

THE PRACTICE OF BREAST SELF-EXAMINATION (BSE) AMONG WOMEN LIVING IN AN URBAN SETTING IN MALAYSIA

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ABSTRACT

Breast cancer is a leading killer among women globally. This study aimed to study the BSE practice and its associated factors among women in Malaysia. A cross sectional study was conducted using a purposive sampling, involving 327 women aged between 20 to 70 years old, attending the Outpatient Department at Kuala Lumpur General Hospital from June 2007 until November 2008. A guided questionnaire was used to explore the personal background of the respondents, practice of BSE, source of health information, history of close contact with breast cancer or benign breast lump patients among other family members or friends, history of attending any health campaign or received any health education programme and their confidence level to perform the BSE on themselves. The results showed, only 24.2% from the total respondents were practicing BSE on a monthly basis. Information on BSE was mainly obtained from health pamphlets, magazines or newspapers and television. Factors significantly influenced the practice of BSE were marital status ($p=0.016$), self-confidence ($p=0.004$), had attended health campaign ($p=0.004$), had received health education ($p<0.01$), received information from doctors ($p<0.01$) and nurses ($p=0.001$). However, none of these factors significantly predict the practice of BSE among women in the final predictive model. In conclusion, despite the widespread promotion on the importance of BSE, the level of BSE practice among women living in the urban setting in Malaysia was still considerably low. More effective strategies should be conducted by health authorities and related agencies in order to improve the awareness and practice of BSE among Malaysian women if it is proven that the practice of BSE is effective for early detection of breast cancer.

Key Words: Breast self-examination, women, urban, Malaysia

1.0 Introduction

Breast cancer is the most common cause of cancer and cancer related deaths among women globally and recorded a high incidence worldwide. Compared to other types of cancer, breast cancer disproportionately affects the young (Kearney, 2006). It has been the main cause of death among Malaysian women, contributing 11% of all deaths (Ministry of Health, Malaysia, 1999). Approximately 1, 200 of new cases had been diagnosed every year with increasing cases occurring among young women (Narimah, Rugayah, Tahir, & Maimunah, 1999).

According to G. Lim, Halimah and T. Lim (2003), 3,738 cases were detected in 2003 involving all ethnic groups in Malaysia, aged 15 years and above. Unfortunately, 40% of breast cancer patients in Malaysia were diagnosed quite late, usually at the locally advanced and metastatic stages (Lim et al., 2003).

Not only the incidence of breast cancer is increasing, but the death rate from breast cancer is also increasing. Studies had shown that early detection and treatment can prevent death due to breast cancer, and can be possibly treated and cured successfully. According to Lee, Kim and Ham (2000), the 5-year survival rate for women who perform early detection of breast cancer is 92% higher than otherwise. This fact provides an overview of the importance and benefits that can be obtained through early detection of breast cancer.

Mammography has been proven to be very effective in the early detection of breast cancer. In a cohort study by the American Cancer Society and the Ministry of Health, United States of America, they had reported that 40% of breast cancer cases were detected by mammography and 10% through clinical examination (Lee et al., 2000). However, regular screening using mammography is still very limited especially in the developing countries and only recommended for women with high risk of developing breast cancer. Therefore, breast self-examination or BSE is the most convenient and also effective to be practiced by women in order to detect the presence of any breast lump or abnormality. Thus early detection and treatment of breast cancer can be done.

BSE has been reported able to detect tumors at an earlier stage than those found by chance and an important adjunct to mammography for finding interval cancers (Kearney, 2006). The practice of BSE is still reported low among most women in different countries despite having considerably good knowledge about BSE. Although the effectiveness of BSE was seriously questioned in many studies, it is still considered as a primary method in the prevention of breast cancer. However, very few women engage in early detection of breast cancer. The main objective of this study is to identify the prevalence of BSE among women attending a hospital located in the capital of Malaysia, and the contributing factors.

2.0 Materials and Methods

2.1 Study setting

A cross sectional study was conducted at the outpatient department of Kuala Lumpur General Hospital.

2.2 Study population

The study was conducted among women aged 20 to 70 years old attending the outpatient department at the stated General Hospital.

