EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON AWARENESS OF EARLY DETECTION OF BREAST CANCER AMONG CAREGIVERS IN SELECTED HOSPITAL AT MADURAI

REG. NO: 301411851

A DISSERTATION SUBMITTED TO THE TAMILNADU DR. M.G.R MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN NURSING

OCTOBER 2016

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CERTIFICATE

This is to certify that the dissertation entitled **"EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON AWARENESS OF EARLY DETECTION OF BREAST CANCER AMONG CAREGIVERS IN SELECTED HOSIPITAL AT MADURAI"** is submitted to the faculty of nursing, **The Tamilnadu DR. M.G.R Medical University, Chennai by Mrs. Devika. C** in partial fulfillment of the requirement for the degree of Master of Science in Nursing. It is the bonafide work done by her and the conclusions are her own. It is further certified that this dissertation or any part thereof has not formed the basis for award of any degree, diploma or any title.

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OCTOBER 2016

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ABSTRACT

The study on "**EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON AWARENESS OF EARLY DETECTION OF BREAST CANCER AMONG CAREGIVERS IN SELECTED HOSIPITALS AT MADURAI** "was undertaken by **REG. NO: 301411851** during the year 2015-2016 in partial fulfillment of the requirement for the degree of master of science in Nursing at RASS Academy college of Nursing, Poovanthi which is affiliated to The Tamilnadu Dr.M.G.R. Medical University, Chennai.

OBJECTIVE: Asses the level of knowledge regarding awareness of early detection of breast cancer among caregivers in selected hospital. Evaluate the effectiveness of self instructional module on awareness of early detection of breast cancer among caregivers in selected hospital. Find out the association between the pre-test level of knowledge with their selected demographic variables. **Conceptual Frame Work**: The study was based on Shuffle Beam's CIPP model. **Approach:** Evaluatory approach was adopted for this study **Design:** Pre-experimental one group pre-test post-test design was taken for this study **Setting:** The study was conducted at Guru Hospital in Madurai. **Sample Size:** The Sample size was 60 caregivers. **Sampling Technique:** The Non probability purposive sampling technique was used to select the samples. **Data Collection Procedure:** Data was collected from the caregivers of the patient with breast cancer to assess the level of knowledge by using structured knowledge questionnaire before and after the implementation of self instructional module. The collected data were tabulated and analyzed by descriptive and inferential statistics. **Results:** The study Shows, there was a significant difference between pre-test and post-test level knowledge regarding on early detection of breast cancer among caregivers. The obtain t-value (37.25) was greater than the table value at 0.05 level of significance **Conclusion:** The Self Instructional module was effective ($p<0.05$) to improve the level of knowledge regarding on awareness of early detection of breast cancer among caregivers.

CHAPTER-1

INTRODUCTION

"To keep the body in good health is a duty, otherwise we shall not be able to keep our mind strong and clear".

-Buddha

Woman is a synonym of a sacrifice. "A woman is the most beautiful creation of God, not only on physical aspects, but certainly on every aspect". From time immemorial breast has been a symbol of womanhood and ultimate fertility. It has been beautifully depicted in our art and culture and even in modern times that women maintain the sanctity of this organ which symbolizes feminity. As a result any danger to the breast evokes fear of loss of feminity and hence fertility. (Sumit Mehta-2011).

The "BREAST" is the tissue overlying the chest (pectoral muscles).Women's breasts are made up of specialized tissue that produces milk (glandular tissue) as well as fatty tissues. The amount of fat determines the size of the breast. (Women's Health-2014).

A woman's breasts go through a significant change throughout the course of her life, making the monitoring of the breast health is an important part of self care. This process is something that should be instilled at puberty. Whether it's breast self exams during teenage years or routine mammograms in middle age, there's always an aspect of breast care that women should know and maintain. (Cancer Care-2015).

"CANCER" is a group more than 200 diseases characterized by uncontrolled and unregulated growth of cells. It is a major health problem that occurs in people of all ethnicities. Although cancer is often considered a disease of aging, with the majority of cases (76%) diagnosed in those over the age of 55 years, it occurs in people of all ages. (Lewis-2011).

"CANCER" is the uncontrolled growth of abnormal cells in the body. Cancerous cells are also called "MALIGNANT CELLS". Cancer is one among the three leading diseases in the world and it is found that cancer of breast is the leading cancer among women. Cancer can develop in almost any organ or tissue, such as the lung, colon, breast, skin, bones or nerve tissues. (Kalpana Mandal and Arambam Aruna-2013).

"BREAST CANCER" is a malignant cell growth in the breast. If left untreated, the cancer spreads to other areas of the body. Excluding skin cancer, breast cancer is the most common type of cancer in women in the United States, accounting for one of every three cancer diagnoses. (National Cancer Institute-2015).

"BREAST CANCER" is the top cancer in women both in the developed and developing countries. The incidence of breast cancer is increasing in the developing world due to increased life expectancy, increase urbanization and adoption of western life. (WHO-2016).

"BREAST CANCER" in men is rare, but it does happen. Less than 1% of all breast cancers occur in men. For men, the life time risk of being diagnosed with breast cancer is about 1 in 1000. (Breast cancer-2016).

Reproductive factors associated with prolonged exposure to endogenous estrogens, such as early menarche, late menopause, late age at first childbirth are the most important risk factors for breast cancer. Exogenous hormones also exert a higher risk for breast cancer. Oral contraceptive users are at higher risk than non-users. Breast feeding has a protective effect. (IARC- 2008).

Breast cancer is the most common form of cancer in women in Alberta other than non-melanoma skin cancer. Approximately 1 in 8women is expected to develop breast cancer during her lifetime, and 1 in 31will die from the disease. Age and heredity are major non-modifiable risk factors. Breast density, certain benign breast tumors, several reproductive factors, and a history of chest wall radiation also increase a woman's risk. Modifiable

lifestyle factors such as body weight, physical activity, alcohol consumption, and smoking should be addressed in the context of an overall wellness strategy. (Breast Cancer Guideline-2013).

Breast cancer is more common in high income developed countries such as Canada, the United States and some European countries like Great Britain. Breast cancer mostly occurs in women between the age of 50 and 69. The risk of developing breast cancer is higher if one or more first degree relatives such as mother, sister, or daughter had breast cancer, especially if they diagnosed before menopause. Having one first-degree relative with breast cancer approximately doubles a women's risk for developing breast cancer. (Canadian Cancer Society-2016).

It has been estimated that for every 10,000 women aged between 25 to 29 years who take combined (estrogen with progesterone) oral contraceptive pills for 5 years, it is estimated an extra 5 cases of breast cancer are diagnosed. If 1000 women aged between 50 to 59 use combined hormone replacement therapy for 5 years, it is estimated an extra 3 breast cancers will be diagnosed. (Women's Health Concern-2015).

Women whose diets included a lot of fat particularly, a large amount of saturated fat from animal products were more likely to develop certain types of breast cancer, compared with women who consumed less fat. The women who ate the most saturated fat (about 47.5gms per day) had about a 28 percent increased risk of breast cancer, compared with the woman who ate the least saturated fat (about 15.4gms per day). (Live Science-2014).

The breast tissue of young women is one of the most sensitive tissues to the carcinogenic actions of ionizing radiation. It takes a minimum of about 5-10 years after exposure before a radiation induced breast cancer would develop and usually many more years. In fact, the time between radiation exposure and breast cancer development is longest in youngest women and shortest for older women. Nearly 25,000 female atomic bomb survivors in Japan who have now been followed for over 50 years, only 173 breast cancer

deaths occurred and only 41(or 24%) were attributed to the radiation received in 1945. (American Cancer Society-2016).

Breast cancer typically produces no symptoms when the tumor is small and most easily treated. Therefore, it is very important for women to follow recommended screening guidelines for detecting breast cancer at an early stage. When breast cancer has grown to a size that can be felt, the most common physical sign is a painless lump. Sometimes breast cancer can spread to underarm lymph nodes and cause a lump or swelling, even before the original breast tumor is large enough to be felt. Less common signs and symptoms include breast pain or heaviness; persistent changes to the breast, such as swelling, thickening, or redness of the breast's skin; and nipple abnormalities such as spontaneous discharge (especially if bloody), erosion, or retraction. It is important to note that pain (or lack thereof) does not indicate the presence or the absence of breast cancer.(American Cancer Society -2015).

Although some risk reduction might be achieved with prevention, these strategies cannot eliminate the majority of breast cancers that develop in low and middle- income countries. Therefore, early detection in order to improve the breast cancer outcome and survival remains the cornerstone of breast cancer control. (Anderson -2008).

Breast cancer is the second common cancer affecting Indian females. The examination consists of mammography, a clinical examination by a specialist and self-examination of one's breasts. Screening is supposed to decrease the number of people dying from breast cancer by almost upto 30%. In India 60% -70% patients commence their treatment when the disease is in advanced stage. Survival for 20 years is noticed in more than 90% of the patients with a tumor diameter of 1cm as compared to 50% with 3cm. This clearly significe the importance of early detection and also explains the poor outcome of treatment in India. (Sonia and Sharma -2013).

The American Cancer Society's (ACS) most recent guidelines said about the importance of the breast self examination for women. Their decision

states that self exams haven't shown a clear benefit, even when doctor's conduct those exams. Still some men and women will find breast cancer and be diagnosed with it as a result of a lump detected during a self-exam. So, it's important for women to be familiar with how their breasts look and check their breasts regularly. This will help you become aware of any changes or abnormalities as they occur. The vast majority of lumps are not cancerous. (Health Line-2016).

Breast cancer is the most common type of cancer among women in the United States. Early detection is a key in the treatment of breast cancer. There are many steps such as self breast examination, mammography, clinical breast examination that takes to detect breast cancer early when it is most treatable. (Cancer Care-2016).

A low incidence is noted in women who have had an early menopause brought on by an oophrectomy. Racial differences have been noted; Black and oriental women seem to have a very low rate, but Japanese women who immigrate to the US and adopt a western culture have an increased rate; therefore diet or environment may be a risk factor. Breast cancers that are detected because of notable symptoms tend to be relatively severe and are more likely to have spread beyond the breast. Breast self-examination practice results in earlier detection of signs of breast cancer such as palpable tumours. Indeed, preventive practices such as breast self-examination and mammogram are useful and effective ways to detect breast diseases at an early stage facilitating the receipts of early treatments. (Cancer Nursing-2009).

Breast self examination is a procedure performed by an individual to physically and visually examine herself for changes in the breast and underarm areas of the body. Breast self examination is an important component of health promotion and maintenance. Providing awareness and encouraging the women to perform breast self examination (BSE) is recommended to decrease the mortality rates from breast disorders. (Medical and Health Science Research-2013).

Breast Self Examination (BSE) is a screening method used in an attempt to detect early breast cancer. The method involves the women herself looking at and feeling each breast for possible lumps or swelling. Breast cancer is one of the most important public health problems and studies have reported that awareness and practice of breast examination is an important method of prevention. Breast self examination is a cost effective method of early detection of cancer of the breast, recommended by American Cancer Society and the National Cancer Institute. Performing monthly breast self examination was first advocated by the Colombia University. Cushman experts recommended that women over age of 20 should perform monthly breast self examination. It helps to know whether her breast is normal or to identify quickly anything abnormal. (Cancer Nursing-2000).

Around 90% of all breast cancers can be definitely diagnosed using magnetic resonance imaging (MRI). This compares to the combined methods of mammography and ultrasound which yielded a detection rate of just 37.5%.(Journal of Clinical Oncology-2015).

The use of mammograms and MRI (in women at high risk) offers women the best chance to reduce their risk of dying from breast cancer. This approach is clearly better than anyone exam or test alone. (The American Cancer Society -2015).

The good news is that breast cancer mortality rates have started to decline in North America, Western Europe and Australia mainly due to early detection programs. (Dr.Stewart-2016).

NEED FOR THE STUDY

“Happiness lies, first of all, in health”.

-George William Curtis.

Breast cancer is the most common cancer in women worldwide, with nearly 1.7 million new cases diagnosed in 2012 (second most common cancer overall). This represents about 12% of all new cancer cases and 25% of all cancers in women. Breast cancer is the top cancer in women worldwide and is increasing particularly in developing countries where the majority of cases are diagnosed in late stages. (WHO-2016).

Breast cancer is the most common form of cancer in women. Each year 1.1 million cancers are diagnosed around the globe. The annual worldwide incidence of breast cancer has almost doubled since 1975. International comparisons of disease rates by area and time of diagnosis can provide important clues to the underlying causes of the diseases and the effects of natural or planned interventions, and serve as indicators of the scope for preventive strategies. There is at least 10 fold variations in breast cancer incidence rates worldwide, as a consequence of large range of socio-economically correlated differences in the population prevalence of several reproductive, hormonal and nutritional factors. (WHO-2012). It is estimated that worldwide over 5, 08,000 women died in 2011 due to breast cancer. (Global Health Estimates, WHO-2013).

Although breast cancer is thought to be a disease of the developed countries, almost 50% breast cancer cases and 58% of deaths occur in less developed countries. Incidence rates vary greatly worldwide from 19.3 per 100,000 women in Eastern Africa to 89.7 per 100,000 women in Western Europe. In most of the developing regions the incidence rates are below 40 per 100,000. (GLOBOCAN-2008).

About 1 in 8 U.S women (about 12%) will develop breast cancer. In 2016, it is estimated that among U.S. women there will be 246,000 new cases

of invasive breast cancer; 61,000 new cases of insitu breast cancer and 40,450 breast cancer deaths. In 2016, about 30,700 new cases of breast cancer are expected to occur among African-American women and about 6,310 deaths are expected to occur among African-American women. (Breast Cancer Statistics-2016).

