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AN EVALUATION OF THE
TEACHING FUNCTION OF THE
COMMUNITY HEALTH NURSE
WITH CLIENTS
ON BREAST SELF-EXAMINATION
IN FAMILY PLANNING CLINICS
IN BLOEMFONTEIN

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by

G. P. Nowlan



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G. P. Nowlan

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CHAPTER 1

STATING THE PROBLEM

1.1 INTRODUCTION

Breast cancer is the most common site for cancer in women today and the figures for new cases are rising yearly (9, p. 345). While breast cancer is fatal if treated late or left untreated it is one of the most curable diseases if it is discovered and treated early, having a five year survival percentage of 80 in Stage I breast cancer (5, p. 3).

Much literature has been published by the National Cancer Association in South Africa on the importance of breast self-examination and the early detection of breast lumps. However, written material mostly affects those higher on the social scale while personal communication has the greatest effect on those lower on the social scale (2, p. 54).

This study then combines both literature and personal communication by the community health nurse on breast self-examination techniques and health education and determines the effectivity of breast self-examination habits.

1.2 A REVIEW OF THE PROBLEM

1.2.1 Increase in incidence of breast cancer

Cancer of the breast is the leading cause of death of women in the United States. The risk of breast cancer for the white American female is said to be 1 in 15 or seven percent (5, p.14).

American figures show that in 1977 there were 90 000 new cases and 34 000 deaths from breast cancer (14, p.31). This tendency of increased mortality is not limited to the United States but affects women world over, especially in Western countries (11, p. 3).

The reported incidence of cancer of the breast has been increasing steadily since the 1940's (8, p. 346). In affluent countries of the West such as the United States, Denmark, England and Canada to name but a few, the incidence of breast cancer is highest. According to Segi, et al, who studied cancer mortality in 24 countries, it has been found that white South Africans fall amongst the high incidence group (1, p. 13). The incidence of breast cancer is higher in European women and especially those over 40 years of age (14, p. 31).

Advances in breast cancer therapy have not significantly changed the morbidity or mortality of this disease. Despite aggressive modern surgical techniques, the five year survival rate for early localized Stage I breast cancer (see 3.3.2) is now about 85% whereas when there is delay and the disease has already spread to the axillary nodes, Stage II breast cancer (see 3.3.2) the five year survival rate drops to 45% (16, p. 81).

The mortality rate from breast cancer, unlike other cancers, is not falling but has shown a slight increase (11,p,39). Only women with truly localized breast cancer at the time of surgery are successfully cured with mastectomy alone. There is evidence, however, which indicates that breast cancer detected early in size and early in time is more likely to be curable than are

those diagnosed late (16, p. 82). There are various factors which given rise to late diagnosis.

1.2.2 Fear of breast cancer

Fear of breast cancer is a major factor which causes women to delay in seeking medical advice. This fear has existed for many years when most people died from cancer. Women also fear the mutilating surgery required to remove the diseased breast and thus delay having a lump diagnosed (13, p. 21).

1.2.3 Ignorance of breast cancer

Women do not realize the importance of monthly breast self-examination as an early detection of breast cancer. Many do not even have regular yearly check-ups done by their doctors. (19, p. 125). People have been so curatively orientated regarding health that it is difficult for them to accept preventative medicine as a means of remaining healthy. Among those women who are aware of breast self-examination there is a lack of knowledge about the procedure to be followed during breast self-examination. Those who do practice breast self-examination have very little confidence in their ability to discover any lumps in the breast.

1.2.4 Health education on breast cancer is neglected

Nothing in the knowledge of breast cancer offers any prospect for prevention. The main hope in influencing mortality is by means of earlier detection and prompt attention. Monthly breast self-examination continues to offer one way to detect the disease early.

The breast is an accessible surface organ which can be readily examined by the client. Thus, the opportunity for the early recognition of an unusual lump or thickening in the breast is exceptionally good.

In this respect Hobbs quotes Easson and Russel as follows:

"Too few among the lay population, however, know that in the majority of women the first indication that a tumour exists is a painless lump in the breast that enlarges at different rates in individual women, in others retraction of the nipple, discharge from the nipple, or changes in the skin of the breast, may be noticed" (12, p. 89).

1.2.5 Nurses neglect health education on breast cancer

Several researchers feel that nurses are not taking advantage of their opportunities to teach breast self-examination. They do not then contribute to the early detection of breast cancer and thus fail in giving preventative care.

Nurses have a responsibility to teach all those around them breast self-examination. The community health nurse is in an ideal situation to undertake this teaching function.

Some authors also feel that the nurse is the ideal person to communicate a positive attitude towards breast self-examination because she is usually a woman and understands the anxiety and fears felt by women in general regarding breast cancer. The nurse has the ability to gain the confidence of all women and is then able to dispel their fears, if she herself has a positive outlook regarding breast cancer.

1.2.6 Non-high risk groups neglected in health education

Programmes should be aimed at those women in the high risk groups. These women are usually middle aged, white and fall in the higher socio-economic groups. It must be taken into consideration, however, that these women will also be more anxious and fearful of cancer which could elicit avoidance behaviour.

The best time to introduce breast cancer preventive education would be during the woman's formative years when she has not yet built up fears about cancer and is interested in all aspects of her body development. Younger girls would also be more likely to learn the habit of regular breast self-examination.

In this respect Neeman refers to Fiedler, et al, who found that teenagers welcomed the opportunity to assume responsibility for their own health maintenance and practice (17, p. 546).

In South Africa very little health education on breast cancer is aimed at the young girl. Most education on breast cancer involves the women at high risk.

1.3 OBJECTIVES OF THE STUDY

The main objective of this study is to determine whether the community health nurse teaches breast self-examination to her clients and whether this teaching is effective.

Another objective of the study is to determine whether increased factual knowledge of breast cancer leads to a more positive attitude regarding preventative action and early detection.

1.4 LIMITATIONS OF THE STUDY

Only white clients attending family planning clinics in Bloemfontein were used and thus these findings might not be representative of the community as a whole. First attenders at these clinics were approached to participate in the study, whether they were attending for contraceptive methods or whether they were attending for Papanicolaou smears.

The first attenders tended to be in the younger age groups and would then be more likely to represent the younger population who are not really in the high-risk group yet. As they are still in the lower risk groups, their attitudes towards breast cancer and early detection methods might be more positive than older high-risk women.

Another aspect which might influence these respondents' reactions is that they might be more health conscious. Many women are under the impression that contraceptives cause breast cancer. This fact could cause these clients to be more conscious about the "risk" of breast cancer which would influence their compliance in regular breast self-examination. As they would feel themselves to be susceptible to breast cancer they would probably be more motivated to carry out breast self-examination. This feeling could be strengthened by the fact that the clinic sister teaches and motivates them to practice breast self-examination regularly. Effectivity of these teachings can only really be measured in terms of a decrease in death rates from breast cancer. However, as this would have to be studied over a period of many years,

the author has taken effectivity to be measured in terms of compliance with the practice of monthly breast self-examination by clients used in the study.

1.5 THE RESEARCH METHOD

This study was developed to investigate the effectivity of nurses' teaching on breast cancer in various Family Planning clinics. From the data obtained recommendations were made to improve the effectivity of this teaching.

Use was made of the experimental and descriptive method in this study. Only one group viz, the experimental group was used in the study. A pretest was followed up by the posttest after a period of three months using the same questionnaire.

1.5.1 The research technique

The literature study and questioning techniques were used.

1.5.1.1 Literature study

A literature study was done of the various breast cancer studies done in other countries. From these a questionnaire was adapted to suit the needs of this particular study.

1.5.1.2 The questionnaire

The questionnaire was developed from a previous study done in America by Stillman and from a UICC model for a health survey on cancer control. Questions from the Gallup study done in 1974 were also included in the questionnaire.

The questions were arranged in four categories. The first seven questions were developed to test the factual knowledge of the respondents on breast cancer.

Questions 8 to 14 measured the clients' attitudes and perceived susceptibility to breast cancer and the perceived benefit of breast self-examination.