2.3 Data collection and analysis

Data was collected between June and November 2008. The practice of BSE among them and its associated factors were identified among 327 women who attended the clinic between the stated time frame. Women who meet the criteria of being a Malaysian citizen and did not have any mental problems were eligible as respondents. They were selected purposively and interviewed using guided questionnaire which was modified from a study by Rahmah and Khadijah (1996). The questionnaire covers the personal background of the respondents, practice on BSE, source of health information, history of close contact with breast cancer or

benign breast lump patients among other family members or friends, history of attending any health campaign or received any health education programme in the past and also their self-confidence level to perform the BSE on themselves. Data were analysed using SPSS version 19.

3.0 Results

3.1 Sociodemographic characteristics of respondents

Table 1 Sociodemographic characteristics of the respondents (n = 327)

Factor	f	%
Age		
≤ 45 years old	225	68.8
> 45 years old	102	31.2
Ethnicity		
Malay	246	75.2
Chinese	16	4.9
Indian	59	18.0
Others	6	1.8
Religion		
Islam	249	76.10
Buddha	15	4.60
Hindu	48	14.70
Christian	13	4.00
Others	2	0.60
Marital status		
Single	120	36.70
Married	192	58.70
Divorcee	15	4.60
Number of children		
< 3	83	40.1
≥ 3	124	59.9
Education level		
None	9	2.80
Primary	42	12.80
Secondary	171	52.30
Tertiary	105	32.10
Occupational status		
Unemployed	165	50.5
Employed	119	36.4
Studying	43	13.1
Household income		
< RM 1500.00	108	33.0
RM 1500.00–RM 3499.99	169	51.7
≥ RM 3500.00	50	15.3

RM= Ringgit Malaysia

A total of 327 women were involved in this study, with a median age of 32 years old. Majority of the respondents were less than 45 years old (68.8%), Malay (75.2%), Muslims (76.1%), been married (63.6%), had 3 or more children (59.9%) and had household income of more than RM 1500 a month (Table 1)

3.2 The practice of BSE

Table 2 The distribution of BSE practice among respondents (n= 327)

Factor	f	%
Ever perform BSE	234	71.6
Still performing	194	83.0
Monthly	79	40.7
Once a while when remembered	74	38.1
Once every 6 months	31	16.0
Once a year	10	5.2
No longer performing	40	17.0
Never perform BSE	93	28.4

Overall, 71.6% of the respondents reported ever perform BSE and 28.4% had never perform it. Among those who claimed ever perform BSE, 83.0% still continue performing it, and 17.0% were no longer performing the BSE. Meanwhile, among those who were still performing the BSE, only 40.7% were doing it on a monthly basis, 38.1% once a while, when remembered, 16.0% once every 6 months and 5.2% once a year (Table 2). For the purpose of further analysis, BSE practitioner in this study is referring to those who was performing it on monthly basis, which were only 79 out of 327 respondents. (24.2%).

