

ORIGINAL ARTICLE

Awareness on Breast Cancer among Women of Kedah State, Malaysia: A Cross-Sectional Study.

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Abstract

Background: Breast cancer is one of the commonest cancers in all ethnic groups and in all age groups in females from the age of 15 years onwards. It is important to create adequate awareness regarding breast cancer in women in order to encourage more women to present to healthcare professionals at the onset of early symptoms. The objective of this study is to assess the awareness of breast cancer among the women of Kedah state, Malaysia.

Methods: Cross sectional study was conducted among 100 females from Alor Setar, Kedah State. Participants were recruited by convenience sampling. Each participant was given a set of questionnaire and data analysis was done by the SPSS software.

Results: In this study, 85% of the respondents knew that breast self-examination (BSE) was a useful tool for the early detection of breast cancer but one third of the participants did not practice it. Results showed that 54% of the respondents aware the right timing for breast self-examination but 15% thought it should be done by a healthcare professional. In this study, 50% of the respondents correctly answered that mammography should be started from age of 40.

Conclusion: Overall awareness on breast cancer among the respondents was satisfactory. More intervention should be done to raise the level of awareness in women to reduce the rate of breast cancer morbidity and mortality.

Key words: breast cancer, breast self-examination, mammography

Introduction

Breast cancer is one of the leading causes of death among women worldwide. With better awareness about the disease, it is possible to detect the disease earlier and treat it in the early stages. Thus, the chance of recovery is also better. In Malaysia many initiatives have been taken to reduce the mortality and morbidity of breast cancer by creating awareness through campaigns and screening programs provided by the Government hospitals. Campaigns such as breast cancer awareness month known as “Pink October” has helped to increase awareness among women. In Malaysia, a triple assessment is done for investigation of breast cancer in hospital setting which includes clinical, radiological and pathological assessments. In radiological assessment, mammogram is commonly provided for screening of breast cancer in women aged more than 35 years and ultrasound is used for women below 35 years of age because of the higher density of breast tissue.^[1]

Breast cancer screening methods include breast self-examination (BSE), clinical breast examination and mammography (and Fine Needle Aspiration Cytology/Biopsy if warranted), and these are usually done in combination. Among these methods, BSE is the recommended method in developing countries because it is easy, convenient, private, safe and requires no specific equipment.^[2] Its purpose is to make women familiar with both the appearance and feel of their breasts as early as possible, so that they will be able to easily detect changes in their breast. Several studies have revealed that a positive association exists between the performance of BSE and detection of breast cancer and most of the early breast tumor detection have been self-discovered.^[3,4]

Age plays a major difference among the number of women in Malaysia who actually go for breast cancer screening. It was found that the older age group women tend to avoid going for screening due to various reason such as socio-demographic

characteristics, family history of breast cancer, income, and level of education. It also showed that young age category women were more likely to carry out mammogram screening compared to the middle age category even though the relationship was not significant. This finding is similar with some other studies in which women’s mammography screening practices increased as they became older. In contrast, some previous research showed opposite findings. This discrepancy in study findings may be due to study population being more from young-old category compare with middle-old aged category.^[5]

The overall survival rate of Malaysian women with breast cancer was lower than the western figures with Malays having the lowest because they presented at late stage, after a long duration of symptoms, had larger tumour size, and had more lymph nodes affected. There is an urgent need to conduct studies on why there is delay in diagnosis and treatment of breast cancer women in Malaysia and also increase their awareness of breast cancer to further overcome delay in seeking treatment.^[6]

Sun et al., 2017 and Ghazi et al., 2020 revealed that breast cancer awareness was poor in Malaysian women and very few eligible women attended regular mammography screening due to various reasons. In a study that was carried out in the Malaysian community in 2017 demonstrated that among high-risk women, with a family history of breast cancer showed that 71% had poor knowledge about the risk factors for breast cancer and they did not recognise their increased risk to cancer and so presented with same stage of disease as women with no family history of breast cancer.^[7] Poor awareness among Malaysian women can be seen in another study that has been carried out in Selangor State, showing 63.4% while the poor level of belief was 84.7%.^[8] This study aimed to find out the awareness of breast cancer among the women of Alor Setar district, in Kedah state.

