

Practice of Breast Self-Examination Amongst Women Attending a Malaysian Well Person's Clinic

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Summary

The practice of breast self-examination (BSE) amongst 1,303 women registered with the Well Person's Clinic, Outpatient Department, Hospital Ipoh between April 1995 and March 1997 were assessed through a questionnaire. Majority (98.2%) were never taught and did not practise BSE, 17(1.3%) practised BSE while 6 (0.5%) were taught BSE but failed to put it into practice. Only 5.8% of 52 women with past/ family history of breast cancer/lump and 2.9% of 207 women with past/family history of other cancers were practising BSE regularly. Three out of 64 women with breast lumps found on clinical breast examination discovered the lumps themselves. Five of the 64 women were subsequently confirmed to have breast carcinoma.

Key Words: Breast self-examination, Well clinic

Introduction

Breast cancer is the principal cause of cancer death amongst women in many countries including Malaysia¹. Breast self-examination compared to mammography and clinical breast examination is relatively safe, low cost, offer monthly assessment and does not require overcoming barriers associated with access to the medical care system². Although there is still no conclusive evidence that BSE reduces mortality many studies show that those who practise BSE detect cancer at earlier stages and with less lymph node involvement³⁻¹⁰. Many breast lumps are discovered by women themselves who then present themselves to a doctor for further evaluation. Evidence positively supports BSE as a significant contributor towards breast conservation surgery and therefore better quality of life¹⁰.

Where mass screening by mammography is not available such as in Malaysia, BSE and clinical breast

examination remains important means to detect breast cancer early. The Ministry of Health encourages BSE and setting up of well clinics in public primary health care facilities in the country to teach BSE technique and do clinical breast examination^{1,11}.

In Japan, mass screening by physical examination and BSE (without mammography) showed that early stage cancer were more common and survival curve significantly better in patients who practised BSE^{10,12}. Japanese women showed a higher 5 year survival rate in those who practised BSE compared to those who did not¹³.

The practice of BSE amongst various groups of women in different countries have been studied¹⁴⁻¹⁸ but there is little published data on the practice of BSE locally.

The Well Person's Clinic (Well Man & Well Woman's Clinic), Outpatient Department (OPD), Hospital Ipoh was started in April 1995 for screening of coronary risk

factors and early detection of common cancers. This clinic held twice a month is open to the public. Women registered with the clinic undergo a thorough physical examination including breast examination and are taught BSE technique¹⁹. The practice of BSE prior to coming to this clinic was assessed in women registered over a 2 year period between April 1995 and March 1997.

Materials and Methods

This is a cross sectional descriptive study. All women registered with the Well Person's Clinic, OPD, Hospital Ipoh in the 2 year period between April 1995 and March 1997 were included in the study. The women were required to answer a questionnaire on their past history/family history of breast cancer/lumps and other cancers. They were also asked whether they practised BSE and were ever taught BSE (please see Appendix 1 where relevant parts of questionnaire are included).

Prior to the study, the well clinic staff (nurses and doctors) were briefed on the format of the questionnaire. They were also trained in BSE technique and clinical breast examination. The staff assisted the women in answering and filling the questionnaire. Any breast lump or abnormalities found on clinical breast examination by the nurse was confirmed by the doctor before referral to the surgical unit for further investigation. All questionnaires were then compiled and analyzed by the medical officer in charge of OPD assisted by the acting sister OPD and the nurse in charge of registration in the Well Person's Clinic.

Results

A total of 1,303 women were registered in the 2 year study period. Ethnic distribution include 363 Malays (27.9%), 742 Chinese (56.9%), 197 Indians (15.1%) and 1 Other (0.1%). This was comparable to the ethnic distribution in Ipoh²⁰ (Malays 27.9%, Chinese 59.9%, Indians 11.5%, Others 0.7%).

Majority were between 30 to 59 years old. Distribution by age groups include 35.6%(40 - 49 years); 23.3%(30 - 39 years); 22.9%(50 - 59 years). Only 7.1%(92) were under 30 years old and 11.1%(144) were aged 60 years and above.