Questions 15 to 24 were developed to determine whether the client had ever heard of breast self-examination, whether she practiced breast self-examination regularly and who had taught her the method, her confidence in the technique of breast self-examination and her ability to detect abnormalities was also questioned.

For those who did not practice breast self-examination regularly a question was included to determine the reason for this neglect and whether they would practice breast self-examination more regularly if they were given more information. (See Appendix A for an example of the questionnaire).

A cover letter was attached to the front of the questionnaire explaining the reason for the study and ensuring confidentiality of the contents of the completed questionnaire. (See Appendix B).

By comparing the results from the pretest and posttest it was possible to draw conclusions about the effectivity of the community health nurses' teaching on breast cancer and breast self-examination.

Effectivity was measured in terms of compliance with monthly breast self-examination.

1.5.2 Validity of the research method

The questionnaire was presented to three nurse practitioners to establish content validity. The questionnaire was checked for clarity, readability and understandability. All three nurses agreed on the content validity of the study.

Two non-nursing women were approached to determine whether anyone in the community would have difficulty with the questionnaire. No difficulties were experienced in understanding and completing the study.

1.5.3 Reliability of the research method

As most questions were developed from other studies done in the United States and from the International Union against cancer it was assumed that these questions would also be reliable in a South African setting.

1.5.4 The sample

Two family planning clinics were approached to help in contacting the respondents. One clinic is run by the Department of Health and the other by the local authority.

Only new clients were approached to participate in the study as it was felt that they would have had no previous experience with the teaching of breast self-examination techniques. The teaching of the nurse could then be evaluated with no previous learning influencing the results.

Use was then made of incidental sampling thus giving everyone an equal chance to participate in the study.

Clients were requested to complete the questionnaire before being seen by the nurse. Only two clients refused to participate in the study. They were unable to complete the questionnaires due to pressure of time.

After completing the questionnaire the clients were seen by the nurse who demonstrated the technique of breast examination during the physical examination. The importance of monthly breast self-examination was then discussed and the client was motivated to practice the technique regularly.

The clients were also given pamphlets on breast cancer which are published by National Cancer Association. These pamphlets give basic information about breast cancer such as those at high risk, how breast cancer develops and explains in simple language the technique of breast examination. These are used as secondary reinforcement to the nurses' teaching.

In the original contact with the clients there were fifty two respondents. It was unfortunate, however, that only forty respondents could be contacted with the follow-up posttest. These losses were due mainly to people changing their addresses while two persons refused to complete the questionnaires.

1.6 A SYNOPSIS OF THE CHAPTERS

The study consists of two parts and five chapters.

Part I consists of three chapters and serves mainly as orientation.

Chapter 1 — This includes a statement of the problem of breast cancer. The research method used to investigate the effectivity of the nurses' teaching as regards breast self-examination is discussed as well as the limitations of the study.

Chapter 2 — The problem of breast cancer is studied in more detail.

Chapter 3 — Includes a discussion of the examination of the breasts, risk factors, signs and symptoms and the actual technique of breast self-examination.

Part II includes the analysis of data and recommendations.

Chapter 4 — This is a detailed account of the research findings. The pre- and posttest results are compared with each other to determine whether the nurses' teaching was effective.

Chapter 5 — Recommendations regarding the type of teaching to be given on breast cancer are made as well as possible areas of further study.

CHAPTER 2A REVIEW OF THE PROBLEM OF BREAST CANCER AND ITS IMPLICATIONS2.1 INCREASE IN INCIDENCE OF BREAST CANCER

Cancer of the breast is one of the main causes of death among women between ages 40 - 44. From cancer statistics for 1977 there were an estimated 90 000 new cases and 34 000 deaths from breast cancer in the United States (14, p. 31). The risk of breast cancer for the women in the United States is said to be 1 in 15 or 7% (8, p. 345).

From figures obtained from an American Cancer Society publication it can be seen that breast cancer had a higher rate in South Africa than in United States in the period 1966 - 67. The rate of deaths were 24 per 100 000 of the population for South Africa while the death rate for Americans was 22 per 100 000 of the population (1, p. 13).

In a study done in the Professional Surgical Centre in Johannesburg General Hospital from 1959 to 1966, the five year survival rates of 166 cases were noted as illustrated in table 1. Of these, 95% of the women discovered the breast mass themselves.

See page 13 for table 1.

TABLE 1BREAST CANCER, CRUDE FIVE YEAR SURVIVAL RATES

Stage			Survival rates
Stage	I	A hard palpable mass has formed	64%
Stage	II	There is slight axillary lymph node involvement	46%
Stage	III	Palpable supraclavicular nodes present	23%
Stage	IV	Distant metastasis has occurred	5%
		Histological stage I	70%
		All 166 cases	40%

(8, p. 364)

Figures from the National Hospital Radiotherapy Department for a period of ten years show similar tendencies. (See table 2).

TABLE 2BREAST CANCER, SURVIVAL RATES FOR 10 YEARS 1968 - 1978

Clinical Stage	1 Year Survival Rate
Stage I	97%
Stage II	97%
Stage III	85%
Stage IV	45%

These figures have not yet been published by the Radiotherapy Department of the National Hospital, Bloemfontein.

2.2 ATTITUDES TOWARDS BREAST CANCER

From a review of attitudes towards cancer in a UICC Monograph (1967) evidence is given that:

"many public health nurses experience feelings of frustration and despondency about cancer and these may be passed on to laymen" (10, p.9).

An investigation into the attitudes towards cancer was done in Hungary during 1970 which revealed that 2% of the respondents felt that cancer education was unnecessary and constituted a waste of time (18, p. 193).

A study on attitudes to cancer conducted by Horn (1964) in America revealed that 25,8% of people interviewed believed that cancer was curable in 1940 whereas 73,5% believed cancer to be curable in 1964 (10, p. 5).

Paterson conducted studies in Manchester which show that there is a more positive outlook towards cancer in recent years. There was an improvement from 57% to 70% who believed that early treatment increases the chance of cure (10, p. 5).

In 1974 the American Cancer society ordered the Gallup study to determine behaviour, attitude and knowledge of women concerning breast cancer. It was discovered "that American women are more concerned about breast cancer than any other disease" (17, p. 544).

The Gallup study was also designed to help develop plans and programmes to increase public knowledge of breast cancer — its early detection and diagnosis. However, there are still many

people who view breast cancer as being incurable and this gives rise to fear which sets off a chain reaction. Fear leads to delay and delay leads to the early death of the patient.

2.2.1 Fear and ignorance of breast cancer

The public has an image of cancer as an incurable disease and this arouses fear which leads to escapism — a refusal even to face the possibility of cancer. J. Walter states in this regard: "The fear of cancer is a potent factor in causing delay in diagnosis. If I have cancer — an incurable disease — I prefer not to know about it or not to have it confirmed, so I won't go to the doctor" (11, p. 42).

Walter quotes Wakefield as stating:

"Psychiatric studies here and in other countries have made it clear that a deep-seated fear of what people regard as an incurable disease, and to a lesser extent ignorance of the symptoms are the cause of delay in seeking medical advice" (11, p. 28).

It has been found that cancer is rated highest in producing anxiety compared with other diseases. Levine (1962) found that knowledge about a disease seems to be associated with fear. He suggests that lack of knowledge leads to anxiety and the newly obtained knowledge increases the anxiety (10, p. 6).

When people are ignorant of the facts or paralyzed by fear of cancer they are unable to act in a sensible way to help themselves. However, fear can often be a source of motivation towards positive action that is appropriate to the situation. It can also function

in a negative way by promoting the use of defence mechanisms (e.g. repression, denial) which only put off the dreaded moment temporarily and by not adapting to the situation, makes it more difficult for the individual to accept it (2, p.65).

However, it is not only lack of knowledge which causes fear as evidence has shown that doctors and nurses themselves, also delay in seeking treatment for cancer as is stated in a UICC Monograph (10, p. 5).