About 40,290 women in the U.S are expected to die in 2015 from breast cancer, though death rates have been decreasing since 1989. Women under 50 have experienced larger decreases. These decreases are thought to be the result of treatment advances, earlier detection through screening and increased awareness. (Breast Cancer Statistics-2015).

Of the newly diagnosed cases of breast cancer in Canada, 80% were in women over the age of 50 years, and about28% were in women aged 70 years or older with little variation by province. Regular screening for breast cancer with mammography, breast self -examinations and clinical breast examinations are widely recommended to reduce mortality due to breast cancer. Although controversy remains over precisely which screening services should be provided and to whom, these methods are frequently used in contemporary practice. Outcomes of screening for breast cancer such as tumour detection and mortality must be put into context of the harms and costs of false -positive results, over diagnosis and overtreatment. Consideration of benefits, harms and costs is complicated by variations in risk factors and in the types and stages of cancer. (Canadian Medical Association Journal-2011).

In 2015, an estimated 231,840 new cases of invasive breast cancer will be diagnosed among women, as well as an estimated 60,290 additional cases of in situ breast cancer .In 2015, approximately 40,290 women are expected to die from breast cancer . Only lung cancer accounts for more cancer deaths in women. In 2015, about 2,350 men will be diagnosed with breast cancer and 440 men will die from the disease. (Breast Cancer Facts And Figures 2016).

About 5-10% of breast cancers can be linked to gene mutations (abnormal changes) inherited from one’s mother or father. Mutations of

BRCA1 and BRCA2 genes are the most common on average women with BRCA1 mutations have a 55-65% lifetime risk of developing breast cancer. For women with BRCA-2 mutations, the risk is 45%. (Cancer Breast Statistics-2015).

According to the recent reports, India has 17% of the world's population suffering from breast cancer. (The New India Express-2015).The 1 in 28 women in India was likely to develop breast cancer during her lifetime. A few decades back, breast cancer was seen only after 50 years of age and the number of young women suffering from this disease was lesser. Almost 65-70% patients were above 50 years and only 30-35%women were below 50 years. (Breast Cancer-2016).

According to the statistics of WHO, more than 60% of the women were diagnosed with breast cancer at stage III or IV in India. This drastically affected the survival rate and treatment options for the patients. For the year 2012, 144,937 women were newly detected with breast cancer and 70,218 women died of breast cancer. So, roughly in India, for every 2 women newly diagnosed with breast cancer, one lady is dying of it. For the year 2015, there will be an estimated 1, 55,000 new cases of breast cancer and about 76,000 women in India are expected to die of the disease. So, we need to work aggressively on early detection. (WHO-2015).

According to World Bank, about 2.7 million screened for breast cancer and more than 36,000 women identified positive for the condition. A women's risk of breast cancer approximately doubles if she has a first-degree relative (mother, sister and daughter) who has been diagnosed with breast cancer. Less than 15% of women who get breast cancer have a family member diagnosed with it. Institute for Health Metrics and Evaluation (2015), reported that about 47,587 women were died due to breast cancer in India in the year 2013.

Sanjit Bagchi (2008) stated that the overall rate is now estimated at 80 new cases per 100,000 populations per year. In Delhi, that rate is pegged at 146/100,000. (Canadian Medical Association Journal-2010).

The incidence of breast cancer is higher in India compared to western countries. The incidence varies between urban and rural women; the incidence in Mumbai is about 27 new cases per 1, 00,000 women per year while in rural Maharashtra it is only 8 per 1, 00,000. Breast cancer is the second commonest cancer in females of Bangalore. 14,000 new cases were registered and over 2,00,000 follow up visits are recorded in Kidwai memorial institute of oncology Bangalore. Which of those, the breast cancer was 27.7 per lakhs.

Each year in the Southern districts of Tamilnadu, there are 20,000 of cancer cases among 8, 00,000 of cases in India every year. The alarming fact is that in India 100 new patients are diagnosed with cancer and roughly 50 die every hour. (Vadamalayan Memorial Trust-2015).

In Chennai, the leading cancer sites among females were breast (26.1%). Approximately 10.7 million women were screened for breast cancer. (Indian Times-2016). One percent of 5.10 lakhs women screened for cancer in Madurai district confirmed breast cancer which is a major concern today. (Madurai Symposium-2015).

According to the National Cancer Institute, nearly 3, 00,000 women were diagnosed with breast cancer. Older postmenopausal women are at highest risk for breast cancer recurrence. According to American Cancer Society, there are 1 in 10 chances that a woman will have breast cancer during her lifetime. Over 10, 00,000 women find lumps in their breasts every year some of which are cancerous but most are benign. A simple Breast Self-Examination (BSE) can be the key to find any abnormality early. Approximately 25% of breast cancers will result in death. Breast cancer is the second most common cancer found in women (following uterus cancer).If diagnosed and treated early, almost 95% of all breast cancers can be cured. That's why the BSE is so important. (National Cancer Registry programme-The Times of India-2007).

Shimona Kanwar (2015) said that presently, breast cancer was more common in the younger age group and 50% of all the cases are in the 25-50

years of age group. More than 70% of the cases present in advanced stage was accounting for poor survival and high mortality. (The Times of India-2015).

Bit-Na Yoo et.al, (2012) had done a National breast cancer screening survey, an annual cross-sectional survey to assess an awareness and practice of breast self examination among 1,255 Korean women. The sample were selected through random sampling technique and Korean women aged >30 years participated in this study. Data was analyzed through SPSS software. The results showed that all participants 88.0% reported that they had heard of BSE but not performing due to lack of knowledge about how to conduct the exam. This study concluded that despite a high level of awareness about BSE, only a small minority of women examine their breasts regularly in Korea.

Somi PJ (2009) investigated the knowledge of breast self-examination (BSE) among female medical students in University of Lagos.A self-administered questionnaire was employed. Result showed that 97.3% had heard of breast cancer and breast self-examination. 54.8% of the respondents had heard of breast cancer from television/ radio. Most of the respondents, 85.8% knew how to perform breast self-examination correctly. Only 65.4% of the respondents thought that breast self-examination was necessary. 43.5% of the respondents said that the last time they performed breast self-examination less than a year ago. Majority of the respondents, 69.6% preferred to perform breast self-examination in the morning while 47.7% of the respondents preferred to carry out breast self-examination in front of the mirror. Though there was a high level of awareness of breast cancer and breast self-examination among the respondents, their practice was poor.

The investigator had more clinical experience of taking care of patients with breast cancer. She found that female caregivers have less awareness on early detection of breast cancers. So she felt that there is an urgent need to give awareness of early detection of breast cancer among caregivers of patients with breast cancer.

And also, from the above mentioned studies, investigator found that there is a need to strengthen the knowledge of caregivers regarding awareness of early detection of breast cancer. The present study is designed ta assess the knowledge level of caregivers and to administer a self instructional module which will help them to improve their knowledge.

Statement of the problem

Effectiveness of Self Instructional Module (SIM) on Awareness of early detection of breast cancer among caregivers in selected hospitals at Madurai district.

Objectives

1. To assess the pretest level of knowledge regarding awareness of early detection of breast cancer among caregivers.
2. To evaluate the effectiveness of self-instructional module on knowledge regarding awareness of early detection of breast cancer among caregivers.
3. To find out the association between the pretest level of knowledge and their selected demographic variables.

Hypotheses

H_1: There is a significant difference between pre test and post test level of knowledge regarding awareness of early detection of breast cancer among caregivers.

H_2: There is a significant association between pre test level of knowledge with their selected demographic variables of caregivers of the breast cancer patients.

Operational definitions

- **Effectiveness:** In this study, it refers to the extent to which the self instructional module will achieve desired effect on gaining knowledge regarding awareness of early detection of breast cancer in terms of

difference between pre test and post test level of knowledge measured by semi- structured questionnaire.

- **Self instructional module:** In this study it refers self-learning information prepared for caregivers to improve their awareness of early detection of breast cancer which includes anatomy and physiology of the breasts, definition, incidence, etiology, risk factors pathophysiology, clinical manifestation, diagnostic studies, management, complications and prevention of breast cancer.
- **Awareness:** In this study, it refers to the knowledge that already exists or understanding by caregivers regarding early detection of breast cancer as elicited through a self administered questionnaire.
- **Early detection:** In this study, it refers to recognizing possible warning signs and taking prompt action leads to early diagnosis of breast cancer.
- **Breast cancer:** Breast cancer begins when abnormal cancerous cells in the breast grow and multiply without stopping, creating a tumor usually starts in the ducts or lobules of the breast.
- **Caregivers:** In this study, it refers to female relatives of the patients with breast cancer aged between 21 to 50 years who are coming / staying in Guru Hospital along with the patients.

Assumptions

The study assumes that,

- All caregivers (female relatives of the patients) are at risk for getting breast cancer.
- Caregivers (female relatives of the patients) are not aware of early detection of breast cancer.
- Education about early detection of breast cancer will improve the knowledge of the caregivers.

Delimitations

The delimitations of the study were

- The study focused only on caregivers (female) between the age group of 21 to 50 years.
- The caregivers who are willing to participate.
- The caregivers who are available at the time of data collection.

Projected Outcome

The study will reveal the importance of Self instructional module in improving the knowledge regarding Awareness of early detection of breast cancer among caregivers.

Conceptual framework

The present study aims at evaluating the effectiveness of Self Instructional Module on awareness of early detection of breast cancer among caregivers. The framework of the present study based on **Shuffle Beam's CIPP Programme Evaluation model, 1960**. CIPP is an acronym that stands for Context, Input, Process and Product.

Context:

It provides information for the development and evaluation of mission, vision, values, goals and objectives. In this study context consist of age (in years) at present, age (in years) at menarche, marital status, educational status, occupation, no. of children, age (in years) during first pregnancy, use of oral contraceptive pills, any family history of breast cancer, diet pattern, previous knowledge exposure regarding breast cancer and relationship with the client. In this study, context includes pretest assessment of knowledge on awareness of early detection of breast cancer among caregivers.

Input:

It helps to assess different teaching and learning approaches. It includes designing of intervention programme. In this study input is the Self Instructional Module prepared on the basis of learning needs.

Process:

In this study process evaluation refers to assess the implementation of the programme.

Product:

It is the evaluation of the outcome of the programme. In this study product is the post test level of knowledge improved among the caregivers followed by the implementation of Self Instructional Module

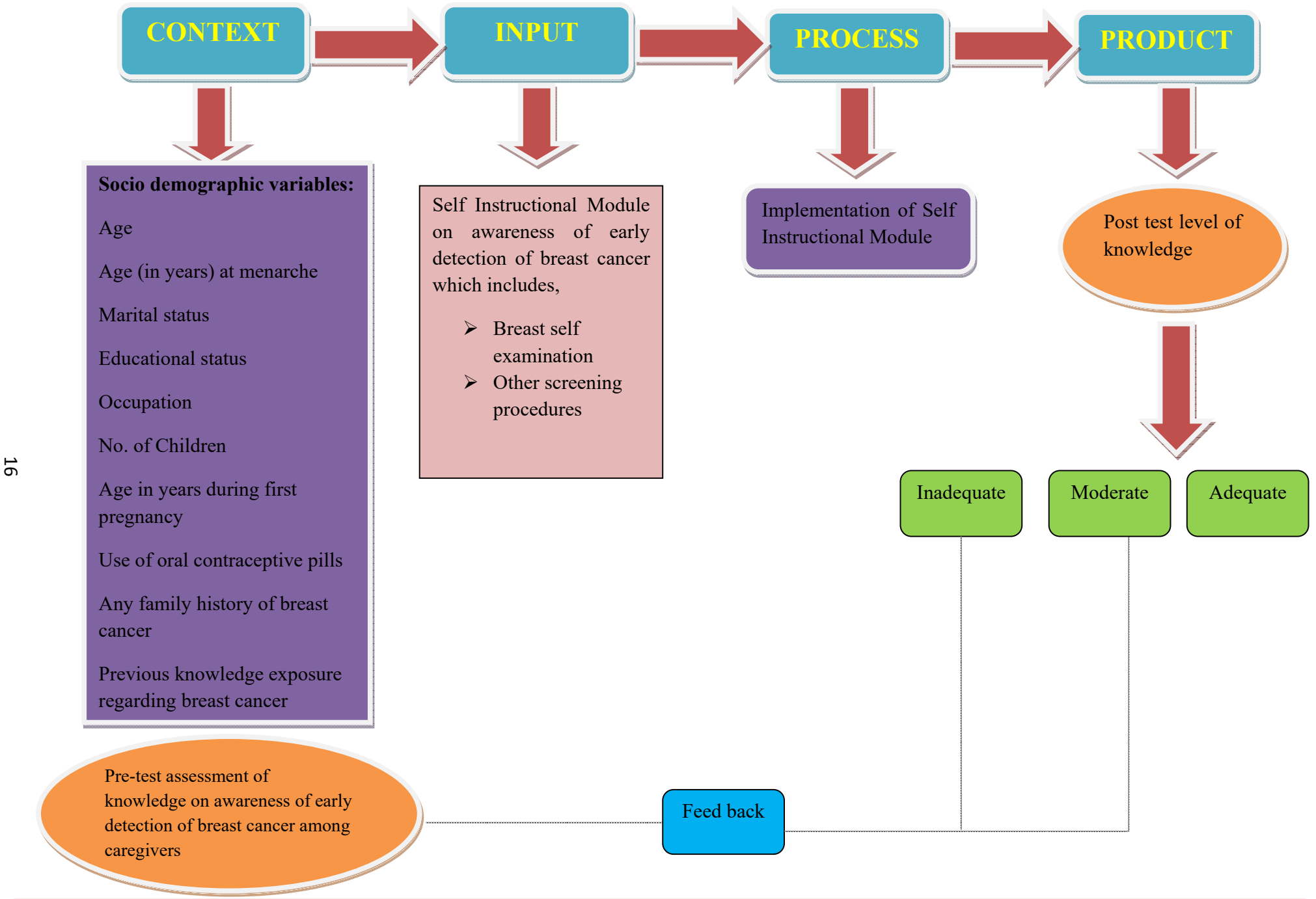


FIGURE 1: CONCEPTUAL FRAMEWORK BASED ON SHUFFLE BEAM'S CIPP PROGRAMME EVALUATION MODEL 1960

CHAPTER-2

REVIEW OF LITERATURE

The extensive review was made to strengthen the present study in order to lay down the foundation which helps us to reveal the prevailing situation of the similar studies in different areas. Existing studies and information are often indispensable in helping the investigator to focus on a particular problem and to formulate suitable research process.