Materials and Methods

A cross-sectional descriptive and analytic study was carried out in Kedah state in 2018. Recruitment of respondents was done in Alor Setar district of Kedah State and this research obtained ethical approval from the University Research Ethical Committee (FOMRHAEC). A total of 100 women of 18 years and older were involved in this study, recruited by convenient sampling method. Majority were Hospital Sultanah Bahiyah patients and attendants. In this project, the same questionnaires that has been validated in the article 'breast cancer screening practices' was used.^[9] Sociodemographic characteristics, knowledge of breast cancer, knowledge and practice of Breast Self-Examination (BSE), and mammography were included in the questionnaire. Furthermore, the questionnaire was reviewed by experts in the field for relevance, clarity, and appropriateness of the terms used and internal consistency of the questions. Bilingual questionnaires were distributed among the respondents after thorough explanation of the study.

Ethics

This research obtained ethical approval from the University Research Ethical Committee (FOMRHAEC). All participants were informed of the title and objective of the study and written Informed Consent was obtained. All responses were confidential, and participants were allowed to refuse participation in the study.

Statistics

SPSS software version 22 was used for data checking, data entry and also for data analysis. The variables used were socio-demographic factors, knowledge on Breast self-examination (BSE) and their practice and knowledge of mammography.

Results

Sociodemographic characteristics

Total of 100 respondents were involved in this study. Findings showed that 64% of the respondents were 40 years and younger whereas 36% were older than 40. Among the respondents, 60% were Malay participants, followed by 19% Indian participants, there are 11% participants of other races, and 10% Chinese participants. As for the education, 52% participants passed their university or college, 44% participants passed secondary school, and 4% of the participants passed primary school. Majority of the participants (96%) had heard of breast cancer and the remaining 4% have not. In this study, one fourth of participants have positive family history of breast cancer. (Table1)

A total of 59% participants obtained information from media such as television, radio, and the internet, 16% from their friends or family, 14% from the hospital, 10% from books and the remaining 1% from class lectures. (Figure 1)

Knowledge and practice of breast self-examination (BSE).

In regard to Breast Self-Examination (BSE), 92% of the participants had heard of it and 85% of them know that it was a useful tool for the early detection of breast cancer. Based on the findings, 34% of the participants thought that BSE should be started from puberty, 31% thought that it should be started from 20 years of age, 20% had no idea when it should be started, 13% thought that it should be started from 30 years, and the remaining 2% thought that BSE should be started after menopause.

Half of the participants thought that Breast Self-Examination (BSE) should be done monthly, 18% had no idea how often it should be done, 15% thought that it should be done yearly, 14%

thought it should be done weekly, and 3% thought it should be done daily.

As for the timing, 54% of the participants believed that BSE should be done a week after period, 28% had no idea, 8% thought it should be done during pregnancy, another 8% thought it should be done during menstruation, and the remaining 2% thought it should be done during breastfeeding.

In this study, 85% of the participants thought BSE should be done by the individual, 11% thought that it should be done by a doctor, whereas the remaining 4% thought that it should be done by a nurse. Majority (93%) of the participants preferred to see a doctor if they found abnormality in the breast, 4% would do a lab test and the remaining 3% decided to pray over it.

As for the benefit of BSE, 51% of the participants chose BSE as an early detection of breast cancer, followed by 44% who chose BSE as a detection of abnormal changes, 3% choose BSE as a good breast exercise while 2% chose BSE as to familiarize with the breast texture.

Regarding the practice of BSE, three fourth of the participants had been taught to do BSE. Among those who learn to do BSE, 35% had learnt from a doctor, 25% from a nurse, 7% from a friend, another 7% from a teacher and 1% participant was taught by her parent while remaining 25% of the respondents did not learn to do BSE. Data shows that 64% of women practiced BSE and non-practice respondents were 36%. However, 91% of the participants thought that BSE is a good practice whereas 9% did not think it is a good practice. (Figure 2)

Knowledge and use of mammography

In this study, 76% of the participants had heard of mammography and 69% of the participants agreed that mammography was a useful tool for early detection of breast cancer whereas 26% did

not agree. The remaining 5% were unsure if mammography was a useful tool. Half of the respondents thought that mammography should be done from 40 years of age, 32% think that it should be done from 20 years of age, 12% said it should be done from puberty, and the remaining 6% thought it should be done after menopause. Findings showed that 44% of the participants thought mammography should be done yearly, followed by 22% who chose every 3 years, 14% said that it should be done when lump was found on BSE, 10% had no idea, 6% said it should be done every month and the remaining 4% claimed weekly.