An investigation by Gold in 1964 into the reasons for delay in seeking medical advice, when breast lumps developed, found that lack of knowledge, psychologic factors, certain behaviour patterns such as fear and anxiety and lack of experience in palpation of the breast were responsible to a significant extent (19, p.122).

A study done in Canada (1961) found that 70% of those interviewed believed that people delayed consulting a doctor when they suspected breast cancer because of fear (10, p. 6).

Ignorance about breast cancer also leads to fear and the usual reaction to fear is avoidance. From the Gallup study it was found that 46% of women felt that practicing monthly breast self-examination would lead to unnecessary worry about cancer (19, p.121).

Fear, however, is still a major reason that more people do not receive early treatment. They may be aware of cancer symptoms but because they fear it is cancer they do not consult a doctor. The sources of this fear are numerous, the main reasons being, however:

- fear of death — many people still regard cancer as an incurable disease.
- fear of disfigurement -- Many women fear breast cancer because of the mutilating surgery which it entails.
- Modesty and shame — Many people still regard cancer as a disease to be ashamed of or as retribution for immoral living (2, p. 66).

An investigation among women with breast cancer in Britain revealed that those who knew that the lump might be cancer delayed three times longer than those who said that they did not know. Fear of the possible meaning of the symptoms was one of the reasons for delay. Another was the lack of assurance that treatment really could cure. It was also found that no education on cancer had been carried out in that area (16, p. 82).

Patients react in different ways to the threat of breast cancer. Stress may manifest itself by means of defence mechanisms such as denial, fear, hostility or delay. The nurse can, however, offer a great deal of assistance to both the potential patient and her family by giving them calm and sympathetic understanding of their anxiety.

2.2.2 Ignorance about breast examination

Many authors have stated that women are ignorant about breast self-examination, the technique, the frequency of practice and the reasons for regular examination.

From the review of cancer screening done in Hungary by Péter and Rakaczky it was discovered that 18,8% did not know what pre=

cancerous lesions were, nor that they could be detected and cured. Also 12% did not know that early detection of breast cancer by means of breast examination increases the chances of recovery. These people were mainly in the 40 - 59 age group and had higher qualifications (18, p. 191).

The Gallup survey was conducted with 100 women and some very disturbing results were demonstrated. Very few women have their breasts examined by doctors with any regularity. Only 35% of those women interviewed had had breast self-examination mentioned to them by their doctors (4, p. 29). Those who practice breast self examination regularly (92%) have been taught mostly by their doctor.

Women who have had a medical examination by their doctor are under the impression that they are safeguarded against cancer for a year and thus do not see the necessity for examining their breasts monthly. From the Gallup study results Holleb feels that doctors do not stress that breast self-examination should be done on a monthly basis. (4, p.29).

Lack of knowledge about breast self-examination as a means of detecting breast cancer early is one of the most important reasons for nonpractice of breast self-examination. Of those women who do know about breast self-examination, many do not realize that it must be done on a monthly basis.

This fact was well illustrated by the Gallup study in which only 12% of all the women knew that they should examine their breasts monthly (13, p. 21).

Holleb states that although 77% of women interviewed had heard of self-examination only one out of every four practiced it. One very encouraging result revealed that 96% of the women interviewed believed that early detection of breast cancer increased the chances of a cure (11, p. 39).

Turnbull investigated the breast examination practice of 160 women. The respondents were chosen from nursing and non-nursing students. It was found that of these only 58 respondents had had a demonstration on breast self-examination by a medical practitioner (20, p. 1450). The study also revealed that cancer fear, mass media and a doctor's influence were factors which influenced breast self-examination among the non-nursing graduate students who took part in the study (20, p. 1450).

Of the 90 nursing graduate students who took part in the study 77 regularly practiced breast self-examination, while 72% of the non-nursing students who took part regularly practiced breast self-examination. Of these non-nursing students only 15 listed a nurse's influence as the motivating factor for regular breast self-examination (20, p. 1450).

2.2.3 Lack of confidence

From several sources it appears that women lack confidence in their ability to discover abnormalities.

It comes to light from the study done by Hobbs that some women feel unsure that they will be able to discover any abnormalities when carrying out their own breast examinations. Of those interviewed 14 nurses indicated that they felt unsure in carrying

out their own breast examinations. Twenty-four of the non-nursing student respondents felt unsure about being able to discover any abnormalities (12, p. 194).

Stillman's study supports the findings of Hobbs that women are mostly unsure of being able to discover abnormalities in their breasts. She also found that those women who had previous experience with a lump in the breast felt more confident in their ability to discover any other abnormalities in the breast (19,p.126).

Bond (1956) made some important observations as regards teaching breast self-examination (17,p.545). He found that audiovisual methods were not very effective in teaching a technique which relies on the sensation of touch. He discovered that even physician's assistants who were well motivated were not able to carry out the technique of breast examination properly after seeing a film and a live demonstration. They needed practice in using tactile perception (17, p. 545).

Thus, it would seem that the best way to learn breast self-examination would be on a one-to-one basis, this then allowing the client the opportunity to demonstrate the technique of breast self-examination to the doctor or nurse. This would allow for immediate feed-back on whether the method was correct or not. The client would then feel more confident in practicing the technique (9, p. 194).

2.3 THE IMPORTANCE OF HEALTH EDUCATION ON BREAST CANCER

In 1963 an Export committee of the World Health Organisation said in a report to Cancer Control:

"Health education of the population and of patients is an integral part of a Cancer Control programme and an essential element in the success of most control measures. Experience in many countries indicates that there is considerable public interest in the subject and widespread readiness to cooperate with the health authorities in the prevention, detection, diagnosis, treatment and after care of cancer when the problems involved are properly understood" (10, p. 1)

In 1964 another World Health Organization Expert Committee reporting on Prevention of Cancer substantiated these comments by expressing the belief that prevention is impossible without education.

"The combination of medical action and health education which has been so effective in combating infections and nutritional diseases, can now be applied in the field of cancer prevention" (10, p.1).

Another problem identified by the committee is stated as follows:

"The educational problems of cancer prevention have not received as much attention as other aspects of cancer. There are wide gaps in our knowledge of social, psychological and educational factors that inhibit the utilization of preventive knowledge and expenditure on research in health education concerning cancer is negligible" (10, p. 1).

As in all forms of health education, a number of general principles can be formulated, but how they are put into practice must always depend on local beliefs, conditions and resources.

When teaching the community one must take their social background and their definition of what constitutes "health" to them, into consideration. In a community where "sickness" and the "sick role" are only permitted in cases where the person is unable to continue to work, preventive medicine and actions will be very difficult to introduce. The climate for acceptance of preventive practices must be cultivated before any progress will be made in this direction. Thus people must be educated to accept preventive actions, e.g. breast self-examination and not delaying in consulting a doctor in the case of abnormalities, as part of their daily lives. This point is illustrated in Cancer Control by UICC which states:

"It is pointless, for example to expect education about preventive health measures, or even early detection to have any quick effect on a community which regards "calling in the doctor" as the ultimate confession of weakness" (7, p. 46).

Doctors and nurses play an important role in the social definition of the "sick role" and in the education of the public on cancer prevention (7, p. 45). The close personal relationship with patients and clients makes them a strong source of influence on the public. This influence can be positive or negative, however, depending on the attitude of the doctor or nurse towards cancer.

One way of instilling preventive health practices is by teaching the children in a community about cancer. This will improve their knowledge about cancer thus reducing fear and instilling the idea of taking preventive action to avoid or detect cancer.

Gisela Gastrin of the Cancer Society of Finland says in this regard:

"The primary task of health education is to seek to affect the attitudes of the individual in such a way that activities maintaining his own health and that of his fellow beings and of society become an everyday habit of life" (2, p. 46).

James, the director of the American Cancer Society feels that school children should be taught about cancer: "While they are in an active learning situation and before they have developed obstructive fears and misconceptions" (15, p. 466).