3.3 Sources of information on BSE

Figure 1 Sources of information on BSE

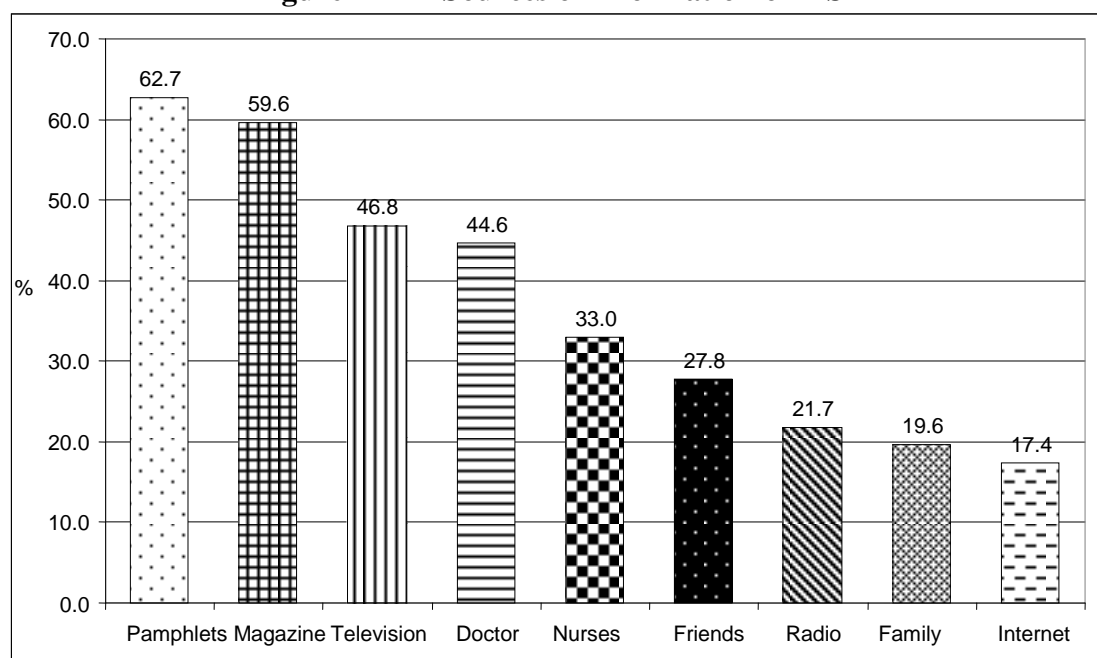


Figure 1 shows the distribution of the sources of information on BSE, with the main resources were from health pamphlets (62.7), magazines or newspapers (59.7%) and television (46.8%).

3.4 Distribution of respondents according to other factors associated with BSE practice

Table 3 Distribution of respondents according to other factors (n= 327)

Factor	Yes		No	
	f	%	f	%
Had closely in contact with breast cancer patient	179	54.7	148	45.3
Had closely in contact individual with benign breast lump	131	40.1	196	59.9
Had attended health campaign on BSE	140	42.8	187	57.2
Had received health education on BSE	154	47.1	173	52.9
Self-confidence to perform BSE	153	46.8	174	53.2

A total of 179 (54.7%) respondents reported had closely in contact with breast cancer patients and 131 (40.1%) with individuals diagnosed with benign breast lump (Table 3). These contacts were family members, close friends and also neighbours. The study also found that 47.1% had received health education on BSE from the healthcare workers and 42.8% had attended health campaign previously. Of all the respondents only 46.8% were having self-confidence to perform the BSE themselves.

3.5 Determinants of BSE practice

Table 4 Predictive model on the determinants of BSE practice among respondents

Factor	β regression coefficient	SE	Wald	p value	Adjusted OR	95% CI
Been married Yes (1) No (0)	0.313	0.314	0.996	0.316	1.368	0.739- 2.531
Self-confidence Yes (1) No (0)	0.514	0.292	3.195	0.074	1.671	0.970- 2.878
Had attended health campaign Yes (1) No (0)	0.334	0.326	1.052	0.305	1.411	0.791- 2.516

Had received health education	0.344	0.295	1.362	0.243	1.396	0.738-2.644
Yes (1)						
No (0)						
Information from doctors	0.522	0.292	3.195	0.245	1.685	0.951-2.986
Yes (1)						
No (0)						
Information from nurses	0.355	0.305	1.351	0.245	1.426	0.784-2.592
Yes (1)						
No (0)						
Constant	-2.362	0.321	54.228	0.000	0.094	

* significant at $p < 0.05$

A predictive model for determinants of BSE practice was developed by using logistic regression analysis (Table 5). However, none of the factors was found to be significant in the final predictive model. A nearly significant association was only shown between self-confidence and BSE practice ($p = 0.074$, Adjusted OR = 1.671).

4.0 Discussion and Conclusion

This study has found that, despite a considerably high education level among majority of the women involved in this study, the practice of BSE among Malaysian women were still low. A similar finding was also reported by Chan (1999), who performed a study among 1,303 local women attended the Well Person's Clinic, Outpatient Department, Ipoh General Hospital, Malaysia, between April 1995 and March 1997. Majority of women involved in that study (98.2%) reported that they were never taught and did not practice BSE. Only 17(1.3%) practiced BSE, while six (0.5%) were taught BSE but failed to put it into practice (Chan, 1999).

A low practice of BSE was also reported in studies done abroad. A study on the practice of BSE among women in Isparta reported that despite nearly one-third of the respondents had known BSE, only 19.0% were performing the examination monthly (Ozturk, Engin, & Kisioglu, 1999). In another study conducted among women residing in Ibadan, Nigeria, had found that of the 37.1% of the respondents who were aware of the BSE, only 18.1% had ever performed BSE on themselves (Balogun, & Owoaje, 2005). Both of these studies indicate a low level of BSE practice among women despite having some related knowledge on BSE.