The available literature and studies are organized under the following headings:

- Literature related to prevalence of breast cancer.
- Literature related to risk /etiological factors of breast cancer.
- Literature related to knowledge regarding awareness of early detection of breast cancer.
- Literature related to Self-instructional module regarding awareness of early detection of breast cancer.
- Literature related to other teaching methods regarding awareness of early detection of breast cancer.

Literature related to prevalence of breast cancer:

Jorgensen.L et.al., (2016) had done a cohort study on prevalence and predictors of distress in 1079 women taking part in surgical continuity of care for breast cancer at Breast Cancer Surgery Department in Denmark. Distress was evaluated using the distress thermometer and predictors of distress were assessed with a self administered questionnaire at the time of diagnosis, at discharge and by the start of treatment or follow- up. Data analysis was done by ANOVA, simple and multiple linear regressions. The investigator reported that more than 2/3rd of women with breast cancer experienced moderate/severe distress. This study finding highlights the need to identify the individual women with distress and offer them adequate support and care.

Jamila Ali Alsanabani, Waleed Gilan and Azzan Al Saadi (2015) undertook a retrospective study to determine the incident data for breast cancer among 595 female patients with palpable breast lumps at Alkuwait University Hospital, Yemen. In this study, the researchers provided a questionnaire which contains detailed information about the samples and triple assessment was done such as breast examination, mammography and biopsy for all the samples. The final results showed that the rate of breast cancer is high, with occurrence at an earlier age than in Western countries. So that, they are in need of breast cancer awareness and screening programme to establish early diagnosis of breast cancer.

Nor Aini Abdullah et.al., (2013) had done a population based retrospective cohort study to assess the survival rate of breast cancer patients in 10,230 Malaysian women. Data were obtained from Health informatics centre, Ministry of health Malaysia, National cancer registry and National registration department and were analyzed by using SPSS statistical software version 17. This study results showed that women aged less than 50 years old significantly better survival compared to women of 50 years old and above.

Fredholm et.al, (2009) performed a registry based cohort study to assess the prognosis of breast cancer among 22,017 young women in Sweden. Data were collected from the regional breast cancer registers in two of Sweden six health care regions which currently serve a population of almost 3.9 million in habitant. The cumulative 5 year relative survival ratio and the relative excess mortality were calculated. Statistics Sweden SAS 9.1 software used for all statistical analyses. The findings revealed that the youngest women with small tumours generally received more aggressive treatment than women in older age groups.

Literature related to risk / etiological factors of breast cancer:

Maria Hilda Araiyo Ribeiro et.al., (2016) investigated the level of knowledge regarding family history in breast cancer among 54 first and second degree relatives at the Aldenora Bello Institute of Oncology Sao Lois , Brazil. The samples were selected through convenient sampling method. Data was collected by interviewing the samples. Data were tabulated by using the Microsoft excel 2003 program and analyzed with the Epi-Info 2007 program version 3.4.3. The final report concluded that the mean patient age at diagnosis was 39.5 years and had a family history of breast cancer.

Muhammad Mansha et.al., (2016) carried out a descriptive cross-sectional study to assess the prevalence of known risk factors of breast cancer in 200 women diagnosed with breast cancer at Inmol hospital, Lahore, Punjab. A structured questionnaire was administered to these patients. The findings of this study are further augmented by environmental changes and dietary habits and place them in a high risk category.

Teresa Ramon.Y.Cajal et.al., (2015) performed a retrospective case-control study on Mammographic breast density and breast cancer in women from high risk families among 509 breast cancer families at 16 cancer genetic units in Spain. The data was collected through structured questionnaires regarding baseline information administered by investigator during either the high risk breast screening or the post test visit. All statistical analyses were performed by using the STATA version 12.0 software program. The investigator reported that carriers were younger at the scored mammogram compared with non-carriers (45 years, p value <0.001).

Predna.L, et.al (2015), conducted a retrospective study to assess the impact of hormonal contraceptives and hormonal replacement therapy on breast cancer among 300 randomly selected samples aged 25-87 years with diagnosed breast cancer have been monitored in the district of Nitra, Slovak republic. The age at which breast cancer was diagnosed and relationship to hormone therapy was analyzed based on medical documentation. The findings showed that in women who took hormonal treatment breast cancer was diagnosed at the mean age of 50-58 years, while women who never took hormonal replacement therapy or hormonal contraceptive , were diagnosed around the age of 54 -65 years.

Jharna Mondal and Purnima Kundu (2014) had done a comparative study to identify the risk factors and risk status for breast cancer among 120 women with a view to develop an action plan at selected urban and rural community of Burdwan, West Bengal. Non-probability convenient sampling technique was adopted for the selection of 60 samples from urban and another 60 samples from rural area. A structured interview schedule was used to identify risk factors and risk status was identified by breast cancer risk assessment tool (Gail model). The results showed that the higher risk factors seen among urban women (mean-3.06) than the rural women (mean-2.35).

Ramchandra Kamath et.al., (2013) had done a hospital based case control study to estimate the level of knowledge on risk factors of breast cancer among 188 female patients who are attending Tertiary hospital at Manipal. The cases (94) and controls (94) were personally interviewed by the investigator using a structured questionnaire and data analysis was done. The findings showed that non-vegetarian diet and educated women were the important risk factor of breast cancer.

Palmer .J.R et.al., (2009) performed a prospective cohort study on family history of breast cancer and risk of breast cancer in among 57,364

black women in Boston university, U.S.A. Data was collected through completed biennial postal questionnaires on health status, risk factors and family history of cancer. Cox proportional hazards were used to calculate incidence rate ratios (IRR'S) and 95% confidence intervals (CI) for family history of breast. The results showed that consistent a cross subtypes of breast tumour defined by oestrogen and progesterone receptor status. The investigator concluded that findings indicate a strong familial relationship for breast cancer in African American women.

Literature related to knowledge regarding awareness of early detection of breast cancer:

Khaled.H.Eldessouki and Yosria El.Sayed Hussein (2016) had done a study to assess the awareness of breast cancer and breast self examination among 80 female nursing students at faculty of nursing, Minia University, Egypt. A sample was selected by convenient sampling method and data was collected by self-administered questionnaires for knowledge assessment, a health belief assessment by a rating scale and a BSE observation checklist. Data was analyzed by using SPSS software. The results showed that a significant improvement in the participant's knowledge, the risk factors of breast cancer was obtained after the workshop.

Al-Khasawneh.E.M et.al., (2015) under took a survey to assess breast cancer awareness and early detection practices among 1372 Omani women of age >20 years from Oman. Women were recruited using stratified random sampling method. Data was collected through questionnaire and analyzed by using linear regression and Pearson's correlation. The results showed that the overall mean for early detection score was 0.59 and 0.47 for general awareness score.

Hajjan Tilak.K and Auladi.S (2015) performed a cross-sectional survey to determine the level of awareness, attitude and practice of breast cancer screening among 500 women aged 20-65 years at Iran. The data have collected with standard questionnaire regarding the knowledge of risk factors and symptoms and sign, the health belief and practice of women in breast cancer screening have collected by interview. The results showed that only 14.8% of participations had a high level of knowledge for breast cancer risk factors and 33.8% at high level of awareness of symptoms and signs. The findings concluded that the low level of awareness and practice have found and emphasized an extension of framework health educational program particularly in younger and low educated women.

Aswathy SreeDevi et al., (2014) had done a cross-sectional study to assess the awareness of screening for breast cancer in low middle income country in a rural area of Kerala, India. 809 women were randomly chosen and were interviewed. The results showed that unmarried women were significantly more likely to express factors related to all the three domains. The final report concluded that a high quality breast cancer awareness and screening initiative can help to consolidate the gains and tackle knowledge, resource and psychosocial barriers.

Arkierupaia Shadap, Maria Pais and Anusuya Prabhu (2014) conducted a descriptive study to assess the knowledge on breast cancer, awareness and utilization of mammogram among 320 women in selected villages of of Udupi district, Karnataka. Samples were selected through non-purposive sampling method. A structured questionnaire was administered and data was analyzed through statistical package SPSS software. The findings revealed that 46.65 had low knowledge for breast cancer and only 19.1% were aware of mammogram. This study concluded that there is a need of a screening programme for a breast cancer.

Makanjuola O.J et.al., (2013) performed a descriptive cross-sectional study to enhance the knowledge and practice of Breast self examination among 100 women aged (18-50 years) in Rural community of Ondo state, Nigeria. The samples were selected through multistage sampling technique and data was collected by using self designed structured questionnaire. Data analysis was carried out by using the SPSS software version window20. The results showed that a greater proportion of respondents (60%) had poor knowledge of BSE. Overall (45%) of participants were partially aware of the breast cancer and only (13%) of the respondents had practiced BSE. The investigator concluded that there is need to explore by giving interventions to improve the uptake and practice of BSE and other methods for early breast cancer detection.

Linda Akuamoah Sarfo et.al., (2013) carried out a case study approach to estimate the level of knowledge, attitude and practice of self-breast examination among 250 female nursing students at the Presbyterian University College of Ghana. A sample was selected through disproportionate stratified sampling technique and self-administered questionnaires were used to collect the data. The data was compiled and analyzed by using SPSS and Pearson's correlation. The results revealed 95% respondents had ever heard of breast cancer and BSE. The researchers reported that breast cancer and self-breast examination awareness campaigns are necessary to improve early breast cancer detection.

Mohamed El-Shinami et.al., (2013) conducted a questionnaire based survey study to assess the knowledge regarding breast cancer among 45 Egyptian breast cancer women in Egypt. The data was collected through interviewed. The results showed that Egyptian breast cancer patients lack knowledge about their illness and condition and the lowest level of awareness were related to age, education and culture.

Matta.J et.al.,(2012) undertook a comparative observational study to assess the validity of DNA repair capacity (DRC) in detecting breast cancer among 824 women throughout Puerto Rico. The investigators were compared 285 women newly diagnosed with breast cancer to 539 without breast cancer. DRC levels are measured in lymphocytes by means of a host-cell reactivation assay. They assessed the sensitivity, specificity and association by using the receiver operating characteristic curve analysis. Multiple logistic regression adjusted odds ratio were estimated with 95% confidence level to measure the strength of the association of DRC and breast cancer. The findings showed when compared to women without breast cancer, women with breast cancer showed an average decrease of 60% in their DRC levels ($p<0.001$) and the validity of the association of DRC as a measure of breast cancer risk showed a sensitivity of 83.2% and specificity of 77.6% ($p<0.0001$).

Zahra Ghodsi and Simin Hojjatoleslami (2012) conducted a descriptive analytic cross-sectional survey to assess the educational needs of breast cancer and breast self examination among 385 Iranian women. A sample was selected by simple randomized method and assessed through a questionnaire and checklist. Data was analyzed through statistical SPSS software. The results showed that there was a meaningful relationship between educational needs and samples age, marital status and prior information about BSE and breast cancer. The findings concluded that screening rates might be improved by focused educational intervention programs.

Ademola Lukman Adelekan and Elizabeth Ronam Edoni (2012) had done a study to assess on awareness, knowledge and practice of breast cancer prevention among 189 women with family history of breast cancer in Ede, Osun state, Nigeria. A sample was selected through snowball sampling technique. A semi-structured questionnaire was used to obtain data and descriptive statistics and t-test were used for the analysis. This

study results showed that revealed a poor knowledge and inadequate early detection and preventive practices among women with family history of breast cancer in spite of their susceptibility to the disease. This study concluded that health education programme is urgently needed to rectify the poor knowledge and inadequate practices.

Oza.J, Prajapati and J.D.Rohit Ram (2011) had done a study to assess on awareness toward the early detection of breast cancer among 250 nursing staffs in civil hospital at Ahmadabad, Gujarat. Data was collected by questionnaire and analyzed by statistical SPSS software technique. The results of this study indicated that 74% of the nurses know that early detection of breast is possible; 71% of the nurses would like to go for early detection by mammography. The investigators reported that there is need to create awareness and periodic screening.

Rosemary.B.Bassey et.al, (2011) conducted a cross-sectional survey to assess knowledge, attitude and practice of breast self examination among 150 female nursing students in Lagos university teaching hospital-Nigeria. Each participant was given a self-administered questionnaire. The data were evaluated by descriptive statistics and chi-square using Epi-info 2004 series. The differences between the three variables were considered significant if the p value was less than 0.05.The results showed that the respondents knowledge is 97.3% and 85.6% knew how to carry out BSE correctly. The attitude of respondents to BSE was good with 98.5%. The respondents practice of BSE also good with 80.2% claiming to carryout BSE regularly.