Neeman and Neeman feel that the teaching of breast self-examination should occur in the woman's formative years while she is still at low risk for breast cancer and thus not yet subject to develop barrier building fears which will prevent her taking responsibility for her own health practice (17, p.546).

2.4 EARLY DETECTION IMPROVES SURVIVAL RATES

Statistics on breast cancer survival rates have shown conclusively that early diagnosis and treatment of breast cancer improves the longterm survival rate.

Sakaguchi quotes figures from a report by the National Cancer Institute on survival rates. These figures support the idea that the earlier detection of breast cancer is made, the better is the longterm survival and cure rate (6, p. 29).

Patients with negative axillary lymph nodes at the time of diagnosis have a five year survival rate of 75% and 65% live 10 years and longer. Patients with axillary involvement have a 50% five year survival rate and after 10 years only 25% are still alive (6, p. 29).

Women with axillary lymph node metastases at the time of surgery show a high rate of recurrence proportionate to the number of nodes involved.

Fifty-two percent of women with more than four involved nodes develop recurrent breast cancer at 18 months and eighty percent have recurred within five years. The five year survival rate of this group is 31 per cent and the 10 year survival rate is only 13 per cent (14, p. 31).

2.5 THE ROLE OF THE NURSE

Nurses have an important role to play in breast cancer detection as the earlier the diagnosis is made the greater the chance of survival.

Lewison says in this regard:

"It is the duty of all nurses to encourage, foster en promote public education regarding cancer of all sites, including breast cancer" (16, p. 82).

Lewison regards the teaching of the public as being a responsibility of both the doctor and the nurse. She also feels that:

"The nurse must apply this knowledge to herself, to those whom she serves and to the community at large. Since cancer of the

breast can develop at any age, regular, periodic examinations are to be emphasized (16, p. 84).

Nurses can persuade people to act in certain ways but there are certain prerequisites for these persuasive activities which Easson recognizes as:

- "(a) to be conscious of the need
- (b) to be willing to persuade i.e. as a conscious educational act and
- (c) to consider how best to communicate, bearing in mind the special requirements of individual patients" (2, p. 17).

For nurses to play their role successfully in the early detection of cancer many will have to undergo a change in attitude towards cancer. Studies have shown that many nurses are despondent about cancer and its cure. This attitude could be carried over to the public which would influence their attitude towards early detection measures.

From Turnbull's study it can be seen that few nurses were identified as teachers of breast self-examination. The study was conducted with non-nursing and nursing graduate students used as the sample (total of 160 women). Of the nursing graduates interviewed 23 claimed that a nurse had done the teaching of breast self-examination and only two of the non-nursing graduate participants identified the teacher as being a nurse. The author feels, however, that these findings may indicate that the nurse was not identified as a teacher or that no nurse was present. Turnbull states in this respect:

"The implications are that nurses need to work on their teaching effectiveness in this regard" (20, p.1451).

Further she claims:

"... There is a need for positive role and image development so that nurses generally will assure their role in cancer detection and be recognized for it" (20, p.1451).

Stillman's findings support those of Turnbull who found that nurses do not make use of all opportunities to teach breast self-examination. From Stillman's results it can be seen that nurses play a very small role in the teaching of breast self-examination. Only four women claimed to have learnt breast examination from a nurse. Many more claimed to have learnt the technique from doctors, and from brochures distributed by American Cancer Society. Many nurses thus miss the opportunity to teach the public about breast self-examination (19, p.126).

Stillman feels that a one-to-one basis of teaching achieves better results as it allows for questions and the opportunity to determine whether the correct technique of breast self-examination is used.

At a symposium held in Pretoria during October 1979 by the National Cancer Association the role of the nurse in the early detection of breast cancer was discussed.

Sister Banks identifies one of the basic roles of the nurse as that of education, to fellow nurses, patients and clients. The nurse must ever be alert, everywhere and always, to inform, teach and guide women to a better understanding of themselves

and of breast cancer. This will win her the trust and confidence of all women and through this she will be able to dispell their fear.

However, the first requisite is that the nurse be correctly orientated on methods of early detection. This orientation will cause her to be constantly aware of her task of teaching her clients breast self-examination and to carry over a positive attitude towards early detection measures.

Nurses are in contact with many people all day and thus their opportunities to teach breast self-examination are limitless. They should set the example by practicing good health habits and be constantly alert to encourage other women to look out for any lumps or thickenings in the breasts. The support that she gives to patients who are confused, ashamed and afraid, is vitally important as it can be the difference between delay and life-saving treatment.

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CHAPTER 3

EXAMINATION OF THE BREAST

3.1 INTRODUCTION

Early detection of breast cancer is facilitated by means of self-examination and being examined regularly by health professionals whose clinical practice shows a thorough knowledge of risk factors associated with an increased incidence of breast cancer; the signs and symptoms experienced by women with a problem; and methods of breast self-examination to be taught to clients (9, p. 42).

3.2 PERSONAL HISTORY

Only the chief complaint and risk factors of importance will be discussed here.

3.2.1 Chief complaint

Women seldom experience early symptoms of breast cancer. The most common single complaint of patients with breast cancer is a painless lump or mass in the breast, usually in the upper, outer quadrant. The second most common complaint is nipple discharge. Infrequently, the first presenting sign or symptom is a large mass in the axilla, a sensation of heaviness in the breast, or a pain due to metastasis to the vertebrae. However, the lump usually palpated by the patient with breast cancer is painless (6, p. 33).

3.2.2 Risk factors

- Sex is a major risk in breast cancer. Women have a seven percent chance to develop breast cancer while less than one percent occurs in males (14, p. 32).
- Age also plays a role in the development of breast cancer. The risk of developing breast cancer rises with increasing age through middle age until the age of 50, when the incidence levels before rising again at a slower rate (6, p. 31).
- There is an inverse relationship between parity and the risk of development of breast cancer. Women who bear their first child before the age of 20 are less likely to develop breast cancer. Pregnancy after the age of 30 increases the risk of developing breast cancer more than that of the nullipara (6, p. 31).
- Early menarche (before the age of 12) and late onset of menarche increase the risk of developing breast cancer. Surgical removal of the ovaries before the age of 35 has also been shown to decrease the risk of breast cancer (14, p. 31).
- Benign breast disease, such as adenomas, chronic mastitis and fibrocystic disease increases the risk of developing breast cancer. The reason for this is unclear. Benign cysts rarely become malignant, but this tendency may exist with a tendency to develop breast cancer (14, p. 32).

- There is a tendency in some families to have a history of breast cancer. Female relatives of women with breast cancer have a two- to threefold increase in incidence (6, p. 31).
- A history of breast cancer is another high risk factor. Women with cancer of one breast have about a 10 per cent incidence of cancer in the opposite breast (14, p. 32).
- Geographic occurrence of breast cancer varies. The incidence of breast cancer in North American and European women is five times that of Asian or African women. Evidence links affluence, changes in dietary habits and obesity with this increased risk (14, p. 32).

C. J. Uys summarized these findings in table form which is as follows:

TABLE 3

VARIABLES ASSOCIATED WITH RISK OF FEMALE BREAST CANCER

Variables	Risk of breast cancer	
	Lower	Higher
Age	Young	Old
Race	Oriental	Caucasion
Ethic group	Gentiles	Jews
Marital status	Married	Single
Number of pregnancies	More	Fewer
Duration of breast feeding	Longer	Shorter
Age at menarche	Later	Earlier
Artificial menopause	Present	Absent
Benign breast disease	Absent	Present
Family history of breast cancer	Absent	Present
Socio-economic status	Lower	Higher

(8, p. 347).

3.3 THE EXAMINATION OF THE BREAST

3.3.1 Signs and symptoms

3.3.1.1 Mass

The most common sign experienced by women is a lump in the breast, which is usually painless and accidentally discovered.

3.3.1.2 Nipple discharge

This sign in the nonlactating breast is abnormal but is not a definite diagnosis of carcinoma. From 18 to 47 per cent of cases are, however, malignant.

