KNOWLEDGE AND AWARENESS OF BREAST CANCER AMONG RURAL WOMEN IN PERAK.

Ramani Subramaniam (FRCR); Hussain R A Saadi (DrPH)

Universiti Kuala Lumpur Royal College of Medicine Perak, 3, Jalan Greentown, 30450, Ipoh, Perak

ABSTRACT

Breast cancer is a major global health problem and the leading cause of death among women of all ethnic backgrounds. In Malaysia the incidence of breast cancer among women is 1: 19. Around 5,000 Malaysian women are diagnosed with breast cancer every year, most of them aged between 30 and 60 years where, nearly half of those affected are under 50-years of age. In Malaysia, screening for breast cancer is mainly based on clinical examination, mammogram and ultrasound studies for most of the population. Based on radiological investigations the patients are then referred for Fine Needle Aspiration Cytology (FNAC) /or biopsy for final diagnosis. Most women over 40 years of age undergo mammogram screening so there has been early detection of cancer of breast in the older age group. Mammogram is not advised in younger age groups as lesions will be difficult to identify in dense breasts. We did a cross sectional study among 139 rural women in Perak. The participants were chosen randomly from the rural areas of different villages. We used a pretested self-administered questionnaire. The questionnaire comprised of eight questions based on knowledge of breast cancer and few more questions related to imaging of breast. The questionnaire was distributed to women between the ages 20- 60 years of all three major ethnic groups in Malaysia, namely Malays, Chinese and Indians. The mean age of the participants was 47.9. The Indians comprised of (59.7%) of participants. Malays (25.2%) and Chinese (15.1%). Just below half of the participants were of secondary educational level (44 .6%) Most of them were married (63.3%). Almost half of them were employed (48.9%). The percentage of women who had a family history of breast cancer accounted for 11.5%. Among the three major races the Chinese had more screening done compared to the Malays and Indians (P value 0.003). 51.1% of women showed poor knowledge of breast cancer and 19.4 % had no knowledge of cause of breast cancer. Among the several reasons given for not having a mammogram, 40.8 % of participants said that it was not advised. The major source of information was (TV, Magazines, papers) 63.4 % and (Friends / Relatives) 30.6%.

Key words: Mammogram, Self-breast Examination [SBE]

INTRODUCTION

Breast cancer is now being diagnosed among younger women unlike in earlier days when cancer was detected primarily in women above 50 years of age.

Reluctance of having breast examined by medical personnel and ignorance of the proper method and frequency of doing SBE are factors that can delay the detection breast lumps in younger women. In addition women also do not present themselves for regular mammogram examinations.

In Perak State in Malaysia, amongst the five common cancers, cancer of the breast is of the highest incidence out of the five most frequent cancers among females, Perak, 2007 [1]

In Malaysia the National Cancer Registry reported that Breast Cancer constitutes 31 % of all female breast cancers in 2003; there was an increase to 32.1% in 2007 [2]

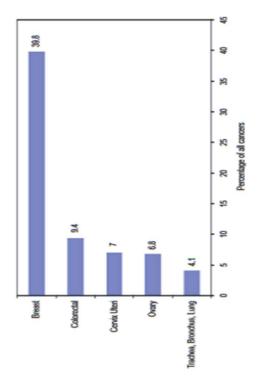


Fig 1, The five most frequent cancers among females in Perak Malaysia, 2007

MATERIALS AND METHODS

This is a cross sectional survey among 139 rural women in Perak. The participants were chosen randomly from the rural areas of different villages. We used a pretested self-administered questionnaire. The questionnaire comprised of eight questions based on knowledge of breast cancer and few more questions related to imaging of breast. The questionnaire was distributed to women between the ages 20- 60 years of all three major ethnic groups in Malaysia, namely Malays, Chinese and Indians.

The participants were chosen randomly from the rural areas of Kampong Tawas in Ipoh, Kampong Serani, Batu Gajah; Kampong Bahru, Manjong; Kampong Malim Nawar and Ayer Tawar in Sungei Siput. Thequestionnaire comprised of eight questions based on knowledge of breast cancer.

The questions were, causes of Breast cancer, incidence of Breast cancer in women, detection of breast cancer, frequency of self-breast examination, traditional methods to cure Cancer of Breast, does Breast cancer affect men, and are all breast lumps considered cancers and finally the source of information.

The questions based on Imaging of breast were if participants have had an Ultrasound of breast done and whether they have had a Mammogram done (women above 40). If mammogram was not done – the reason why a screening mammogram was not done

RESULTS

TABLE 1: sociodemographic factors distribution in relation to Knowledge of women about breast cancer according to Self-Breast Exam SBE. (Chi square, P is significant ≤0.05)

	Knowledge about BC		P value*
	according to SBE		
Factors	Good	Poor	
Race			0.75
Chinese	42.9	57.1	
Indian	44.6	55.4	
Malay	37.1	62.9	
Education			0.25
Category			
Low Edu	40	60	
High Edu	51.7	48.3	
Age Category			0.04 *
20-39	47.2	52.8	
40-50	54.5	45.5	
>50	30.5	69.5	

TABLE 2: sociodemographic factors distribution in relation to Knowledge of women about breast cancer according to the cause. (Chi square ,P is significant \leq 0.05)

	Knowledge about BC according to cause %		P value*
Factors	Good	poor	
Race			0.70
Chinese	57.1	42.9	
Indian	47	53	
Malay	48.6	51.4	
Education			0.11
Category			
Low Edu	45.5	54.5	
High Edu	61.1	37.9	
Age Category			0.63
20-39	55.6	44.4	
40-50	47.7	52.3	
>50	45.8	54.2	