It was revealed that 27% of the participants had done mammography while 73% had not done mammography. Reasons related for not using mammography show was they thought it was unnecessary (31%), 15% had financial constraint, 14% said mammography facility was not available and the remaining 13% claimed to be not old enough.

Discussion

Breast cancer is one of the most frequently occurring cancers in women globally. It also showed the highest prevalence and mortality rate among all types of cancer in Malaysia, occupying 17.3% of newly detected cancer cases and 11.9% of death from all cancer causes.^[10] Common age at presentation for breast cancer in women was 40 to 49 years.^[11] Age of the women involved in this study was 18 to 78 years and more than half the women (63%) were older than 40 years, giving a good representation of women with a high risk for breast cancer.

Almost all participants had heard of Breast Self-Examination (BSE) and majority of them know that BSE was a useful tool for the early detection of breast cancer. Based on the results, 60% of women in Kedah State had been taught to do BSE by health personals like doctors and nurses and half of the participants correctly answered that

early detection of breast cancer was the benefit of BSE which was satisfactory. Half of the participants thought that BSE should be done monthly and also a week after period, which was correct. Similar practice was revealed by the previous study in Malaysia where nearly half of the participants practice BSE on monthly basis.^[12] However, one third of the women in this study had no idea of the frequency and timing at which BSE should be done. This could probably be due to the lack of time to take care of themselves, as most of the participants were working. Community outreach programme are nowadays introduced to women in the remote areas by National Cancer Society of Malaysia. Awareness programme should be more focused in the women of Kedah State with the help of volunteers, corporates and cancer support groups by adjusting the most convenient time and place for the residents.^[13]

Many respondents believed that BSE should be done by the individual. However, some thought that it should be done by a healthcare professional such as a doctor or a nurse. The participants still wanted to depend on healthcare professionals to confirm the right way of doing it. In this study, almost all the participants answered that they would see a doctor if abnormalities were discovered during BSE. However, some answered that they would proceed with a lab test as the next step and some even said that they would pray over it. Those who said that they would pray over it probably answered so because of their religious or traditional beliefs. Misconception should be corrected by awareness talk. They should know that medical treatment is necessary to follow and there is no natural cure for breast cancer.

Regarding the knowledge related to mammography, majority had heard of mammography. For those one fourth of the respondents who had not heard of mammography was probably due to lack of exposure to current technology used for screening of breast cancer.

Most of the participants said that mammography was a useful tool for early detection of breast cancer. However, there were one fourth of the respondents thought that mammography was not a useful tool and some who had no idea. Awareness towards mammography among Malaysian women was weaker than the study that has been done in Thailand in 2015. The main difference was educational background and the participants in Thailand study had higher education than our study. Attitude and behaviours across the different ethnic groups related to health seeking behaviour could be varied from one country to another country.^[14] Moreover, a study conducted in Kedah and Perlis in 2014 stated that awareness for the need for cancer screening is still low among the respondents.^[15] It was important to raise the awareness towards consistent cancer screening especially within high-risk groups. As reported by the previous studies, barriers to mammography were embarrassment, low income, non-availability and lack of health insurance coverage.^[16] Public health intervention is required by careful tailoring to overcome the common barriers.

Half of the participants had correctly answered that, mammography should be started from 40 years onwards. However, only 5% of them answered that, mammography should be started after menopause. Breast cancer if detected early, proper treatment can be given to reduce the mortality. Only 44% of participants answered correctly that mammography should be done yearly. Findings from this study support the previous study done in Shah Alam, Malaysia where fifty percent of women were aware of mammography.^[17] Some participants in the current study answered that they think a mammography should be done only when a lump was found and this group of people should be educated because the main purpose of mammography was to detect breast cancer before signs and symptoms appear.