3.3.1.3 Skin retraction

Puckering or dimpling of the skin is frequent over superficial carcinomas but is not of absolute diagnostic evidence of a malignancy as evidence has shown that it does also occur with benign tumours.

3.3.1.4 Change in contour of the breast

This may be the only change or one of several visible changes in the breast due to carcinoma. Local retraction with flattening may occur. In advanced cases there is marked deviation and shortening and retraction of the breast.

3.3.1.5 Axillary adenopathy

Enlarged axillary lymph nodes may be the only sign of an occult breast cancer. Pierce found that this sign may represent malignancy in as many as one in every 14 cases (9, p. 40).

3.3.1.6 Inflammatory carcinoma

Redness, increased heat, tenderness and local edema (peau d'orange) occur in advanced breast carcinoma as well as with "inflammatory carcinoma". It develops rapidly, with symptoms lasting four to six months. Pain is usually present while ulceration does not usually occur (9, p. 42).

3.3.2 Classification of breast cancer

Clinical manifestations of the various stages of the development of breast cancer are classified internationally as follows:

- Stage 0 - the preclinical or occult stage, there are no clinical findings. Diagnosis made by means of Mammography.
- Stage I - a mass has already formed. The tumor is usually solitary, unilateral, hard, irregular in shape and painless. Nipple retraction or elevation, nipple discharge and skin dimpling may be observed (6,p.33).
- Stage II - there is axillary lymph node involvement at this stage. A fairly large and hard, mobile axillary node or nodes are palpable. Other signs such as nipple discharge, nipple retraction or elevation, and skin dimpling may be observed.
- Stage III - this is the locally advanced stage in which one or more of the following signs are present: palpable supraclavicular nodes, fixation of the tumor to the

chest wall, skin edema, redness over more than one third of the breast, edema of the arm, ulceration of the skin, satellite nodules, and parasternal nodes (6, p.33).

Stage IV -- involves distant metastasis.

3.3.2.1 Morphological types of breast cancer

3.3.2.1.1 Ductal carcinoma

Three fourths of all breast cancers belong to this group. It appears as a poorly delineated mass with the hardness depending on the content of the fibrous tissue. It includes all invasive cancers in which no special type of histological structure is recognized (8, p. 354).

3.3.2.1.2 Medullary carcinoma with lymphocytic infiltration

About five to seven per cent of all mammary carcinomas are of this type (9, p. 71). The tumour may be large and is usually spherical in shape with a well defined border.

3.3.2.1.3 Colloid carcinoma

This type of cancer occurs in about three per cent of cases (9, p. 72). The tumour may be of any size and is characterized by large amounts of mucus. It tends to be well delineated, with a bulging, soft, translucent cut surface. They seldom give rise to metastases.

3.3.2.1.4 Papillary carcinoma

This is one of the least frequently encountered cancers -- only about one per cent. They have well defined borders. Tumour growth is very slow and secondary axillary lymph node involvement occurs late and infrequently (8, p. 352).

3.3.2.1.5 Intraductal carcinoma

This carcinoma grows entirely within the mammary duct without invading the surrounding stroma. Many foci occur which is one of its striking characteristics.

It can manifest as a normal breast, through areas with slightly dilated ducts or various patterns can exist simultaneously in one specimen. The variation in the gross pattern is associated with the degree of necrosis existing in the tumour within the duct and with the thickness of the ductal walls (9, p. 77).

3.3.2.1.6 Lobular carcinoma

This lesion is usually diagnosed as an incidental microscopic finding. No distinctive features permit its identification (9, p. 77).

3.3.2.1.7 Paget's Disease

It is clinically characterized by an eczematoid lesion of the nipple and is always associated with carcinoma within the breast. About three percent of all mammary cancers have this eczematoid lesion as their presenting symptom. The prognosis of patients with this lesion depends mainly upon the size and upon the histological type of the associated carcinomas (8, p. 356).

3.3.3 Prognostic variables which influence the survival rate

3.3.3.1 Metastasis to regional lymph nodes

This is the most important prognostic variable as it is an indication of the ability of the neoplasm to spread. The number of lymph nodes involved is inversely proportional to patient survival. If metastatic involvement of the nodes can be grossly detected, the prognosis is worse than when the metastasis are of microscopic size (9, p. 81).

3.3.3.2 Tumour size

The larger the size of the tumour (larger than 3.5 mm), the greater the chance of metastasis to axillary lymph nodes (9, p. 81).

3.3.3.3 Tumour margin

Tumours with poorly delineated or infiltrative borders give rise to a larger proportion of axillary lymph node metastasis than tumours which have definite borders.

3.3.3.4 Histological type

Some infrequent types of carcinoma of the breast have a better prognosis than the more common invasive duct carcinoma. Histological identification by the pathologist is important.

3.3.3.5 Histologic differentiation

The malignancy of breast carcinoma has a positive correlation with the degree to which the neoplastic tissue lacks normal histologic and cytologic differentiation (anaplasia) (9, p. 83).

3.3.3.6 Inflammatory infiltrate

An inflammatory infiltrate not related to tumour necrosis may exist. It is usually composed of plasma cells, lymphocytes and sometimes histiocytes. A dense infiltrate has been considered a measure of host resistance, somewhat similar to graft rejection. This has a good prognosis.

3.3.3.7 Vascular invasion

The growth of neoplastic cells into the lumina of blood vessels is an ominous sign in carcinoma of the breast.

A prognostic statement can be made with regard to certain types of breast cancer with some confidence. However, many viable cancer cells are shed into the body from the primary tumour very early in its cycle. While many of these cancer cells are destroyed by host defence mechanisms a number escape and spread to distant sites. These viable cells may remain dormant for variable time periods, thus explaining the variability in time from original surgery to collapse (14, p. 31).

3.3.4 The technique of breast self-examination

The client must be given clear instructions in the technique of examining the breasts. These instructions must be followed up by a demonstration on the client. The client must then be able to give a satisfactory demonstration to the nurse so that any uncertainty can be corrected.

3.3.4.1 Inspection

Examination starts with the client sitting in front of a mirror, first with her arms at her sides and then raised above her head. When the arms are raised the breast tissue is stretched across the pectorals. The breasts are observed for symmetry of size, skin colour and vascular patterns. The contour of the two breasts are evaluated by following the contour from the anterior axillary fold to the midline on each side. An indentation or a bulge or a puckering in the contour betrays the site of the tumour. An enlarged edematous breast may be a sign of acute cancer (9, p. 47).

Nipples are also inspected for deviation in the direction in which nipples point, flattening, broadening and retraction. The areola and nipples are observed for pigment, crusting and discharge (3, p. 63).

3.3.4.2 Palpation

Palpation is done while lying down with a small pillow placed under the breast being examined. The arm on that side is placed under the head. The client then palpates the breast with her free hand starting at the upper outer quadrant and working in a circular motion towards the nipple. The flat surface or balls of the fingers are used to gently palpate the entire breast (6, p. 39). The nipple must also be checked for mobility as a tumor may grow under it, causing resistance on examination. The same procedure is carried out with the opposite breast and must also be done in a sitting position.

The client is then instructed to see a doctor immediately if she observes any abnormalities in the breast tissue. She is also reassured that not all lumps are cancer but that only a doctor will be able to decide.

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CHAPTER 4ANALYSIS OF THE RESEARCH DATA

A discussion of the research findings as revealed by the questionnaires will follow. See Appendix A for questionnaire.

4.1 KNOWLEDGE OF BREAST CANCER

From the results it can be seen that there was a definite improvement in factual knowledge about breast cancer as shown in Table 4. Only the respondents having the correct answer were taken into consideration.

TABLE 4 FACTUAL KNOWLEDGE OF RESPONDENTS ON BREAST CANCER
WITH PRE- AND POST TESTING

QUESTION	PRETEST RESULTS	POSTTEST RESULTS
1 The percentage of women who would get breast cancer	15,0%	50,0%
2 Most lumps in the breast turn out to be cancer	47,5%	97,5%
3 Age at which women's chances to develop breast cancer begin to increase	27,5%	97,5%
4 Should a woman consult a doctor about an abnormality	100,0%	100,0%
5 Is cancer contagious	75,0%	100,0%

Thus from Table 4, question 3, shows a vast improvement from 27,5 to 97,5 percent of respondents showed increased knowledge about breast cancer.