We tested whether, the knowledge about breast cancer according to the self-breast examination (SBE) is different with different sociodemographic factors of the participants like the race, the education and the age category. This analyses showed that, only age category of the participants was a possible significant factor which could be associated with the knowledge, P 0.04. (Table 1) We also tested whether, the knowledge about breast cancer according to the cause is different with different sociodemographic factors of the participants like the race, the education and the age category. This analyses showed that, there was no significant possible association between the knowledge and all these independent sociodemographic factors. (Table 2)

The mean age of the participants was 47.9. The Indians comprised of (59.7%) of participants. Malays (25.2%) and Chinese (15.1 %). Just below half of the participants were of secondary educational level (44 .6%) Most of them were married (63.3%). Almost half of them were employed (48.9%). The percentage of women who had a family history of breast cancer accounted for 11.5%. Among the three major races the Chinese had more screening done compared to the Malays and Indians (P value 0.003). 51.1% of women showed poor knowledge of breast cancer and 19.4 % had no knowledge of cause of breast cancer. Among the several reasons given for not having a mammogram, 40.8 % of participants said that it was not advised. The major source of information was (TV. Magazines, papers) 63.4 % and (Friends / Relatives) 30.6%.

DISCUSSION

Most of the participants had no family history of breast cancer (88.5%). Almost all of them have heard about breast cancer (95%). When they were asked what the cause of breast cancer was, 41% of them said family history whereas, 31.7% said food was a factor, 19.4% did not know the risk factors

for developing breast cancer. 46.6 % of women thought that all breast lumps are cancerous – this may be a factor is seeking medical advice late. This in addition to the Asian taboo of exposing the breasts to others may also be a strong deterrent.

A worrying fact is that 58.9 % of women did not have correct information about Self Breast Examination.

In Malaysian context there are no statistics to suggest that self and clinical breast examinations resulted in increased number of biopsies. This may be attributed to the fact that any breast lump/ detected is further investigated by Ultrasound and if required a mammogram before biopsy is performed.

In one large population based study involving 388,535 women. A regular self-examination or clinical examination for early detection of breast cancer concluded that there was no beneficial effect of screening in terms of improvement in breast cancer mortality. [3]

In our study among rural women in Perak, 51.1% of women showed poor knowledge of breast cancer, 19.4 % had no knowledge of cause of breast cancer. About 58.9 % of women did not do / know the correct method of doing self-breast examination. One study concluded that in a large population based study involving 388,535 women there was no beneficial effect of screening in terms of improvement in breast cancer mortality

" A review of Breast cancer in Malaysia by by one researcher – it was noted that Malaysian women had poor knowledge of risk factors, symptoms and methods of early detection of breast cancer leading to late presentation. [4]

In our study 51.1 % had poor knowledge of risk factors. The better performance of the women in Perak can be attributed to [1] most of the participants were educated – 76.3% -secondary education [2]

63.8 % had access to TV, magazines and other electronic media.

Similarly, one study concluded that 71 % had poor knowledge of risk factors for breast cancer. [5]

In the current study the analyses also showed poor knowledge and practice of selfbreast examination which goes in similar to other previous studies in which it was noted that a high number of students were aware of breast cancer but do not perform self-breast examination. [6]

Another study by UNIMAS :-Knowledge and practice of Breast selfexamination among female undergraduate students in Universiti Malaysia Sarawak (UNIMAS 2010) stated that in the study of 133 students only 38.3% knew that self-Breast examination should be performed monthly, The study concluded that knowledge and practice of self-breast examination among female undergraduate students in UNIMAS was poor. [7].

Last but not least a similar findings were detected in different studies in terms of poor knowledge on breast cancer and poor self-breast examination practices. [8,9,10]

REFERENCES

- 1. Narimah A. Breast examination. Report of second national health and morbidity by Public Health Institute, Ministry of Health Malaysia, 145-148. 1997
- 2. Norlaili AA, Fatihah MA, Daliana NF, Maznah D.Breast cancer awareness of rural women in Malaysia: Is it the same as in cities. Pubmed Asian Pac J Cancer Prev. 2013; 14(12):7161-4.
- 3. Parisa Parsa, Mirnalini Kandiah, H Abdul Rahman, NA Mohd Zulkefli. Barriers for Breast Cancer Screening Among Asian Women: A Mini Literature Review, Asian Pacific Journal of Cancer Prevention, Vol 7, 2006
- 4. CH Yip, N Bhoo Pathy, Teo, A Review of Breast Cancer Research in Malaysia Med J Malaysia Vol 69 Supplement A August 2011
- 5. Pathmawathi Subramaniam. Breast Cancer Knowledge and Screening Behavior among Women with a positive Family History: A cross sectional study. Pacific Journal of Cancer Prevention Vol 14, 2013
- 6. Mehrnoosh Akhtari-Zavare et al. Barriers to breast self-examination practice among Malaysian female students: a cross sectional study SpringerPlu s2015 4:692
- 7. KC Kanaga, J Nithya, MFV Noor Shatirah Awareness of Breast Cancer and Screening Procedures Among Malaysian Women Asian Pacific Journal of Cancer Prevention Vol 12, 2011.
- 8. Dahlui M, Gan DE, Taib NA, Lim. Breast Screening and health Issues among rural females in Malaysia –how much do they know and practice JN Europe PMC 2013
- 9. Danny R. Youlden, Susanna M. Cramb, Cheng Har Yip, Peter D. Baade. Incidence and mortality of female breast cancer in the Asia-Pacific region J Cancer Biology and Medicine Vol 11, No 2: June 2014.
- 10. Salde G, Dhanja, S, Shah N .Asian Indian women: Knowledge, attitudes and behaviors toward breast cancer early detection. Public Health Nursing, 18, 357-63 (2001).