Findings from this study also revealed that the main source of information on BSE was obtained from health pamphlets, magazines or newspaper, and television. This reflects a good performance indicator by the Malaysian Government in an effort to encourage the use of mass media and internet to disseminate health information to the community. In contrast, a study involving the Middle Eastern Asian Islamic immigrant women residing in a major metropolitan United States city had reported that, only 3.0% of them received information on BSE from doctors, 3.0% from health pamphlets and 15.0% from other sources (Rashidi, & Rajaram, 2000). Most of the women had not learned about BSE from a health professional, nor had they undergone a clinical breast examination or CBE (Rashidi, & Rajaram, 2000).

The Middle Eastern Asian immigrant women may be a population overlooked by health care professionals in the education of BSE.

This study also showed a considerably low level of BSE practice, with only 24.2% of the women involved were practicing BSE on a monthly basis. This percentage was just slightly better than what had been reported in another related local study by Rahmah and Khadijah (1996). Both of these studies reflect the low level of awareness among the Malaysian women about the importance of prevention and early detection of breast cancer. However, another local study comparing the knowledge and practice of BSE among daughters of breast cancer and non-breast cancer patient found that a higher level of practice was reported (Khalijah, & Hanafiah, 1999). That study concluded that 84.3% of daughters of breast cancer patients performed BSE with 30.5% of them performing it monthly, which reflect the importance of family history as a significant factor influencing practice of BSE (Khalijah, & Hanafiah, 1999). Nevertheless, family history or close contact with an individual with breast cancer patient was not a significant influencing or predicting factor in this study.

The practice of BSE was also found to be associated with marital status in this study. Women who were married were more likely to perform BSE than otherwise. A similar finding was also reported in a study involving women in Tehran, Iran by Montazeri et al. (2008). Their study indicated that performing BSE was significantly related to age, marital status, education level and also knowledge on breast cancer and breast cancer screening programme ($p < 0.05$). However, several studies had also reported the absence of association between practice of BSE and marital status. One of them was a study by Gray (1990) involving rural women, who concluded that there was a weak or no association between demographic variables such as marital status and practice of BSE.

Apart from marital status, sources of information on BSE also influenced the practice of BSE. This study showed that although health pamphlets, magazines or newspaper and television were the main sources of information on BSE, women who received information about BSE from healthcare workers such as doctors and nurses were more likely to perform BSE. A study done recently by Yoo, Choi, Jung, and Jun (2012) among Korean women also reported television, radio and newspaper as the most common sources of information on BSE among them. The important role played by mass media such as television in disseminating health information was also reported in another local study involving young women, in which majority of them mention television and radio as the main sources of information (R. Al-Naggar, D. Al-Naggar, Bobryshew, Chen, & Assabi, 2011). In another study involving Jordanian women had concluded that having heard or read about breast tumors was among the significant predictors for BSE practice (Petro-Nustus, & Mikhail, 2002). A majority of 82.0% of them had heard of read about breast tumors, with only 11.0% and 12.0% respectively mentioned health professionals like doctors and nurses were their sources of information on breast tumors and BSE (Petro-Nustus, & Mikhail, 2002). As for self-confidence to perform BSE, Olson and Mitchell (2006) found that satisfaction with BSE ability and explanation on BSE technique significantly predicted the frequency of BSE. They had concluded that, clinicians can promote BSE frequency by helping women feel confident about their abilities to perform BSE (Olson & Mitchell, 2006).

In conclusion, this study showed that the level of BSE practice among studied women was still unsatisfactory despite a monthly recommendation to perform BSE since 10 years ago by the Ministry of Health, Malaysia. Healthcare workers such as doctors and nurses should be

well-trained in order to disseminate health information related to BSE more effectively , especially among married women. Health campaign and education programmes should be conducted regularly among targeted group and should also be included in the school syllabus to give an early exposure on the importance of early detection of breast cancer among teenagers.

Ethical

Approval from the UKM Medical Center was received prior to the conduction of the study.

Declaration of conflict of interest

I/we author(s) of the article declare that there is no conflict of interest regarding publication of this article.

Acknowledgement

This study has been funded by the UKM Medical Centre.

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