Majority were married (91.7% - 1195) with only 5.1% (73) single. The remaining 2.7% (35) were divorcees and widows.

By occupation 66.8%(870) were housewives. Another 13.7% (178) were clerks, 5.6%(73) factory workers, 4.7%(61) teachers and 3.5%(46) laborers. These 5 occupations made up 94.3% of all the occupations entered into the questionnaire.

One thousand two hundred and eighty women (98.2%) said they were never taught and did not practise BSE. Only 17(1.3%) practised BSE. Of the 17 who practised BSE, 14 were taught the BSE technique. The remaining 3 who were not taught BSE technique were feeling for breast lumps regularly. There were 6 women (0.5%) who were taught BSE but failed to put it into practice.

Fifty two women had family history/past history of breast cancer/breast lump but only 3(5.8%) practised BSE regularly. Another 207 had family history/past history of other cancers but only 6(2.9%) were practising BSE (please see Table I).

Three out of 64 women found to have breast lumps on clinical breast examination in the well clinic discovered the lumps themselves. Five breast lumps (one discovered by the patient herself) were subsequently confirmed breast carcinoma upon referral to the surgical unit.

Discussion

This study found only 1.3% were practising BSE prior to registration at the Well Person's Clinic. Among women with past history/family history of breast cancer/lumps and other forms of cancer, BSE was practised by only 5.8% and 2.9% respectively. This very low frequency of BSE practice may not be representative of the situation as a whole in the country. The women in the study group attending the well clinic in a government facility probably represents the lower socioeconomic sector of the population as evidenced by their occupations. However in view of the low frequency of BSE, it is appropriate that further studies involving a larger and more representative population be done.

The other important aspect is that BSE was not taught to 98.2% of the women in the study group. This

Table I
Relationship between Past History & Family History of Cancer with the Practice of Breast Self-examination in Women Registered between April 1995 to March 1997

	Not Taught BSE & not Practising BSE	Taught BSE but not Practising	Taught BSE & Practising BSE	Not Taught BSE but Doing BSE	TOTAL
Past history of breast cancer	2	0	1	0	3
Family history of breast cancer	46	1	2	0	49
TOTAL	48	1	3	0	52
Past history of other cancers	6	0	0	0	6
Family history of other cancers	194	1	4	2	201
TOTAL	200	1	4	2	207
GRAND TOTAL	248	2	7	2	259

includes 92.3% of women with past history and family history of breast cancer. Although BSE is promoted and BSE technique taught in public and some private health care facilities, there needs to be evaluation on their effectiveness in reaching Malaysian women especially those in the high risk group.

The practice of BSE reported elsewhere varies from 8.4% in Taiwan²¹, 10% in a Swedish study¹⁴, 15% in American Chinese¹⁸, 20% to 63% in American whites/blacks^{22,23}, 28% in Tunisia²⁴ and 39 to 63% in Australia¹⁷. A selective review of the literature (1977 -1989) by Coleman found between 19% to 40% of women practise BSE²⁵. There is little published data locally. A study by Chan²⁶ found 49.5% of health personnel in Malaysia practise BSE. A similar study in Chile reported 28% of their health personnel practice BSE regularly²⁷.

Looking at factors associated with increase in the frequency of BSE, studies by Strauss et al²⁸ and Doyle²⁹ found significantly higher rates of BSE frequency among the breast cancer patients as compared to the general population. Confidence in BSE performance, prior BSE instruction and finding some way to remember to do BSE were factors most positively associated with frequent BSE practice^{25,2}. The most important predictors

of frequency of BSE were patients' perceptions of the social support for BSE and the extent to which they found BSE to be distasteful. Perceived health benefits were of less importance in predicting behavior³⁰.