Sami Abdo Radman Al-Dubai et.al, (2011) conducted a study to estimate the level of an awareness and knowledge of breast cancer and mammography among 250 Malaysian women in Shah Alam. Data were collected using a self-administered questionnaire. The data was analyzed through statistical software. The results showed that the majority had heard

about breast cancer (81.2%) and 50% of women were aware of mammography, significant predictors knowledge of breast cancer ($p<0.05$). The researcher concluded that the level of knowledge should be raised among Malaysian women, particularly in the young and less educated women.

Yelena Bird et.al (2010) under took a study to determine breast cancer knowledge and early detection among 137 Hispanic women with the family history of breast cancer in three U.S. Mexico-border countries in New Mexico. The samples were randomly selected and interviewer administered questionnaires. Data was analyzed by using SPSS 15.0 statistical software package. The results showed that 46 women (32.2%) reported having family history of breast cancer and 91 women (63.6%) reported that they did not have family history. 6 women (4.2%) were unsure if any family relatives had ever been diagnosed with breast cancer or were dropped from subsequent analyses. This study concluded that increased research on theory-based strategies targeted at increasing early detection behaviors among Hispanic women with a family history of breast cancer is warranted.

Omolase Charles (2008) under took a pre-experimental study on awareness, knowledge and practice of breast self examination among 100 female health workers in a Nigerian community at Federal medical centre. A sample was selected by simple random sampling technique and interviewed with the aid of structured questionnaire. The data obtained was collected and analyzed by SPSS software version 12.0.1. The results showed that most respondents (94%) were aware of breast self examination. Knowledge about screening methods for breast cancer was poor. The practice of BSE amongst female should be encouraged.

Literature related to effectiveness of Self instructional module regarding Breast Self Examination:

Seema (2015) had done a descriptive survey approach to assess the knowledge and practice of 100 nursing students regarding breast self examination with self instructional module at selected nursing colleges of Patiala, Punjab. A samples was selected by using non-probability sampling and administered structured knowledge questionnaires and practice checklist knowledge breast self examination. The data was analyzed and the study concluded that the SIM would be effective in improving the knowledge and practice level of students regarding breast self examination.

Prabha.S.Lakshmi (2013) carried out a quasi-experimental study to assess the effectiveness of self instructional module on knowledge and practice of breast self examination among 120 girl students in selected nursing colleges at Salem. Data were collected and was analyzed by using descriptive and inferential statistics. Findings revealed that there is a difference between control and experimental group knowledge scores ($t = 3$; $p < 0.05$) and practice scores ($t = 10.1$; $p < 0.05$). Karl Pearson's co-efficient of correlation analysis between knowledge and practice ($r = 0.7$) showed significant relationship which reveals when knowledge level increases, the practice also increases.

Literature related to other teaching methods regarding awareness of early detection of breast cancer:

Swapna.M.K (2016) performed a one group pre-test post-test study to evaluate the effectiveness of video assisted teaching programme on breast self examination among 50 samples were selected through convenient sampling technique in Gurgaon. The data was collected by using structured knowledge questionnaire. Data analysis was done. The findings of this study showed that there is an improvement of the samples knowledge after teaching programme.

Shalini et.,al (2015) conducted pre-experimental one group pre test and post test study to assess the awareness and impact of education on breast self examination among 40 female students at selected colleges of Udupi district. The samples were selected by using cluster sampling technique. Data was collected by using structured and validated questionnaire on BSE and planned a teaching program. Data was analysed showed that the majority (52%) of them was in the age group of 18 to 19 years and 72% of them were had average knowledge on BSE in the pre test score. The results showed that out of 40 only one student was performing BSE occasionally.

Girijabhaskaran (2014) had done a qualitative study to assess the effectiveness of structured teaching programme on knowledge and awareness of breast self examination among 120 Industrial women worker between the age group of 30-60 years in Chennai. Samples were selected through non-probability sampling method. A structured questionnaire was administered to collect the data. Data was analyzed and the findings showed that the participants' level of knowledge and awareness was improved after the structured teaching programme. The investigator insisted the need for educational programme to create awareness on breast cancer screening behavior.

Nur Zeinomar and Roxana Moslehi (2013) conducted a community-based study to assess educational intervention on breast cancer among 484 female students at selected colleges in the New York state capital region. The samples were selected through stratified sampling method and data was collected through self-administered questionnaires. Effectiveness of education intervention was estimated through a paired t-test. The results showed that the mean percentage of correct answers increased from 39.9% at baseline to 80.8% post education ($p<0.0001$) among college students and from 43.5% to 77.8% ($p<0.0001$) among community group members. The study concluded that community based education intervention was effective in increasing breast cancer knowledge.

Angel Rajakumari (2012) had done a pre-experimental one group pre- test post-test study to evaluate the effectiveness of structured education on knowledge and attitude regarding early detection of breast cancer among 50 nursing students in Kadhad, Telugana. Data was collected through self structured questionnaire. The analysis findings indicated clearly that 46% of participants had inadequate knowledge. The investigator reported that teaching programme was an effective method to improve the knowledge, attitude and practice thereby the prevention of breast cancer.

Deepa.R. (2011), conducted a quasi experimental study to assess the effectiveness of structured teaching programme on breast self examination for early detection of breast cancer between the age group of 20 -60yrs of women who were residing at Poraiyur. Through convenient sampling technique, 60 women were selected and data collection was done by giving structured interview schedule and checklist to assess their knowledge, attitude and practice. Data collection was analyzed and result shows that a statistically significant $p(<0.05)$ increase in knowledge regarding breast self examination after the administration of structured teaching programme on BSE.

Amudha.P.(2010) carried out a pre-experimental study to assess the effectiveness of structured teaching programme on knowledge, attitude and practice of breast self examination for early detection of breast cancer among 60 Nursing assistant students at CSI Kalyani multispecialty hospital school of nursing, Mylapore. A structured questionnaire, likert scale and an observational checklist were used and data were analyzed. The result showed that the students gained adequate knowledge after the administration of structured teaching programme and had a good practice of BSE.

CHAPTER – III

RESEARCH METHODOLOGY

This chapter deals with the methods adopted by the research to find out the effectiveness of self instructional module on awareness of early detection of breast cancer. It includes research approach, research design, the setting, population, and sample size, sampling technique, development cum description of tool, validity, reliability, pilot study procedure for data collection and data analysis

Research approach

Evaluatory approach was used in this study. It aimed to evaluate the effectiveness of self instructional module on awareness of early detection of breast cancer.

Research design

The investigator has adopted pre experimental one group pre- test post-test design for this study. The diagrammatic representation of design is represented below.

GROUP	PRETEST	EXPERIMENT	POST TEST
E	**O_1**	**X**	**O_2**

0_1 – Pre-test assessment of knowledge regarding awareness of early detection of breast cancer

X - Self instructional module

0_2- Post-test assessment of knowledge regarding awareness of early detection of breast cancer

Variables under the study

Independent variables: Self instructional module on early detection of breast cancer was an independent variable in this study

Dependent variables: Knowledge of female caregivers regarding early detection of breast cancer was a dependent variable in this study.

Setting of the study

The study was conducted in Guru Hospital at Madurai which is about 20 km away from our nursing institute. It is a 100 bedded hospital with comprehensive cancer care services, such as Medical oncology, Surgical oncology, and Radiation oncology. There are about 10 new cases attending OPD and about 1800 cancer old & new cases attended the out patient department. Around 70 – 80 in-patients will be available for various oncology services.

Study population

The study population comprised of female caregivers of the patients with breast cancer.

Sample

Caregivers who fulfill the inclusion criteria will be considered as a sample.

Sample size

Sample size comprised of 60 female caregivers of the patients with breast cancer.

Sample technique

The investigator adopted non probability – purposive sampling technique to select the samples for the study.

Criteria for sample selection

The samples were selected based on the following inclusion and exclusion criteria.

Inclusion criteria:

1. Female caregivers of the patients aged between 21 to 50 years.
2. Those who are willing to participate
3. Those who are available at time of data collection

Exclusion criteria

1. Female caregivers who were already diagnosed and in treatment of breast cancer
2. Female caregivers who have already attended a teaching programme

Research tool and technique

The instruments used in this research study consist of two sections.

Section A

It comprised of demographic variables such as age (in years) at present, age (in years) at menarche, marital status educational status, occupation, no. of children, age (in years) during first pregnancy, use of oral contraceptive pills, any family history of breast cancer, diet pattern, previous knowledge exposure regarding breast cancer and relationship with the client.

Section B

It comprised of semi structured questionnaire to assess the awareness on early detection of breast cancer. It was edited as per the blueprint and

covered different content area. It consisted of 25 multiple choice questions. A score value of ‘one’ was allotted to each correct response. ‘Zero’ was rewarded for the wrong response. Thus there were 25 maximum obtainable scores. The different level of knowledge is categorized as follows:

Adequate knowledge - Above 75%

Moderate knowledge - 50 – 75%

Inadequate knowledge - Below 50%

Section c

It is a self instructional module on awareness of early detection of breast cancer among caregivers. The content on breast cancer was selected through literature search and in consultation with experts. The content of the self instructional modules was organized well by the following headings

- Introduction
- Structure of the female breast
- Definition of breast cancer
- Incidence of breast cancer
- Etiology and Risk factors of breast cancer
- Clinical manifestation of breast cancer
- Diagnostic studies of breast cancer
- Medical management of breast cancer
- Surgical management of breast cancer
- Complications of breast cancer
- Preventive measures of breast cancer

Testing the tool:

Pilot study

Pilot study was conducted in Asirvatham Hospital, Madurai in order to test the feasibility, relevance and practicability of the tool. Result shows that the tool was feasible to carry out the main study.

Content validity

Assessment tool was evaluated by experts from the field of nursing and medicine for content validity. Suggestions were considered and appropriate changes were done and made the tool to be valid.

Reliability

The data were collected from 10 samples to find out the reliability. The split half method was used to establish the reliability of the tool. This was done by splitting the items into odd and even items. The reliability coefficient of the whole test then estimated and the value obtained was (r=0.99) which indicates that tool is reliable.

Data collection procedure

The investigator met the Managing Director, Guru Hospital- Madurai in order to obtain permission and co-operation to conduct the study successfully. The investigator introduced her to the female caregivers of the patients with breast cancer and established rapport with them. The study was conducted for the period of two weeks. The investigator selected the samples those who fulfilled the inclusion criteria. The informed consent was obtained. Appropriate orientation had given to the subjects about the aim of the study and nature of questionnaire. Adequate care was taken for protecting the subjects from potential risk including maintain confidentiality, security and identity. The demographic datas were collected from the subjects.The pre- test was done to assess the female caregiver's knowledge through semi-structured questionnaire which contain 25 MCQ questions. Self instructional module was administered. The post- test of study was carried out one week later, using same tool as the pre- test. Collected data was then tabulated and analyzed.

Plan for data analysis

Data analysis was done according to the objectives of the study. Both descriptive and inferential statistics were used.

1. Analysis of the demographic data was done by frequency, mean, percentage.
2. Paired t- test was used to determine the difference between the pre-test and post-test score in terms of effectiveness of self instructional module.
3. Chi-square test was used to determine the association between the pre-test level of knowledge and selected demographic variables.

Protection of human rights

Research proposal was approved by the dissertation committee, RASS Academy college of Nursing, Poovanthi. Prior to the study oral and written consent of each sample was obtained before starting the data collection. Assurance was given to the samples that anonymity and confidentiality would be maintained.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of the data collected from caregivers who have received the self instructional module. The collected data were tabulated, analyzed and presented. It consists of the following sections:

Section I: Description of samples according to their selected demographic Variables

Section II: Description of samples according to their pre-test and post-test level of knowledge

Section III: Comparison of mean pre-test and mean post-test level of knowledge

Section IV: Association of pre-test level of knowledge with their selected demographic variables.

SECTION – I

Description of samples according to their selected demographic variables

Table: 1: Distribution of samples according to their selected demographic variables

Experimental group (n=60)

S:no	Demographic variables	Frequency	Mean	Percentage%
1.	Age (in years) at present:			
	(a)21-30	35	0.58	58%
	(b)31-40	12	0.20	20%
	(c)41-50	13	0.22	22%
2.	Age (in years) at menarche:			
	(a)10-12	33	0.55	55%
	(b) 13-16	25	0.42	42%
	(c)>17	2	0.3	3
3.	Marital status:			
	(a)Unmarried	21	0.35	35%
	(b)Married	39	0.65	65%
	(c)Divorced/Separated	0	0.0	0%
4.	Educational status:			
	(a)Illiterate	15	0.25	25%
	(b)Primary	25	0.42	42%
	(c)Secondary	9	0.15	15%
	(d)Graduate	11	0.18	18%
5.	Occupation:			
	(a)Home maker	33	0.55	55%

	(b)Private job	26	0.43	43%
	(c)Government job	1	0.2	2%
6.	No.of.children:			
	(a)Nil	26	0.43	43%
	(b)Below 2	24	0.40	40%
	(c)Above 2	10	0.17	17%
7.	Age (in years) during first pregnancy:			
	(a)Below 30	16	0.27	27%
	(b)Above 30	18	0.30	30%
	(c)Nil/Not yet pregnant	26	0.43	43%
8.	Use of oral contraceptive pills:			
	(a)Yes	8	0.13	13%
	(b)No	52	0.87	87%
9.	Any family history of breast cancer:			
	(a)Yes	60	0.100	100%
	(b)No	0	0.0	0%
10.	Dietary pattern:			
	(a)Vegetarian	16	0.27	27%
	(b)Non-vegetarian	44	0.73	73%
11.	Previous knowledge exposure regarding breast cancer:			
	(a)Through family members	24	0.40	40%
	(b)Through friends	22	0.37	37%

	(c)Through health care professionals	9	0.15	15%
	(d)Through mass media	5	0.8	8%
12.	Relationship with the client:			
	(a)Daughter	27	0.45	45%
	(b)Sister	20	0.33	33%
	(c)Mother	13	0.22	22%

Table 2 depicts the demographic characteristics of Caregivers. Among 60 samples, 35(58%) were between 21-30 years of age, 12(20%) were between 31-40 years of age and 13(22%) were between 41-50 years of age at present. Regarding age at menarche, 33(55%) were between 10-12years of age, 25(42%) were between 13-16 years of age and 2(3%) were above 17 years of age. In case of marital status, 21(35%) were unmarried, 39(65%) were married and no divorced / separated. With regards to educational status, 15(25%) were illiterate, 25(42%) has got primary education, 9(15%) were come under secondary education and 11(18%) of the samples were graduate.