The question which determined whether the respondent knew anyone with cancer revealed that 84,5% of them knew someone who had cancer. Of these 64,5% revealed that the person had died of cancer.

Women at risk had to be identified in this specific question. Results revealed that very few respondents could identify risk factors both before and after the teaching programme. After the teaching programme 77% of the respondents knew of the relationship between breast cancer and a family history of breast cancer. Although 97,5% of the respondents claimed to know that women over the age of 35 were at higher risk, they could not associate it with the wording "is past menopause" and only 64,5% marked it as a risk factor.

From the various possible answers to this question it became clear that there are two misconceptions about the causes of breast cancer. Respondents believed that contraceptive pills and being hit on the breast increased the risk of developing breast cancer. This misconception did not show much improvement even after the teaching - 46,5% of the sample were of the impression that the Pill caused breast cancer.

4.2 BELIEFS

Seven questions were developed to determine perceived benefit of breast self-examination and perceived susceptibility to breast cancer. A strongly positive attitude was rated as 4 decreasing through to 1 for the most negative attitude. Results are summarized in Table 5.

TABLE 5 FREQUENCY OF SELECTION OF RESPONDENTS PER ITEM ON BELIEF SCALE

QUESTION	COMPLETELY AGREE		PARTLY AGREE		PARTLY DISAGREE		COMPLETELY DISAGREE	
	Pretest results	Posttest results	Pretest results	Posttest results	Pretest results	Posttest results	Pretest results	Posttest results
<u>Perceived benefit</u>								
8 The more women who examine their breasts, the fewer the deaths from breast cancer	75,0%	97,5%	25,0%	2,5%	-	-	-	-
9 Finding a lump herself doesn't really matter because by then it is too late	20,0%	-	15,0%	5,0%	12,5%	10,0%	52,5%	85,0%
10 By examining her breasts, she will discover a lump sooner	65,0%	90,0%	20,0%	10,0%	7,5%	-	7,5%	-
12 She finds examining her breasts an embarrassing thing to do	17,5%	-	20,0%	10,0%	17,5%	10,0%	42,5%	80,0%
<u>Perceived susceptibility</u>								
11 So many things could happen to her that its pointless her worrying about breast cancer	15,0%	-	17,5%	-	32,5%	32,5%	35,0%	67,5%
13 The older she gets the more she thinks about getting breast cancer	27,5%	72,5%	42,5%	22,5%	12,5%	5,0%	17,5%	-
14 She rates her chances as average, above average or below average	Average 77,5% 85,0%		Above average 7,5% 10,0%		Below average 15,0% 5,0%			

* See page 42.

By far the greater percentage 77,5 to 85 percent of the respondents rated their chances as average in the pre- and posttest in question 14.

* Questions 8, 10 and 13 were rated as 4 if the respondent chose "Completely agree". Questions 9, 11, 12 were rated as 4 if the respondent chose "strongly disagree".

Question 14 required the respondent to evaluate her chances of developing breast cancer as "average" which received a rating of 2, "above average" which was rated as a 3 or "below average" rated as 1.

For perceived susceptibility there was a possible score of 3 to 11 and for perceived benefit a score of 4 to 16 was possible. In the case of perceived benefit a score of 12 or more was taken as a high degree of belief and thus a positive attitude. A score of 7 to 11 was taken as moderate belief and less than 7 was a low belief indicating a negative attitude.

A score of 9 or more in perceived susceptibility was taken as a high degree of belief in breast self-examination as a means of reducing the threat of breast cancer. A score of 6 to 8 was regarded as moderate belief and less than six as a low degree of belief.

4.2.1 Perceived benefit of breast examination

In perceived benefit scores ranged from 7 to 16 in the pretest with an average score of 11,7 (within the moderate range).

Most scores fell in the moderate range of belief with none in the low belief range.

In the posttest scores ranged between 10 and 16 with an average score of 13,1. Only 20 percent fell in the moderate range of belief while the rest of the sample ranged in the higher degree of belief.

4.2.2 Perceived susceptibility to breast cancer

In the pretest scores ranged from 3 to 11 with an average score of 3,3 (within the moderate belief range). There were no scores lower than 3 thus, no one scored in the low range of belief. Sample scores ranged between 7 and 12 in the posttest. The average score was 9,2 which was rated as a high degree of belief. Only 15 per cent of the sample fell among the moderate degree of belief.

From the above data on perceived susceptibility it can be seen that the respondents became more aware of the fact that they can develop breast cancer after the teaching programme.

In general it can be seen that attitudes towards breast self-examination are positive and the greater proportion of the sample responded even more positively after the teaching programme.

4.3 BREAST SELF-EXAMINATION PRACTICE

In this section the first two questions determined whether the respondents had ever heard of breast self-examination and whether the technique had been demonstrated to them.

The pretest revealed that although 77,5% of the respondents had heard of breast self-examination, only 50% had ever had a demonstration. After the teaching programme 100% had heard of and had a demonstration on breast self-examination.

The respondents were then required to identify the person who demonstrated the technique to them. In the pre- and posttest 25 per cent identified a doctor as the person who taught them

the method of examination. In the pretest only 15 per cent identified the nurse as the teacher. Posttest results revealed an improvement in that 75 per cent identified the nurse as the teacher. (It must be remembered, however, that this study was done in clinics where a nurse was on duty all the time with a doctor paying visits on certain days only).

In the pretest articles and films were also recorded by 15 per cent of the sample as the source of information about the technique of breast self-examination. Pamphlets were given to these respondents as positive reinforcement to the nurses' teachings.

When asked whether they regularly examined their breasts (Question 18) the pretest revealed that 37,5 per cent of respondents did so while 70 per cent claimed to practice breast self-examination after the teaching programme. When questioned as to the regularity of breast self-examination only 55 per cent of the respondents examined their breasts monthly. Table 6 includes a comparison of the respondents who had heard of and had a demonstration of breast self-examination and those who practiced breast self-examination.

TABLE 6 COMPARISON OF PRE- AND POSTTEST RESULTS OF RESPONDENTS
REGARDING EXPERIENCES OF BREAST SELF-EXAMINATION

Experience of respondent	Pretest re= sults in percentage	Posttest re= sults in percentage
Respondents who heard of breast self-examination	77,5	100,0
Respondents who had demonstration	50,0	100,0
Respondents who practiced breast self-examination	37,5	70,0

Participants in the study were required to indicate the time in the monthly cycle when they examined their breasts (Question 20). In the pretest only 10 per cent examined their breasts after menstruation. After the teaching programme 65 per cent claimed that breasts were examined just after menstruation.

Respondents were questioned about the correctness of the method of breast self-examination and their confidence in detecting abnormalities. The pretest revealed that only 10 per cent of the respondents claimed confidence in the technique and their ability and these had been taught by a doctor. The posttest revealed that 70 per cent of the clients felt confident of their ability to practice breast self-examination and to detect abnormalities after the teaching programme. This is very encouraging and will hopefully act as an incentive for them to continue with the practice of breast self-examination.

From several possibilities respondents had to give the reasons why they did not examine their breasts; 40 per cent of them neglected to do so because they had never been shown the method. Forgetfulness was the next most popular reason for not examining the breast, viz. 20 per cent. Seven and a half percent of the respondents claimed that they were too busy to examine their breasts regularly.

The posttest revealed that 12,5 per cent did not want to think about breast cancer or practice preventive action. Twenty per cent claimed that they were forgetful about breast self-examination and thus did not practice breast self-examination regularly and sometimes not at all.

The majority of the respondents gave favourable answers to the question which asked them if they would practice breast self-examination regularly (Question 24). Ninety per cent of the sample agreed to practice breast self-examination should additional information be given to them.

