The occupational status of participants 33 the less of the represented group was merchant's accounts only 12 of participants, 37 is a private employee, and 22 students [8].

Discussions

This study tried to assess knowledge of breast self - examination and related factors among women aged 15-45 in Semit health center, Ethiopia.72 of the respondents have good knowledge of breast self -examination. A cross-sectional study done among female medical students in Adama health science and technology university, Ethiopia showed that only of the study participants had good knowledge of breast self- examination. This significant difference may be attributed to the difference in the number of participants. Another study carried on by nurses at Addis Ababa University hospital found out that 202knew about breast cancer and breast cancer screening. This is significantly different from the result found in this study. One reason for this gap could be the difference in the careers of participants. Nurses are likely to know about breast cancer and screening more than just ordinary residents of Addis Ababa. This study also found out the participants with good knowledge are less than the figures found for a study conducted in a rural area of turkey 76.6 % [9].

A study conducted on women household heads in Mekele city, Ethiopia showed that 34.7% knew about breast cancer and its prevention and this study found out that only 36.0% had good knowledge which is a bit higher. On the assessment of participants' knowledge on symptoms of breast cancer, this study found out that 179 replied correctly by saying breast cancer is presented as a painless lump which is high than the study in Nigeria which was at 21.4% The finding of the study among Female University students in Presbyterian University College, Ghana showed that 95% of the respondents had good knowledge about breast cancer and BSE which was higher compared to this study. This might be explained by the fact that the study participants were female nursing students who had better clinical knowledge about BSE.

The study was done at harmony University also showed that among the study participants 85.7% of students knew all the three methods of breast cancer screening which are mammography, CBE, and BSE. The difference in this study may be since study participants were health science students who are expected to be knowledgeable about breast cancer self-examination than women in the summit health center. According to this study, 84 of the study participants had heard about breast self -examination previously. In this study, the major source of information about BSE was the health profession which accounted for 16%. This study revealed that 74 of the study participants noted that the recommended age to begin BSE was beyond the age of 20 years, and 102 did not know when to start BSE. Another study was done in Ethiopia, Mekele city showed that study participants know that BSE should be started after the age of 20, which accounts for 67% and 19.4% did not know at what age BSE should begin [10].

Conclusion

In our survey, more than half of participants made a significant case for women's inadequate understanding, negative attitudes, and poor practices about BSE. Along with a breast cancer awareness campaign, it was advised that emphasis be placed on improving women's attitudes and practices about breast self-examination and enhancing the implementation of comprehensive, systematic, and ongoing BSE educational programs.

Conflict of Interest

None

Acknowledgement

None

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