Persson et al¹⁴ in his Swedish study found that neither age, educational background, occupation, nor having knowledge of breast disease and medical outcome was associated with BSE practice. Having a close relative or friend with breast cancer did not affect the practice of BSE. Similarly Alagna et al also found women at high risk for breast cancer although more knowledgeable and more focussed on breast cancer did not practise BSE more frequently than those at low risk³¹.

In a study by Lashley on elderly women, perceived susceptibility to breast cancer and perceived benefits of BSE were not found to be significantly predictive of BSE practice¹⁵. However receiving instructions in a class on BSE was related to improved BSE technique. No difference in frequency of BSE was found between athletic women and non athletic women by Schlueter¹⁶. He also found no significant relationship existed between knowledge or beliefs of breast cancer with frequency of BSE.

On the other hand, Yelland et al¹⁷ found BSE frequency strongly linked with age in Australian women. Women aged between 20 to 40 years were more likely to practise BSE frequently while those above 65 years were less likely to perform BSE. Married women, women who underwent cervical smear testing and those who learnt BSE from their doctors as opposed to other sources practiced BSE more frequently.

In conclusion the findings showed majority of the women registered with the Well Person's Clinic, OPD, Hospital Ipoh did not practise BSE including women with past history and family history of breast cancer/lump and other cancers. More studies need to be

done to determine the frequency & predictors of BSE among Malaysian women and factors that can improve the practice of BSE among Malaysian women. Since screening mammography is not widely available in Malaysia, BSE should be actively encouraged as it may lead to the diagnosis of breast cancer in the earlier stages.

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APPENDIX 1

Questionnaire (part) used in Well Person's Clinic			
Date of Registration			
1. Name			
2. Age			
3. I/C			
4. Sex : Male	Female		
5. Ethnic group: Malay	Chinese	Indian	Others
6. Occupation			
7. Tel Phone No			
8. Address			
9. Marital Status			
B. Cancer Screening			
1. Family History Cancer	Yes	No	
Specify type of cancer			
Relationship with patient			
2. Past History Cancer Specify	Yes	No	
Female only			
6. Breast Cancer			
a. Do you practice BSE	Yes	No	
b. Already taught BSE	Yes	No	
c. BSE taught today	Yes	No	
* Examination Breast	NAD	Breast lump	
* Other breast abnormality		Lymph node	
	(specify)	(specify)	
* Ca Breast	Suspicious	Not suspicious	Refer **SOPD
* Examination by staff nurse/medical officer			
** SOPD = Surgical specialist outpatient clinic			