4.4 AGE GROUPS

Fifteen per cent of the respondents were 41 years and older. This age group was the actual target group for which teaching programmes should be set up as they are the group most at risk. From table 7 it can be seen that 85 per cent of the respondents were under the age of 41, while 65 per cent were under the age of 30.

TABLE 7 AGE GROUPS OF RESPONDENTS

AGE GROUPS	PERCENTAGE
16 - 20	10,0
21 - 30	55,0
31 - 40	20,0
41 - 50	7,5
51 - 60	2,5
61 and over	5,0

These figures show that mainly those women in the younger age groups took part in the study. This was due, however, to the fact that mainly young women use family planning services and use was made of this kind of service for the selection of a sample.

4.5 EDUCATION AND OCCUPATION

Fifty per cent of the sample had completed standard eight or less and only 10 per cent had any qualifications above matriculation while the rest of the sample had only completed matric.

Sixty five per cent of the sample were housewives and 13 respondents were in Social Class II as classified by British Registrar General. This class is intermediate and includes people in occupations such as teaching, nursing and business (12, p. 191).

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CHAPTER 5CONCLUSION

From the results summarized in Table 4, page 39, it can be seen that knowledge of breast cancer did improve after the teaching programme. This indicates an interest in the subject on the part of the respondents. There are still some misconceptions about the cause of breast cancer which could be cleared up by intensifying the education programme on breast cancer. Those women at high risk could then be forewarned to be especially on the lookout for any changes in the breast and to report them to a doctor immediately.

Not only knowledge improved but also attitudes towards breast cancer became more positive. Nearly all the respondents felt that breast self-examination was effective in reducing the death rate from breast cancer.

The pre- and posttest revealed that the majority of respondents who had positive beliefs in perceived susceptibility and perceived benefit practiced breast self-examination more regularly than those whose beliefs were not as high. However, it is difficult to state definitely that belief caused practice in this situation.

Only 55 per cent of the respondents practiced breast self-examination on a monthly basis although 70 per cent claimed that they examined their breasts regularly after the teaching programme. Of the sample 80 per cent held high beliefs in perceived benefit and 85 per cent rated high beliefs in perceived susceptibility. Even with high beliefs in perceived benefit and perceived susceptibility 30 per cent of the sample did not practice breast self-examination.

These figures lead one to surmise that there is only a random association between beliefs and behaviour and that possibly other variables affect behaviour. Some respondents who scored high in perceived susceptibility and perceived benefit did not practice breast self-examination at all while other respondents who scored in moderate belief of perceived susceptibility and benefit were regular practicers of breast self-examination.

Those respondents who rated themselves as above average in susceptibility were amongst those who practiced breast self-examination regularly. It is hoped that not only women at high risk but that all women will follow their example of regular, monthly breast self-examination. Perhaps, if the benefits of practicing breast self-examination were stressed more, women who do not feel vulnerable to breast cancer would still see the relevance of practicing it, as would the high-risk group.

There was a small group of respondents, 10 per cent, who replied that even should additional information be given, they would not practice breast self-examination. From a study done by Fink, et al, during Health Insurance Plan studies it was found that there were a hard core of women who refused participation in screening programmes despite efforts to recruit them. These findings of Fink, et al, were also experienced by the author who found that some women refused to learn more about breast self-examination. This was confirmed by Stillman's study which indicated that there were a group of women who refused to learn about breast self-examination (19, p. 126).

5.1 POSSIBLE FACTORS INFLUENCING RESULTS OF STUDY

The author felt that these limitations of the study would be better understood when read after all the results had been given.

It was stated by several clients during the posttest that on the day of the pretest and first contact with the clinic, they were in a hurry. Many did not realize that the first visit entailed a physical examination and they had thus not allowed sufficient time for this as most of them visited the clinic during their lunch time.

This was felt by the author to be a serious handicap to the study as the subject of breast cancer is usually anxiety producing compounded with the respondents' fear of being late for work. This shortage of time would also interfere with the respondents' ability to concentrate on the demonstration and understanding of the importance of regular breast self-examination.

Another possible factor influencing the results could be that the specific nurses did not stress the importance of breast self-examination strongly enough. Preventive medicine must be stressed to the community as it has been found in various studies that in communities where preventive health practices are not followed by the people, it is difficult to introduce preventive health practices (See p. 22).

Many women do not want to face the reality that they can someday develop breast cancer and delay taking preventive action. One comment which arose frequently during the posttest contact was "I can think about it later". It was mostly women in the younger age who gave this comment.

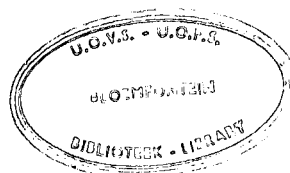
The author feels that if respondents felt that the decision to practice breast self-examination had been their own the compliance with monthly breast self-examination would have been better. Most adults resent being told to behave in a certain way, even if they know it is for their own benefit. Thus, one must lead them into making this decision themselves.

This is confirmed by a study done by Bond who found that when women discuss all the aspects about taking certain action and then decide for themselves, the compliance with the desired breast self-examination practice was higher than amongst those women who were told to practice breast self-examination regularly (17, p. 545).

5.2 RECOMMENDATIONS

When preparing a teaching programme on breast cancer, stress must be laid on the low prevalence of breast cancer and thus decrease the fear and anxiety experienced by women when they feel threatened by breast cancer. The importance of early detection as the best hope for reducing death rates due to breast cancer should be emphasised at every opportunity.

Older women who find behaviour changes more difficult should receive more attention. Group decision-making followed up by regular group meetings to reinforce their decision should be encouraged. This would aid them to develop the habit of regular breast self-examination and decrease their feeling of anxiety as they are not the only "one at risk".



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The technique of breast self-examination should be demonstrated together with education about the value of early detection and the success of early action. This teaching should also be given on a one-to-one basis and in group settings so that the different values of both types of teaching can be evaluated.

High risk factors and groups should be identified in the programme so that women can appreciate and be aware of their susceptibility. This would then help to rid them of the attitude that "it can't happen to me". Care must be taken, however, not to elicit excessive feelings of fear as this would cause barriers to the compliance with the breast self-examination habits required of them.

As regards further research in this field the author feels that a larger sample should be used and the posttest carried out at different time intervals of up to two years after the initial teaching programme. In this way an accurate evaluation of the success as far as compliance is involved, can be made.

It would also be of interest to study nurses in community health, schools, industry and hospitals to determine the percentage who teach the public about breast cancer and breast self-examination and their reasons for doing so. The regularity with which nurses examine their own breasts and the correlation with their teaching practice would also be interesting to investigate. A similar study done with groups but using discussion-decision making as the incentive to compliance with breast self-examination habits would help to develop the best means of educating the public to take preventive action against breast cancer. Two groups

could be used, one receiving the teaching programme but not making the decision together to practice breast self-examination. The other group receives the teaching programme and together discuss and decide to take action. A comparison could then be made between the two groups and the group which had individual teaching from the nurse.

A country wide campaign against breast cancer should be started with a study done immediately afterwards to assess the success of the campaign.

5.3 FINAL WORD

Nurses should continue to stress preventive aspects of breast self-examination and recognise and alter blocking attitudes towards breast cancer. In this way a more positive attitude can be developed towards breast cancer, together with increased knowledge about breast cancer, early diagnosis can be made thus leading to a decrease in morbidity and mortality.

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SUMMARY OF AN EVALUATION OF THE TEACHING FUNCTION OF THE
COMMUNITY HEALTH NURSE ON BREAST SELF-EXAMINATION

This study was done to investigate the teaching function of the nurse on breast self-examination and breast cancer as breast cancer death rates are rising yearly.

Chapter 1 included an introduction into the problem of breast cancer. The problem of breast cancer is reviewed briefly including such aspects as incidence of breast cancer, factors which influence the health practice of breast self-examination and factors influencing the health education of clients.

The objectives of the study were to determine whether the community health nurse taught breast self-examination to her clients and whether increased factual knowledge about breast cancer led to a positive attitude towards preventive action.