Among 60 samples, 33(55%) of them were home-makers, 26(43%) were doing private job and only 1(2%) works in government job. Regarding number of children, 26(43%) of them do not have children, 24(40%) of them had 1- 2 children and 10(17%) of them had more than 2 children. In 60 samples, 16(27%) of them had their first pregnancy below 30 years of age, 18(30%) of them had their first pregnancy above 30 years of age and 26(43%) of them not yet conceived. Out of 60 samples, only 8(13%) of them used oral contraceptive pills and 52(87%) were not used oral contraceptive pills. In regard to family history of breast cancer, all the 60 (100%) of them had family history of breast cancer. With regards to dietary pattern, 16(27%) were vegetarians and 44(73%) were non-vegetarians. Among 60 samples, 24(40%) of them had a previous knowledge exposure through family members,

22(37%) had through their friends, 9(15%) had through health care professionals and only 5(8%) of them had through mass media.

About caregivers relationship with the patient, among 60 samples, 27(45%) were daughters to the patients, 20(33%) were sister and 13(22%) of them were mother.

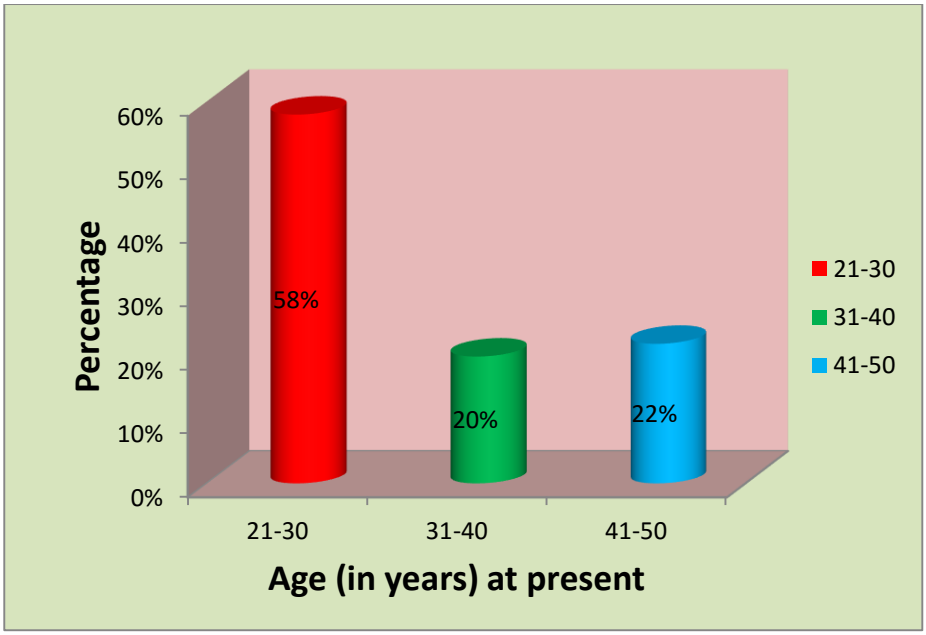
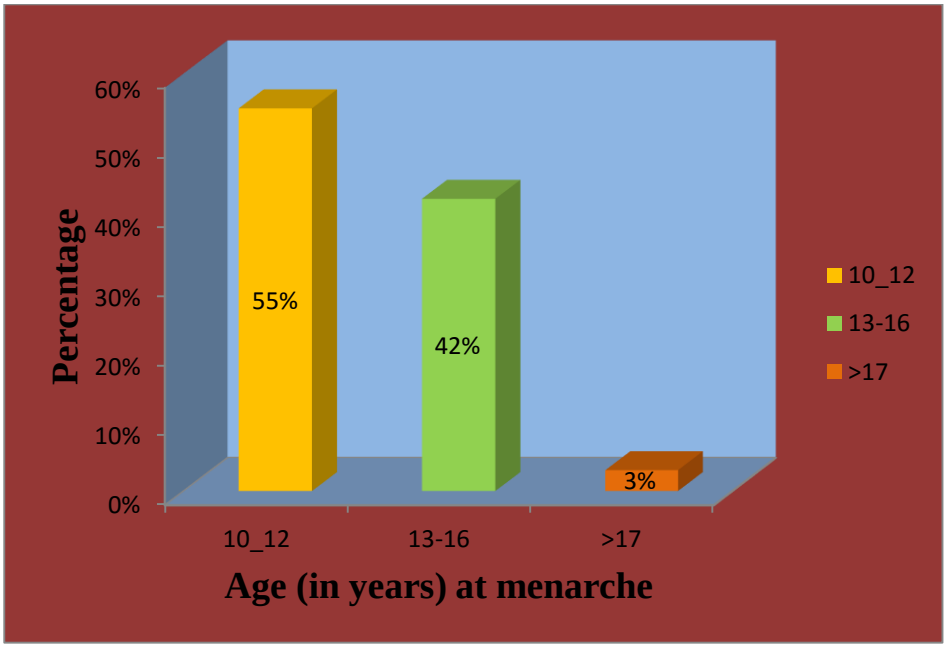


Figure: 2: Distribution of samples according to their age (in years) at present



Figures: 3: Distribution of samples according to age (in years) at menarche

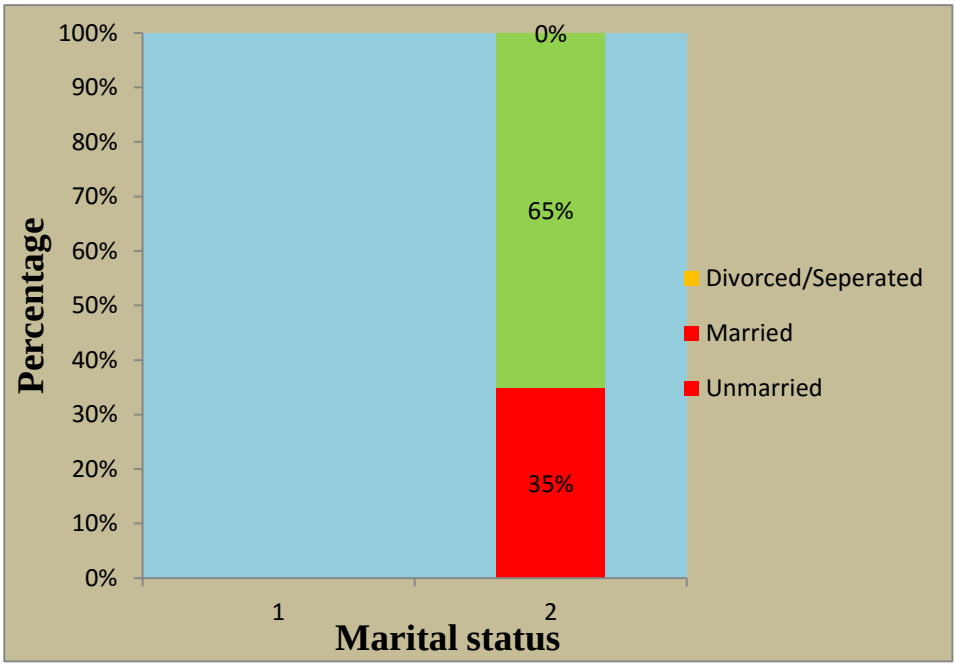


Figure: 4: Distribution of samples according to their marital status

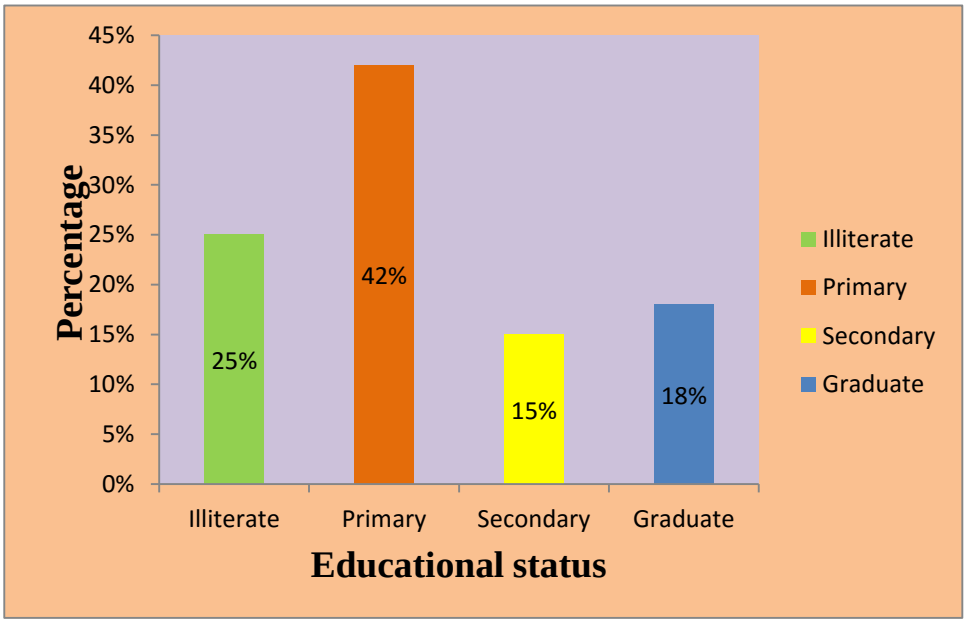
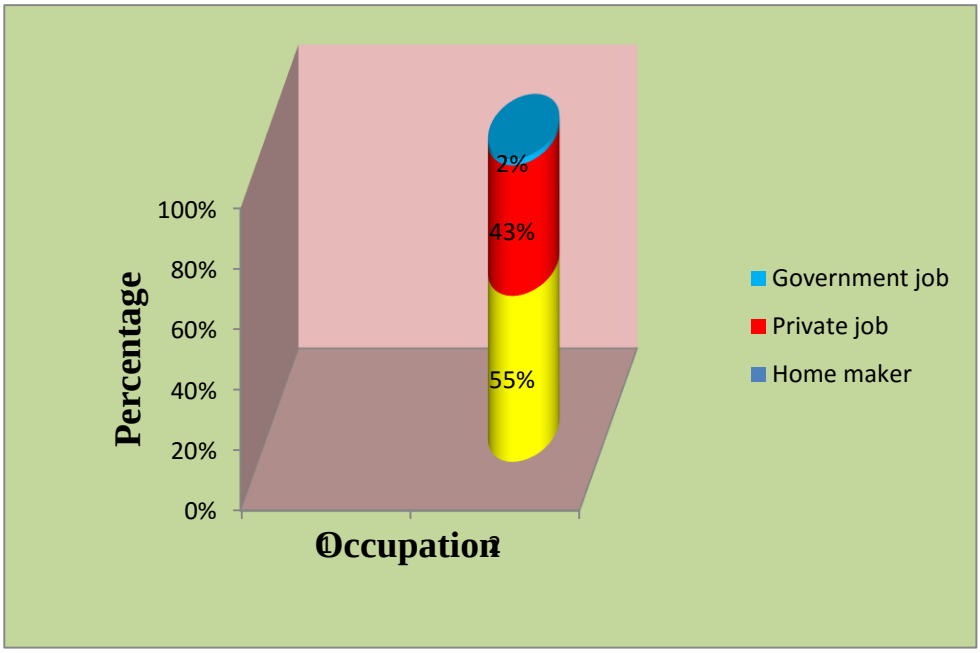