References

1. Ho KB. Overview of Preventive and Control Programme for breast cancer. Ministry of Health 1994 (presented at Kursus Mempertingkatkan Perkhidmatan Pengesanan Awal Barah Payudara Di Peringkat Kebangsaan, May 1994, Kuala Lumpur).
2. Janz NK, Becker MH, Anderson LA *et al.* Interventions to enhance breast self-examination: a review. *Public Health Rev* 1989; 17(2-3): 89-163.
3. Ogawa H, Tominaga S, Yoshida M *et al.* Breast self-examination practice and clinical stage of breast cancer. *Jpn J Cancer Res* 1987; 78(5): 447-52.
4. Foster RS Jr, Lang SP, Costanza MC *et al.* Breast self-examination practices and breast cancer stage. *N Engl J Med* 1978; 299(6): 265-70.
5. Greenwald P, Nasca PC, Lawrence CE *et al.* Estimated effect of breast self-examination on breast cancer mortality. *N Engl J Med* 1978 10; 299(6): 271-73.
6. Huguley CM Jr, Brown RL. The value of breast self-examination. *Cancer* 1981; 47(5): 989-95.
7. Tamburi M, Massara G, Bertariol *et al.* Usefulness of breast self-examination for an early detection of breast cancer results of a study of 500 breast cancer patients and 652 controls. *Tumori* 1981; 67(3): 219-24.
8. Feldman JG, Carter AC, Nicastrì AD *et al.* Breast self-examination, relationship to stage of breast cancer at diagnosis. *Cancer* 1981 Jun 1; 47(11): 2740-5.
9. Servie RT, Rosen PP, Lesser ML *et al.* Breast self-examination and medical examination related to breast cancer stage. *Am J Public Health* 1981; 71(6): 583-90.
10. Kurebayashi J, Shimozumaki, Sonoo H. The practice of breast self-examination results in early detection and better clinical course of Japanese women with breast cancer. *Surg Today* 1994; 24(4): 337-41.
11. Expanding the scope of Primary Health Care Services in the Health Clinics. Family Health Division, Ministry of Health 1996 (presented at Mesyuarat Pengoperasian Konsep "Expanded Scope", April 1997, Kuala Trengganu).
12. Koibuchi Y, Iino Y, Takei H *et al.* The effect of mass screening by physical examination combined with regular breast self-examination on clinical stage and course of Japanese women with breast cancer. *Oncol Rep* 1998; 5(1): 151-5.
13. Ota J, Horino T, Taguchi T *et al.* Mass screening of breast cancer comparison of the clinical stages and prognosis of breast cancer detected by mass screening and in out patient clinics. *Jpn J Cancer Res* 1989; 80(11): 1028-34.
14. Persson K, Johansson I, EK AC. Breast self-examination among Swedish woman: a survey of frequency, knowledge and attitude. *J Cancer Educ* 1995; 10(3): 163-7.
15. Lashley ME. Predictors of breast self-examination practice among elderly women. *ANS Adv Nurs Sci* 1987; 9(4): 25-34.
16. Schueler LA. Knowledge and beliefs about breast cancer and breast self-examination among athletic and non athletic women. *Nurs Res* 1982; 31(6): 348-53.
17. Yelland MJ, Rice DE, Ward AE. A profile of Australian women practising breast self-examination. *Asia Pac J Public Health* 1991; 5(4): 304-12.
18. Lu ZJ. Variables associated with breast self-examination among Chinese women. *Cancer Nurs* 1995; 18(1): 29-34.
19. Chan SC. A Malaysian Well Person's Clinic. Review of patients seen between April and December 1995. *Med J Malaysia* 1997; 52(1): 53-8.
20. Planning Unit Majlis Bandar Raya Ipoh (personal communication).
21. Chie WD, Cheng KW, Fu CH *et al.* A study of women's practice of breast self examination in Taiwan. *Prev Med* 1993; 22(3): 316-24.
22. Foxall MJ, Barron CR, Houfek J. Ethnic differences in breast self-examination practice and health beliefs. *J Adv Nurs* 1998; 27(2): 419-28.
23. Phillips JM, Wilbur J. Adherence to breast cancer screening guidelines among African American women of differing employment status *Cancer Nurs* 1995; 18(4): 258-69.
24. Ben Ahmed S, Njah M, Heigh R *et al.* Breast self-examination practice in Tunisia based on a survey of first-line patients. *Rev Fr. Gynecol Obstet* 1994; 84(4): 198-20.
25. Coleman EA. Practice and effectiveness of breast self-examination: a selective review of the literature (1977 - 1989). *Cancer Educ* 1991; 6(2): 83-92.
26. Chan SC. Practice of breast self examination among health personnel in Malaysia (unpublished)
27. Schenecke M, Espinoza S, Munoz N *et al.* Attitude and behavior regarding breast self examination among health professionals in Chile. *Bol Oficina Samit Panam* 1993; 114(4): 317-25.
28. Strauss LM, Solomon LJ, Costanza MC. Breast self-examination and attitudes of women with and without a history of breast cancer. *Behav Med* 1987; 10(4): 337-50.
29. Doyle MA. Breast self-examination practices in women with a known neoplasm. *Pro Clin Biol Res* 1988; 278: 171-84.
30. Norman RM, Tudivar F. Predictors of breast self-examination among family practice patients. *J Fam Pract* 1986; 22(2): 149-53.
31. Alagna SW, Morokoff PJ, Bevett JM *et al.* Performance of breast self-examination by women at high risk for breast cancer. *Women Health* 1987; 12(2): 29-46.