Limitations of the study were that only white clients, mainly in the younger age groups were contacted for the study due to the type of clinic used, viz. family planning clinics.

The research method made use of experimental and descriptive methods while a literature study and questioning were the techniques used for the gathering of data. The study comprised of two parts - A pretest was administered at the family planning clinic where a demonstration on breast examination was given together with pamphlets from the National Cancer Association. After three months the posttest was administered by telephone and personal contact. These two results were then compared with each other to indicate an improvement in breast self-examination practice.

Chapter 2 outlined the problem of breast cancer and its implications in more detail. Statistics showed an increase in deaths from breast cancer. Attitudes such as fear and ignorance of breast cancer and lack of confidence in their ability to detect breast lumps seemed to be the most common reason why most women did not practice breast self-examination.

The importance of health education on breast cancer was pointed out in the light of what different authorities had to say about health education. The role of the nurse in health education on breast cancer and breast self-examination was also clearly set out.

Chapter 3 includes both objective observation to be made by the nurse during her examination of the breasts and subjective observations to be taught to the client together with a motivation for regular breast self-examination. In this chapter there is also a short classification of morphological types of breast cancer and prognostic variables which influence the survival rate.

Chapter 4 is an analysis of the research data. Results from the pretest on factual knowledge were compared with those of the posttest which revealed an improvement of knowledge on breast cancer in all the cases. Some misconceptions about the causes of breast cancer were held even after the teaching programme. These included beliefs that contraceptive pills and being hit on the breast were responsible for breast cancer.

In the section on beliefs about breast cancer it was found that there was an improvement in perceived benefit of breast self-examination and more respondents realized that they too were more susceptible to the threat of breast cancer. Attitudes on the whole became more positive towards breast cancer.

Regular breast self-examination practice improved, but not in all cases on a monthly basis as was required of them. Also it was shown that not only those with high beliefs in perceived benefit of breast self-examination were the ones to practice breast self-examination regularly, but also those with moderate belief had a high rate of compliance. Some respondents with high beliefs in perceived benefit did not practice breast self-examination at all.

The main reasons for non-compliance seemed to be forgetfulness and an unwillingness to think about breast cancer.

Those respondents who were unwilling to think about breast cancer fell mainly in the younger age groups and who mostly took the attitude that they could think about breast cancer later in life.

Chapter 5 includes some factors which possibly had an effect on the study results. Briefly, these were lack of time on the part of the respondents and failure by the nurses to stress the importance of breast self-examination strongly enough.

It was recommended that older women should receive more attention in teaching programmes as they are the ones in the high risk group, and that demonstrations should be given to all women, on a group and a one-to-one basis.

Further studies are required in the field of teaching techniques of breast self-examination to determine the best and most effective method to ensure compliance. Posttesting should be continued over a period of two years so that a more accurate picture could be gained of compliance with this health practice.

APPENDIX A - QUESTIONNAIRE

APPENDIX A

Name:

Address:

Tel. No.:

Age: 16 - 20

21 - 30

31 - 40

41 - 50

51 - 60

61 - over

Occupation:

Education:

Std. 8 or less

Matric

Other higher education

Please read the following questions and make a cross in the block opposite the answer which you think is true about breast cancer.

1. Out of a hundred people, about how many would get breast cancer in a lifetime?

(a) Less than 10 people

(b) 10 to 25 people

(c) 26 to 50 people

(d) 57 to 75 people

(e) over 75 people

2. Most lumps in the breast turn out to be cancer.

(a) Yes

(b) No

(c) Have no idea

3. On the average the chances of a woman developing breast cancer begin to increase after she passes which birthday?

- (a) 20 th.
- (b) 30 th.
- (c) 40 th.
- (d) 50 th.
- (e) 60 th.
- (f) Have no idea

4. If a person thought she had cancer, should she go to a doctor straight away?

- (a) Yes
- (b) No
- (c) Have no idea

5. Can a person catch cancer from someone else?

- (a) Yes
- (b) No
- (c) Have no idea

6. (i) Have you ever known anyone who had cancer?

- (a) Yes
- (b) No

(ii) What happened to the person?

- (a) Died
- (b) Recovered
- (c) Have no idea

7. A woman is more likely to develop breast cancer if she (mark as many as you feel are correct):

- (a) is single
- (b) has been married but has no children

(c) has been married and has children

(d) has breastfed her children

(e) has had a hysterectomy

(f) has relatives who have had breast cancer

(g) is past menopause (change of life)

(h) takes birth control pills

(i) has been hit in the breast

(j) have no idea

8. If more women examined their breasts regularly there would be fewer deaths from breast cancer.

(a) Completely agree

(b) Partly agree

(c) Partly disagree

(d) Completely disagree

9. Whether I find a lump in my breast myself doesn't really matter because by then it is too late.

(a) Completely agree

(b) Partly agree

(c) Partly disagree

(d) Completely disagree

10. If I examined my breast regularly, I might find a lump sooner than if I just went to the doctor for a checkup.

(a) Completely agree

(b) Partly agree

(c) Partly disagree

(d) Completely disagree

11. There are so many things that could happen to me that it is pointless to think about any one thing like breast cancer.

(a) Completely agree

(b) Partly agree

(c) Partly disagree

(d) Completely disagree

12. Even though it's a good idea I find examining my breasts/
having to examine my breasts an embarrassing thing to do.
- (a) Completely agree
- (b) Partly agree
- (c) Partly disagree
- (d) Completely disagree
13. The older I get the more I think about the possibility of
getting breast cancer some day.
- (a) Completely agree
- (b) Partly agree
- (c) Partly disagree
- (d) Completely disagree
14. If I had to think about the possibility that I might some
day get breast cancer, I would rate my chances as compared
with other women as:
- (a) Average
- (b) Above average (more likely I would
get it)
- (c) Below average (^{LESS} more likely I would
get it)
15. Have you ever heard of breast self examination?
- (a) Yes
- (b) No
16. Have you ever been shown how to examine your breasts?
- (a) Yes
- (b) No
17. Who showed you this method?
- (a) Doctor
- (b) Clinic nurse
- (c) Other health members
- (d) Studied the method from an article/
film on breast cancer
- (e) Other: State please

18. Do you examine your breasts regularly?
- (a) Yes
- (b) No
19. If you examine your breasts, how regularly do you examine them?
- (a) Once a month
- (b) Once in two months
- (c) Once in three months
- (d) Every six months
- (e) Less regularly
20. At what time in the monthly cycle do you examine your breasts?
- (a) Just before menstruation
- (b) During menstruation
- (c) Just after menstruation
- (d) No specific time during the cycle
21. Is the method that you use to examine your breasts the correct method?
- (a) Yes
- (b) No
- (c) Don't feel
22. Do you feel confident that you will discover any abnormalities?
- (a) Yes
- (b) No
- (c) Not sure
23. Which of the following reasons would you give for not examining your breasts regularly?
- (a) Too busy
- (b) Have never been shown how
- (c) Rather not think about it
- (d) Other - please state

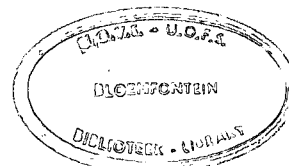
24. If you were given more information would you examine your breasts more regularly?

(a) Yes

(b) No

(c) Don't know

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APPENDIX B — COVER LETTER

APPENDIX B

13 Ascot Court
Park Road
BLOEMFONTEIN
9301

Dear Madam

I am doing a study concerning the breast self-examination habits of women attending clinics in Bloemfontein with the aim of decreasing breast cancer.

Would you be so kind as to complete the questionnaire. Your name and address are required for follow-up questionnaires which form the second part of the study. Your name and address will not however appear anywhere in the study and only the researcher will have access to this questionnaire.

Please don't guess. If you don't know the answer, be honest and mark "don't know". Also do not skip any questions as it can affect the end results.

Thank you for your co-operation.

.....
(MISS) G. NOWLAN