Figure: 5: Distribution of samples according to their educational status



Figures: 6: Distribution of samples according to their occupational status

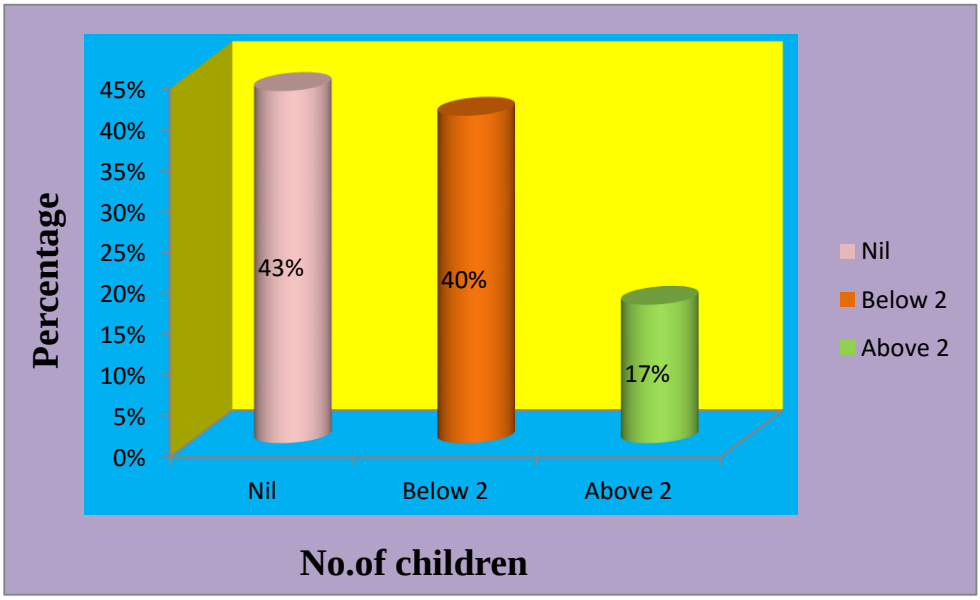


Figure: 7: Distribution of samples according to their number of children

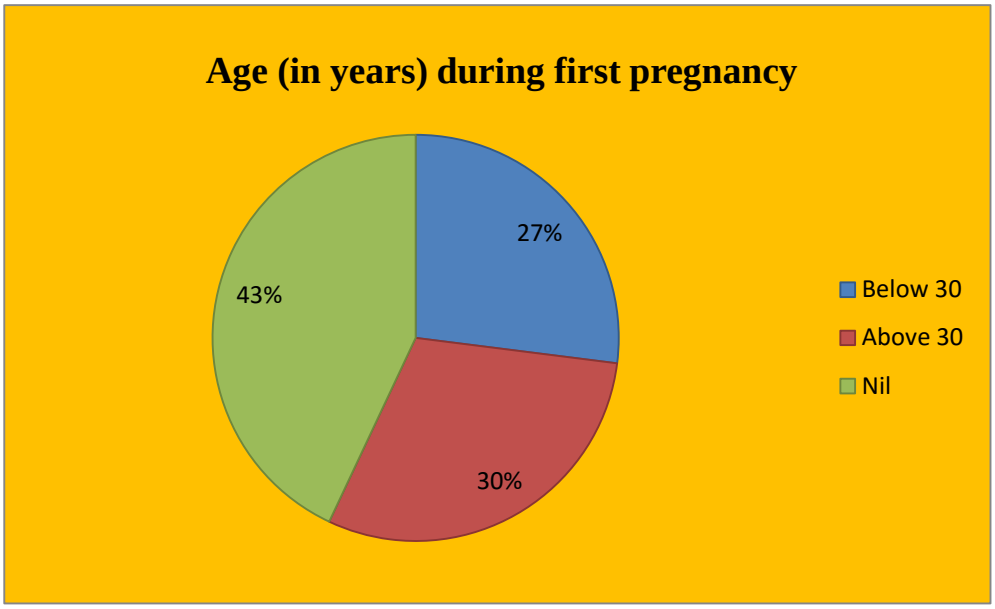


Figure: 8: Distribution of samples according to their age (in years) during first pregnancy

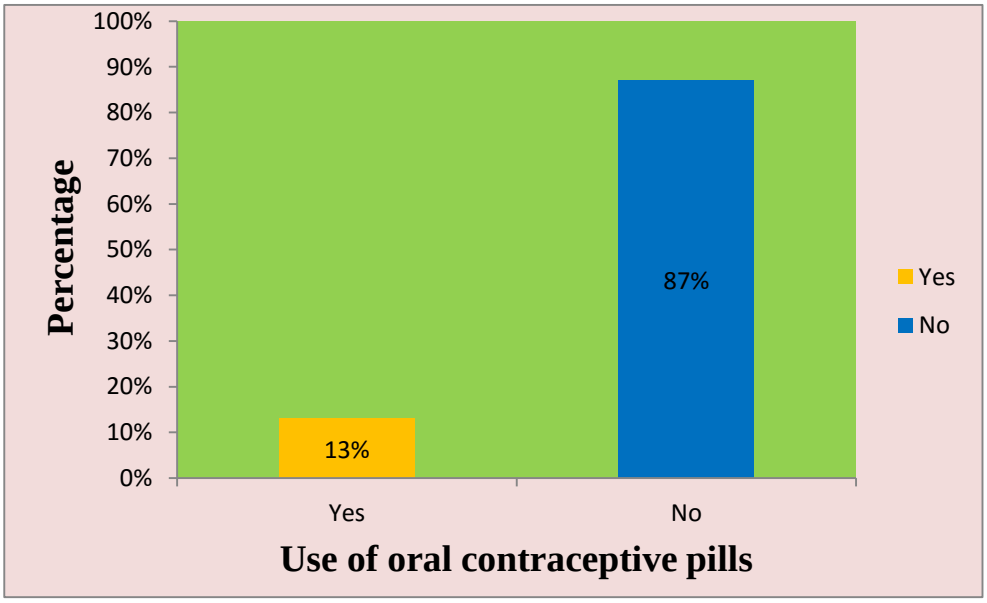


Figure: 9: Distribution of samples according to their use of oral contraceptive pills

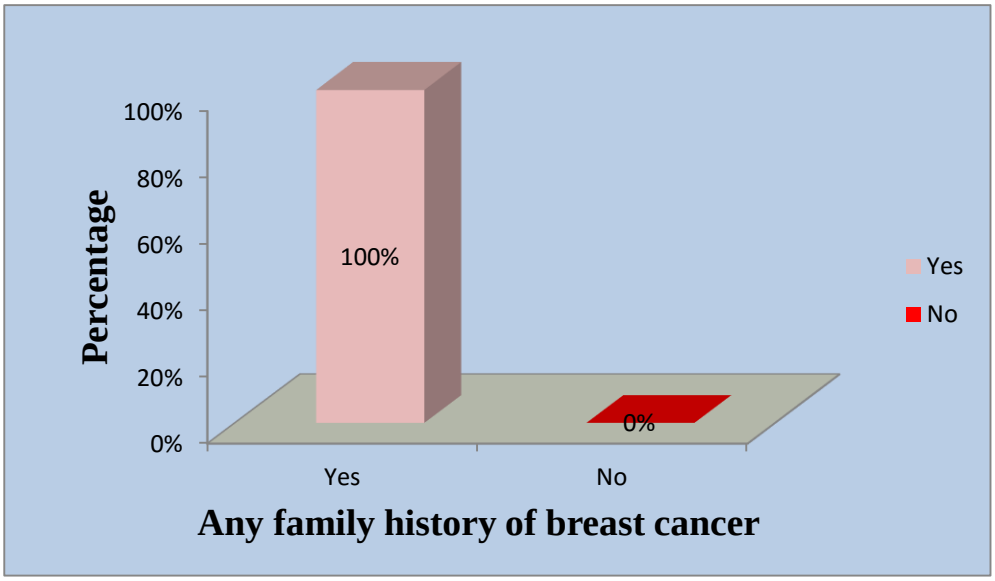


Figure: 10: Distribution of samples according to their family history of breast cancer

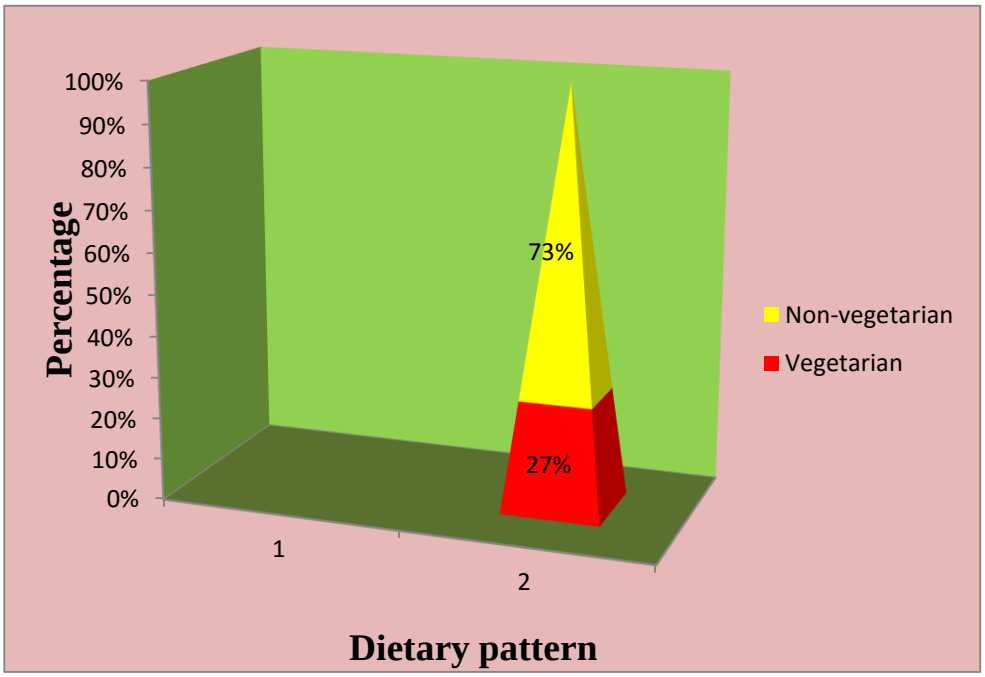


Figure: 11: Distribution of samples according to their dietary pattern

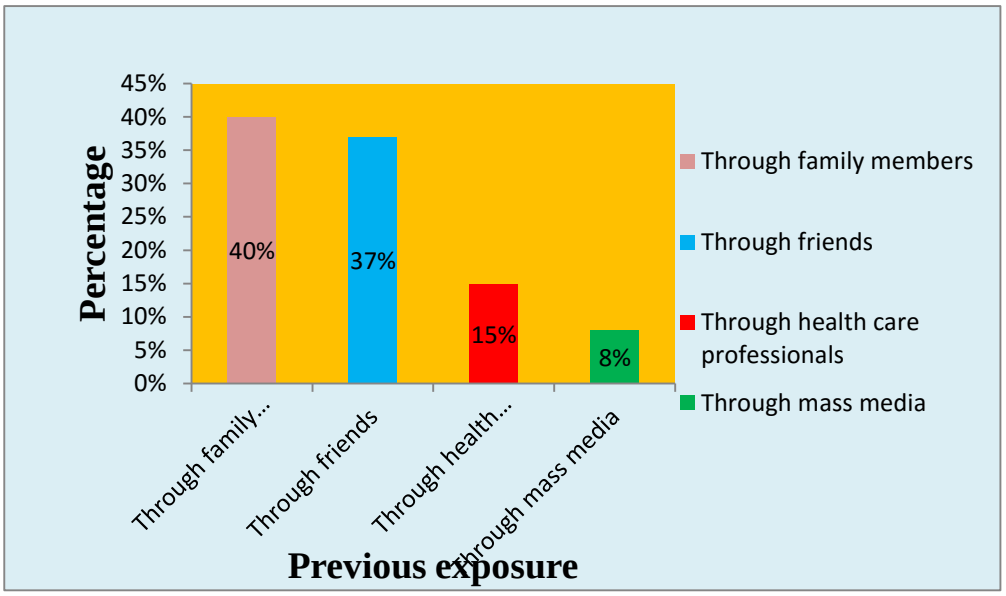


Figure: 12: Distribution of samples according to their previous exposure

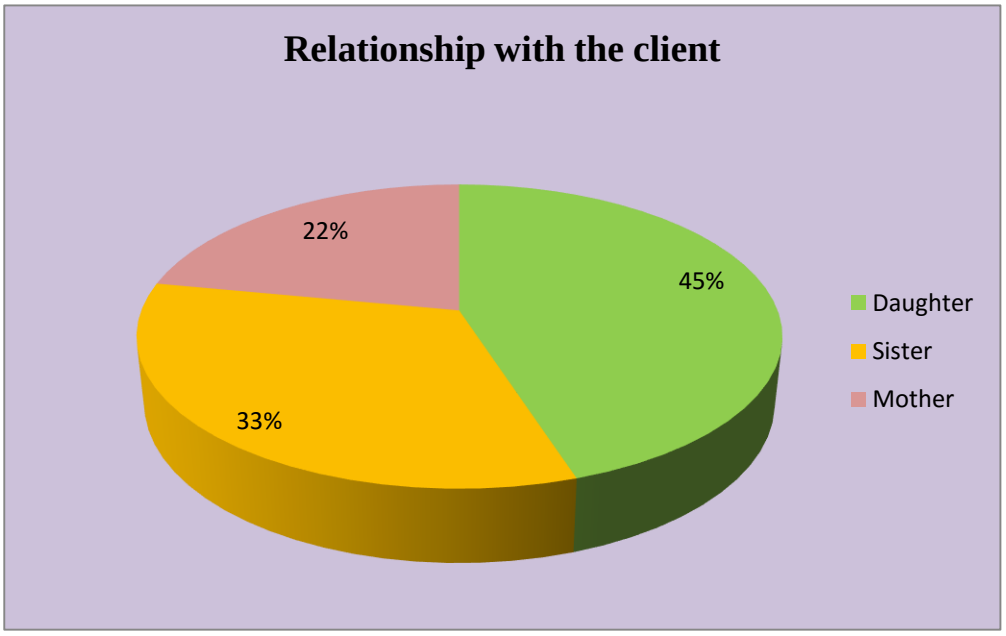


Figure: 13: Distribution of samples according to their relationship with the client

SECTION – II

Description of samples according to the pretest and posttest level of knowledge on early detection of breast cancer.