Early detection is a key factor for survival of breast cancer. Regardless of the age, women need to be aware of risk factors and importance of the breast cancer screening. Ministry of Health Malaysia, the National Cancer Council (MAKNA) and the National Cancer Society should broaden their initiatives to raise cancer awareness to primary and secondary school students.^[15] Health personal and volunteer can educate the public more on breast cancer awareness.

Conclusion

Awareness on breast cancer among the respondents is satisfactory however participants did not correspond well with the awareness of available screening measures in the Kedah State. More intervention should be done to raise the

public awareness on early detection of breast cancer. Health care professionals should educate women on the benefits, timing, and frequency of screening measures.

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Table1. Background of the participants

Variables		Frequency	Percent
Age	40 years and younger	32	64
	Older than 40	18	36
Race	Chinese	3	6
	Malay	23	46
	Indian	16	32
	Other	8	16
Education	Primary School	3	6
	Secondary School	19	38
	University/College	28	56
Heard of breast cancer	Yes	47	94
	No	3	6
Family history	Yes	13	26
	No	37	74

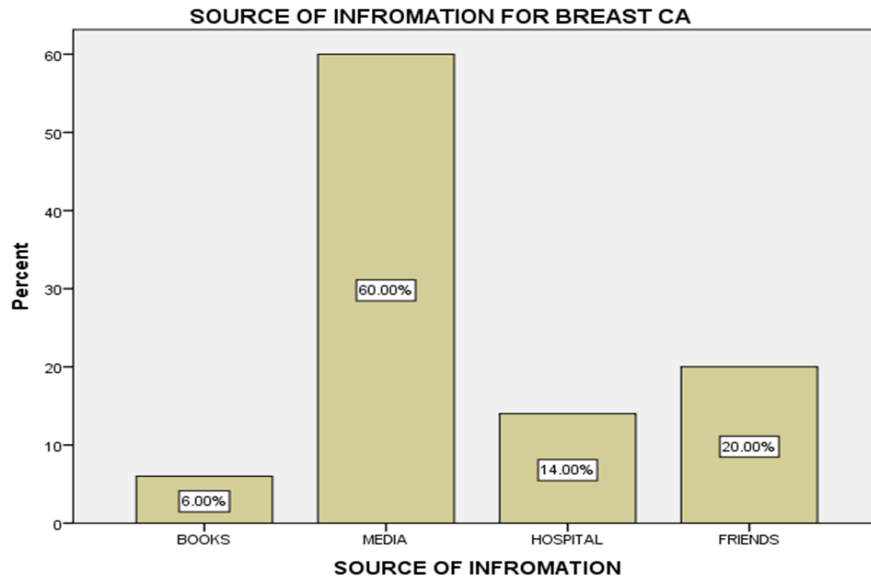


Figure 1. Different sources of information on breast cancer

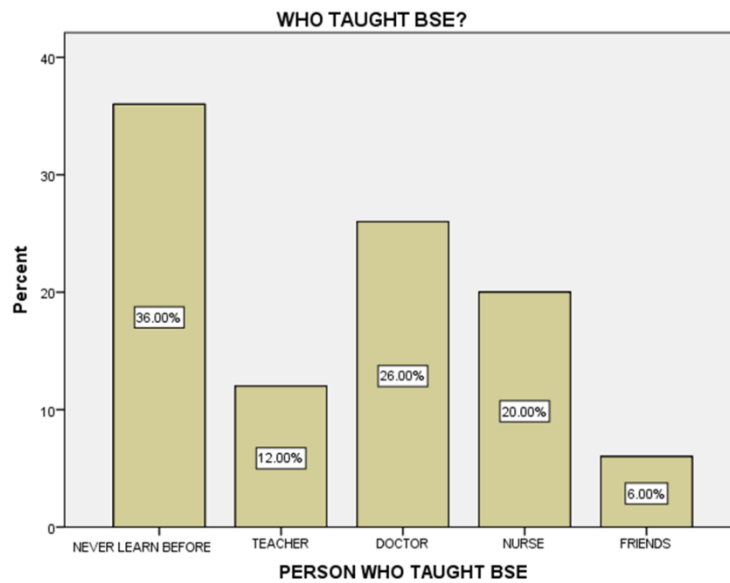


Figure 2. Person who taught Breast Self-Examination (BSE)

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