Table: 2: Description of samples according to the pretest and posttest level of knowledge on early detection of breast cancer.

(n=60)

Level of knowledge	Pre- test			Post- test		
	F	%	Mean	F	%	Mean
Inadequate knowledge	52	0.87%	87.05	0	0%	0
Moderate knowledge	8	13.3%	0.13	5	8%	0.8
Adequate knowledge	0	0%	0	55	92%	0.92

Table:3 Illustrates the pre-test and post-test level of knowledge among samples. In pre-test assessment of knowledge, no one had adequate knowledge. 8(13.3%) had moderate level of knowledge and 52(87.05%) samples had inadequate level of knowledge.

In case of post-test level of knowledge, 55(92%) out of 60 samples were acquired adequate level of knowledge, 5(8%) had moderate level of knowledge and no one had inadequate level of knowledge.

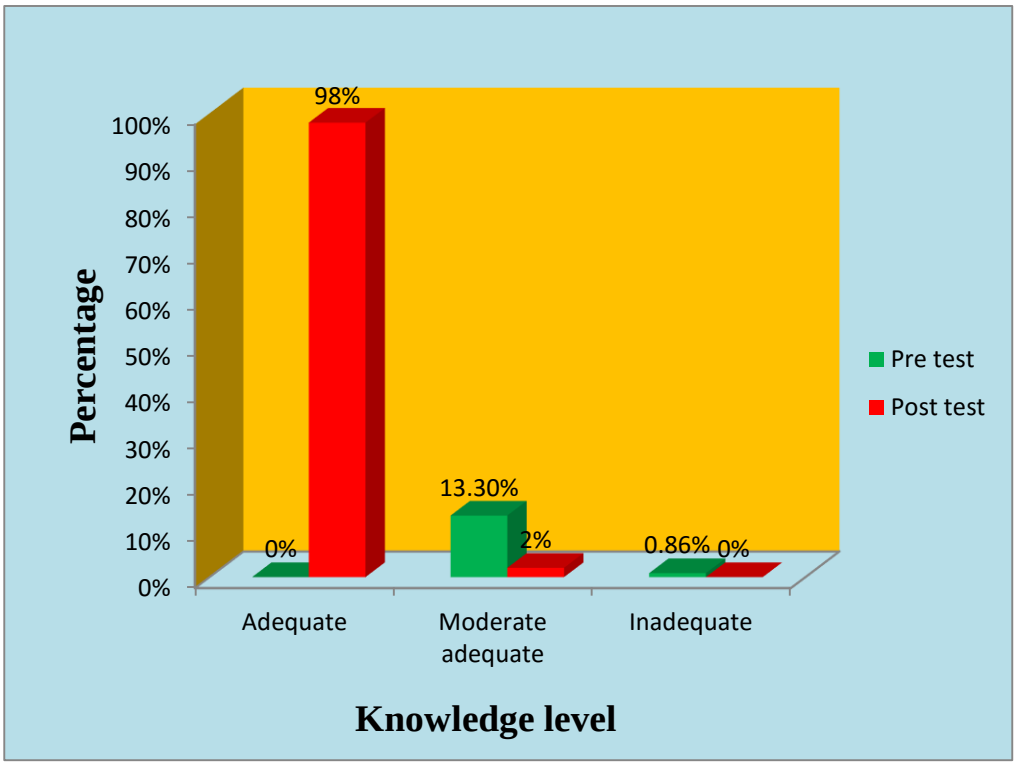


Figure:14. Distribution of samples according to their pre-test and post-test level of knowledge

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SECTION – III

Comparison of pre-test and post-test level of knowledge among the samples

Table: 3: Comparison of pre-test and post-test level of knowledge among the samples

S:No	Level of knowledge	Mean	Mean difference (MD)	Standard deviation (SD)	't' Value	Degree of freedom (df)
1.	Pre-test	9	11.3	2.34	*37.25	59
2.	Post-test	20.06				

*Significant at 0.05 level

Table 4 depicts the comparison of mean pre-test and post-test level of knowledge and it also deals with mean difference (11.3) and standard deviation (SD=2.34) The obtained't' value (37.25) was significant at 0.05 level with the degree of freedom 59. This indicates that, there is significant difference between pre-test and post-test level of knowledge regarding early detection of breast cancer among caregivers. The above findings reveal that the self Instructional Module had significantly improved the knowledge of caregivers.

There is a significant difference between pre test and post test level of knowledge regarding awareness of early detection of breast cancer among caregivers. Hence, the research hypothesis H_1 was accepted.

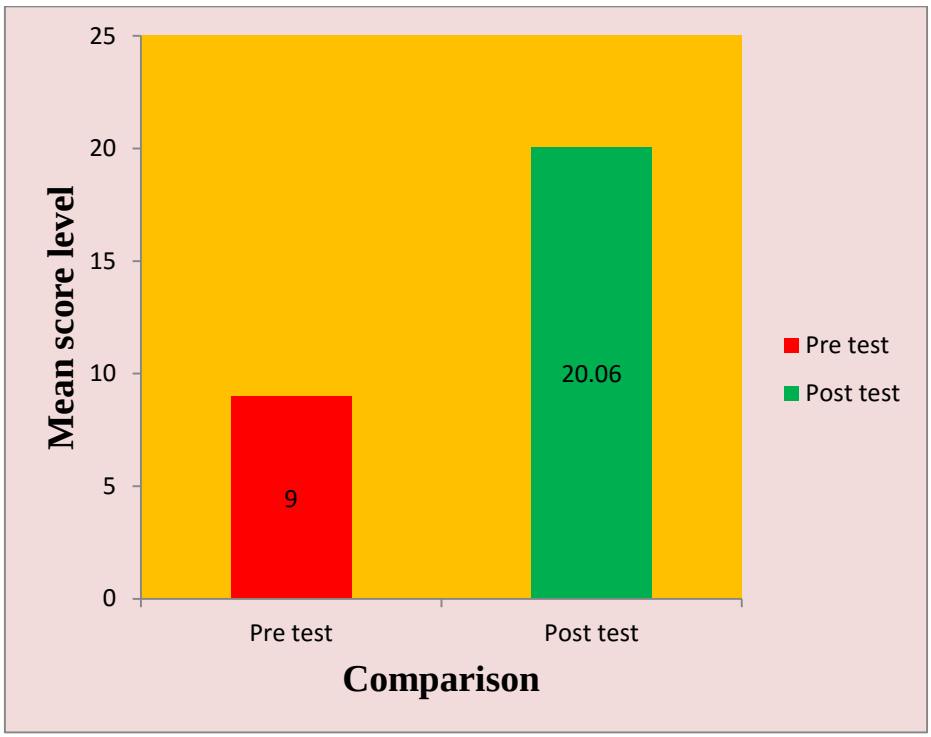

Figure: 15: Comparison of mean pre-test and post-test level of knowledge among samples.

SECTION: IV

Association between pre-test knowledge with their selected demographic variables

Table: 4: Association between pre-test knowledge with their selected demographic variables

(n=60)

S:No	Demographic variables	Pre test knowledge		Degree of freedom (Df)	Chi-square value
		Above Mean	Below Mean		
1.	AGE IN YEARS AT PRESENT:				
	(a)21-30	17	18		
	(b)31-40	8	4	2	2.0538 #
	(c)41-50	5	8		
2.	AGE IN YEARS AT MENARCHE:				
	(a)10-12	15	18		
	(b)13-16	12	13	2	6.2714 *
	(c)>17	2	0		
3.	MARITAL STATUS:				
	(a)Unmarried	10	11		
	(b)Married	20	19	2	0.0732 #
	(c)Divorced/Separated	0	0		
4.	EDUCATIONAL STATUS:				
	(a)Illiterate	5	10		

	(b)Primary (c)Secondary (d)Graduate	14 4 8	11 5 3	3	4.3478 #
5.	OCCUPATION: (a)Home maker (b)Private job (c)Government job	 15 15 0	 18 11 1	2	1.8878 #
6.	NO.OF.CHILDREN: (a)Nil (b)Below 2 (c)Above 2	 13 14 3	 13 10 7	2	2.2666 #
7.	AGE IN YEARS DURING FIRST PREGNANCY: (a)Below 30 (b)Above 30 (c)Nil/Not yet pregnant	 7 10 13	 9 8 13	2	0.472 #
8.	USE OF ORAL CONTRACEPTIVE PILLS: (a)Yes (b)No	 5 25	 3 27	1	0.576 #
9.	ANY FAMILY HISTORY OF BREAST CANCER: (a)Yes (b)No	 30 0	 30 0	1	0 #
10.	DIETARY PATTERN: (a)Vegetarian (b)Non-vegetarian	 8 22	 8 22	1	0 #

11.	PREVIOUS KNOWLEDGE EXPOSURE REGARDING BREAST CANCER:				
	(a)Through family members	9	15		
	(b)Through friends	14	8		
	(c)Through health care professionals	5	4	3	3.4039 #
	(d)Through mass media	3	2		
12.	RELATIONSHIP WITH THE CLIENT:				
	(a)Daughter	16	11		
	(b)Sister	9	11	2	1.818 #
	(c)Mother	5	8		

*Significant at 0.05 level #Not significant

In order to find out the association between the pre-test level of knowledge and selected demographic variables, chi-square test was used. With regard to age, the obtained Chi-square value = 2.0538 at df (2) was not significant at 0.05 level. With regard to age in years at menarche, the calculated Chi-square value = 6.2714 at df (2) was significant at 0.05 level. Regarding marital status, the Chi-square value was 0.0732 at df (2) was not significant at 0.05 level. In case of educational status, the calculated Chi-square value = 4.3478 at df (3) was not significant at 0.05 level. For occupational status, the calculated Chi-square value was 1.8878 at df (2) was not significant at 0.05 level. For number of children, the calculated Chi-square value = 2.2666 at df (2) was not significant at 0.05 level. With regard to age

during first pregnancy, the calculated Chi-square value = 0.472 at df (2) was not significant at 0.05 level. Regarding the use of oral contraceptive pills, the calculated Chi-square value = 0.576 at df (1) was not significant at 0.05 level. For the family history of breast cancer, the calculated Chi-square value was 0 at df (1) was not significant at 0.05 level. Regarding dietary pattern, the calculated Chi-square value = 0 at df (1) was not significant at 0.05 level. For previous exposure, the calculated Chi-square value = 3.4039 at df (3) was not significant at 0.05 level. In case of relationship with the client, the calculated Chi-square value = 1.818 at df (2) was not significant at 0.05 level. Hence H_2 was accepted.

CHAPTER V

DISCUSSION, SUMMARY, CONCLUSION, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

Discussion:

The present study was designed to assess the effectiveness of Self Instructional Module on awareness of early detection of breast cancer among caregivers in a selected hospital at Madurai.

To find out the effectiveness of Self Instructional Module, the investigator adopted pre-experimental one group pre-test post-test design and 60 caregivers were selected through purposive sampling technique.

Demographic Variables:

1. With regard to age, 35 samples (58%) were between 21-30 years of age, 12 samples (20%) were between 31-40 years of age and 13(21.6%) were between 41-50 years of age.
2. In case of age at menarche, majority 33 (55%) of the samples were between 10-12 years of age, 25 (42%) were between13-16 years of age and only 2(3%) were attained menarche above 17 years of age.
3. In case of marital status, 21(35%) were unmarried, 39(65%) were married and no divorced / separated.
4. With regards to educational status, 15(25%) were illiterate, 25(42%) had completed primary education, 9(15%) were come under secondary education and 11(18%) of the samples were graduates.
5. Among 60 samples, 33(55%) of them were home-makers, 26(43%) were doing private job and only 1(2%) were doing government job.
6. Regarding number of children, 26(43%) of them had no children, 24(40%) of them had 1- 2 children and 10(17%) of them had more than 2 children.

7. Out of 60 samples, 16(27%) of them had their first pregnancy below 30 years of age, 18(30%) of them had their first pregnancy above 30 years of age and 26(43%) of them not yet conceived. Among 60 samples only 8(13%) of them were used oral contraceptive pills and 52(87%) were not used oral contraceptive pills.
8. Regarding family history of breast cancer, all the 60 (100%) of them had the family history. With regards to dietary pattern, 16(27%) were vegetarians and 44(73%) were non-vegetarians.
9. Among 60 samples, 24(40%) of them had a previous knowledge exposure through family members, 22(37%) had through their friends, 9(15%) had through health care professionals and only 5(8%) of them had previous exposure through mass media.
10. About caregivers relationship with the patient, among 60 samples, 27(45%) were daughters to the patients, 20(33%) were sister and 13(22%) of them were mother.

The major findings of the study are discussed related to the formulated objectives, as follows.

The first objective was to assess the pre-test level of knowledge regarding awareness of early detection of breast cancer among caregivers.

In pre-test level of knowledge, none had adequate knowledge. 8(13.3%) had moderate level of knowledge and 52(87.05%) samples had inadequate level of knowledge. The above findings show that more than half of the samples had inadequate level of knowledge.

Abduelmula.R.Abdul Karim et.al., (2015) undertook a questionnaire survey to assess the evaluation of breast cancer awareness among 166 pharmacy students at Sharjah. Samples were selected by convenient sampling technique. A validated questionnaire was used to conduct interview with each participant. The study reported that almost one quarter of the students had a family history of breast cancer. The investigator concluded that at the end of the study, the awareness of breast self examination was improved among the

participants. The findings of Abduelmula.R.Abdul Karim support the findings of the present study.

Soumya Thomas et.al, (2013) had done a survey approach with descriptive study to estimate the level of knowledge on breast self examination among 60 rural women of reproductive age group (18-45years) selected by non-probability convenient sampling method. Data was collected by administering structured knowledge questionnaire on breast self examination and the collected data was analyzed by using statistical SPSS software. This study finding revealed that 1.66% of the women had very good knowledge, 3.33% of women had good knowledge, 53.33% of women had average knowledge and 41.66% of women had poor knowledge. The investigator reported that there is no significant association between the knowledge score with selected demographic variable. The findings of study done by Soumya Thomas similar to the present study.

The second objective was to evaluate the effectiveness of self-instructional module on knowledge regarding awareness of early detection of breast cancer among caregivers.

In the present study, post-test level of knowledge assessment shows, 55(92%) out of 60 samples had adequate level of knowledge, 5(8%) had moderate level of knowledge and no one had inadequate level of knowledge. The obtained‘t’ value (37.25) was significant at 0.05 level with the degree of freedom 59. This indicates that, **H_1**-there is asignificant difference between pre-test and post-test level of knowledge regarding early detection of breast cancer among caregivers. **Hence the research hypothesis H_1 was accepted**.

The present study results are supported by study done by Anju Thomas (2011). She had done pre-experimental study to assess the effectiveness of self instructional module on knowledge regarding early detection and prevention of breast cancer among 50 nun-sisters in selected convents at Mangalore. A

sample was selected through purposive sampling technique. Data was collected by using structured knowledge questionnaire and analysis was done. The findings concluded that after the administration of self instructional module the knowledge was improved among the participants. The investigator felt that a practical application of SIM would create health awareness among the nun-sisters and thus reducing the risk of getting breast cancer.

The third objective was to find out the association between the pre-test level of knowledge and their selected demographic variables.

In order to find out the association between the pre-test level of knowledge and selected demographic variables, chi-square test was used. With regards to age (in years), the obtained Chi-square value = 2.0538 at df (2) was not significant at 0.05 level. With regard to age in years at menarche, the calculated Chi-square value = 6.2714 at df (2) was significant at 0.05 level. Regarding marital status, the Chi-square value = 0.0732 at df (2) was not significant at 0.05 level. In case of educational status, the calculated Chi-square value = 4.3478 at df (3) was not significant at 0.05 level. For occupational status, the calculated Chi-square value = 1.8878 at df (2) was not significant at 0.05 level. For number of children, the calculated Chi-square value was 2.2666 at df (2) was not significant at 0.05 level. With regard to age during first pregnancy, the calculated Chi-square value = 0.472 at df (2) was not significant at 0.05 level. Regarding the use of oral contraceptive pills, the calculated Chi-square value was 0.576 at df (1) was not significant at 0.05 level. For the family history of breast cancer, the calculated Chi-square value= 0 at df (1) was not significant at 0.05 level. Regarding dietary pattern, the calculated Chi-square value was 0 at df (1) was not significant at 0.05 level. For previous exposure, the calculated Chi-square value was 3.4039 at df (3) was not significant at 0.05 level. In case of relationship with the client, the calculated Chi-square value = 1.818 at df (2) was not significant at 0.05 level. Hence H2 was accepted.

Summary of the study:

The study was undertaken to assess the effectiveness of self instructional module on awareness of early detection of breast cancer among caregivers in selected hospital at Madurai.

The following objectives were set for the study

- To assess the pretest level of knowledge regarding awareness of early detection of breast cancer among caregivers.
- To evaluate the effectiveness of self-instructional module on awareness of early detection of breast cancer among caregivers.
- To find out the association between the pretest level of knowledge and their selected demographic variables.

The study was based on Shuffle Beam's CIPP Programme Evaluation Model (1960); an evaluator approach used to conduct the study. The research design adopted for the present study was pre-experimental one group pre-test post-test. The purposive sampling technique was adopted as sampling technique. The data was collected for a period of two weeks from the caregivers at selected hospital in Madurai.

The tool consists of demographic variables of the samples and structured knowledge questionnaire regarding early detection of breast cancer.

Major findings of the study:

1. Majority of the samples, among 60 samples, 35(58%) were between 21-30 years of age, 12(20%) were between 31-40 years of age and 13(22%) were between 41-50 years of age at present.
2. Regarding age at menarche, 33(55%) were between 10-12years of age, 25(42%) were between 13-16 years of age and 2(3%) were above 17 years of age.
3. In case of marital status, 21(35%) were unmarried, 39(65%) were married and no divorced / separated.

4. With regards to educational status, 15(25%) were illiterate, 25(42%) has got primary education, 9(15%) were come under secondary education and 11(18%) of the samples were graduate.
5. Among 60 samples, 33(55%) of them were home-maker, 26(43%) were doing private job and only 1(2%) works in government job.
6. Regarding number of children, 26(43%) of them not had a child, 24(40%) of them had 1- 2 children and 10(17%) of them had more than 2 children.
7. In 60 samples, 16(27%) of them had their first pregnancy below 30 years of age, 18(30%) of them had their first pregnancy above 30 years of age and 26(435) of them not yet conceived.
8. Among 60 samples only 8(13%) of them were used oral contraceptive pills and 52(987%) were not used oral contraceptive pills.
9. In case of family history of breast cancer, all the 60 (100%) of them had the family history.
10. With regards to dietary pattern, 16(27%) were vegetarians and 44(73%) were non-vegetarians.
11. Among 60 samples, 24(40%) of them had a previous knowledge exposure through family members, 22(37%) had through their friends,9(15%) had through health care professionals and only 5(8%) of them had through mass media.
12. About caregivers relationship with the patient, among 60 samples, 27(45%) were daughters to the patients, 20(33%) were sister and 13(22%) of them were mother.
13. In pre-test level of knowledge, no one had adequate level of knowledge. 8(13.3%) had moderate level of knowledge and 52(87.05%) samples had inadequate level of knowledge.
14. In case of post-test level of knowledge, 55(92%) out of 60 samples were acquired adequate level of knowledge, 5(8%) had moderate level of knowledge and no one had inadequate level of knowledge.

15. In comparison of mean pre-test and post-test level of knowledge the mean diference was (MD=11.3), standard deviation (SD=2.34) and‘t’ value. The obtained‘t’ value was (37.25).
16. With regard to association of caregivers knowledge, study reveals that there was a significant association between age (in years) at menarche and the pre-test level of knowledge with the calculated Chi-square value was 6.2714 at df (2) and it was significant at 0.05 level and the other demographic variables such as age (in years) at present, marital status, educational status, occupation, no.of.children, age (in years) during first pregnancy, use of oral contraceptive pills, any family history of breast cancer, dietary pattern, previous knowledge exposure regarding breast cancer, relationship with the client shows no association with knowledge score.

Conclusion:

The study findings provide the statistical evidence which clearly indicates that Self Instructional Module has significant effect on the level of knowledge of caregivers.

Implications:

Nurses can use the Self Instructional Module as a best teaching method for imparting the knowledge in the field of health. The present study has several implications in Nursing practice, Nursing education, Nursing administration and Nursing research.

Implications for Nursing Practice:

- The nursing professionals working in the hospitals as well as in the community can understand the importance and impart knowledge on early detection of breast cancer for their clients.

Implications for Nursing Education:

- Self instructional module can be used as one of the teaching method by the student to imparting knowledge on early detection of breast cancer to public in both urban and rural while giving health education.
- Nurse educator can prepare the nursing students in order to give teaching programme on early detection of breast cancer by using different teaching methods and teaching aids.

Implications for Nursing Research:

- The nursing researchers should conduct further studies to find out the effectiveness of various methods of providing education on improving the awareness on early detection of breast cancer among other group of peoples such as teachers, nun-sisters, and adolescent girls.

Implications for Nursing Administration:

- Nurse administrator should motivate and teaching sessions like workshops, conference, and seminars for the nursing students to improve their professional knowledge, skill by attending the on early detection of breast cancer.
- Nurse administrator should arrange regular in-service education program to the health care worker gaining knowledge.

Recommendations:

- A comparative study may be conducted to evaluate the effectiveness of two different teaching methods.
- A similar study can be conducted on large sample to assess the knowledge and attitude regarding early detection of breast cancer.
- A study can be conducted in assessing knowledge and practice of early detection of breast cancer.

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APPENDIX I

SECTION A

DEMOGRAPHIC VARIABLES

Sample no:

1. Age (in years)

   a. 21-30 ( )
   b. 31-40 ( )
   c. 41-50 ( )

2. Age (in years) at menarche

   a. 10 -12 ( )
   b. 13 – 16 ( )
   c. >17 ( )

3. Marital status

   a. Unmarried ( )
   b. Married ( )
   c. Divorced/Separated ( )

4. Educational status

   a. Illiterate ( )
   b. Primary education ( )
   c. Secondary education ( )
   d. Graduate ( )

5. Type of occupation

   a. Home maker ( )
   b. Private Job ( )
   c. Government job ( )

6. Number of children

a. Nil ( )
b. 1-2 ( )
c. More than 2 ( )

7. Age in years during the time of first pregnancy

a. Below 30 ( )
b. Above 30 ( )
c. Not yet conceived ( )

8. Use of any contraceptive pills

a. Yes ( )
b. No ( )

9. Any family history of breast cancer

a. Yes ( )
b. No ( )

10. Dietary pattern

a. Vegetarian ( )
b. Non vegetarian ( )

11. Previous exposure regarding breast cancer

a. Through family members ( )
b. Through friends ( )
c. Through health personnel ( )
d. Through mass media ( )

12. Relationship with the client

a. Daughter ( )
b. Sister ( )
c. Mother ( )

SEMI - STRUCTURED QUESTIONAIRRE RELATED TO EARLY DETECTION OF BREAST CANCER:

<u>Instruction</u> : please read the following questions and put tick against the correct response:

1. Female breast remains small and immature until
    a. Delivery ( )
    b. Pregnancy ( )
    c. Puberty ( )
    d. Menopause ( )
2. The total number of lobules in each breast is
    a. 5 ( )
    b. 10 ( )
    c. 15 ( )
    d. 20 ( )
3. What do you mean by breast cancer?
    a. Normal growth of the cells ( )
    b. Abnormal proliferation of cells in the breast ( )
    c. Benign tumor ( )
    d. None of the above ( )
4. Which is the most high risk age group for getting breast cancer?
    a. 10-19 years ( )
    b. 20-29 years ( )
    c. 30-39 years ( )
    d. Above 40 years ( )
5. What are the risk factors for getting breast cancer?
    a. Early menarche ( )
    b. Null parity ( )
    c. Genetics ( )
    d. All of the above ( )
6. How long would the mother breast feed her baby compulsorily?

a. 1-3 months ( )
b. 1-6 months ( )
c. 1.5 years ( )
d. Above 1.5 years ( )

7. What are the food stuffs that cause breast cancer?
   a. High fat containing diet ( )
   b. Fresh green vegetables ( )
   c. Fruits ( )
   d. Fresh green vegetables and fruits ( )
8. One of the signs of breast cancer in early stage is
   a. Chest pain ( )
   b. Headache ( )
   c. Painless nodule ( )
   d. Breathlessness ( )
9. What are the common signs and symptoms of breast cancer?
   a. Swelling ( )
   b. Discharge (bleeding) from nipple ( )
   c. Changes in size and shape of the breast ( )
   d. Swelling, discharge from nipple and changes in size and shape of the breast ( )
10. What are the changes that changes that takes place in the nipple of the breast due to breast cancer?
   a. Discharge from the nipple, inverted nipple and peeling of the nipple skin ( )
   b. Inverted nipple ( )
   c. Discharge from the nipple ( )
   d. Peeling of the nipple skin ( )
11. If you find spontaneous discharge from the nipple other than pregnancy, What will you do?
   a. Do nothing as it is normal ( )
   b. See the doctor immediately ( )

c. Self treatment by oneself ( )
d. None of the above ( )

12. Which one is the easiest and economical ways to detect breast lump?
    a. Breast self examination ( )
    b. X-ray ( )
    c. Mammography ( )
    d. Blood test ( )
13. What is the ideal age in years for women to begin practicing breast self examination?
    a. 20 ( )
    b. 30 ( )
    c. 40 ( )
    d. 50 ( )
14. What do you mean by breast self examination?
    a. Inspection of the breast by oneself ( )
    b. Palpation of the breast ( )
    c. Visual observation of the breast ( )
    d. Inspection, palpation and visual observation of the breast ( )
15. What is the appropriate time to perform breast self examination during pre-menopausal period?
    a. 5-7 days after menstruation ( )
    b. During menstruation ( )
    c. 5-7 days before menstruation ( )
    d. At any time ( )
16. The breast self examination should be done during this period because breast
    a. Become soft and least lumps ( )
    b. Color will change ( )
    c. Will get swollen up ( )
    d. Will be freely movable ( )

17. What is the purpose of doing breast self examination?
    a. To detect any changes in the breast ( )
    b. Early detection of the breast cancer ( )
    c. Provide awareness of normal texture of the breast ( )
    d. All of the above ( )
18. While doing breast self examination special attention to be given to the area of
    a. Under arm and breast ( )
    b. Outer edges of the breast ( )
    c. Nipple ( )
    d. Back ( )
19. Which part of the hand is used to palpate the breast during breast self examination?
    a. Nails ( )
    b. Wrist ( )
    c. Finger pad or palms ( )
    d. Palms alone ( )
20. After menopause the breast self examination should be carried out
    a. Weekly ( )
    b. Quarterly ( )
    c. Monthly ( )
    d. Yearly ( )
21. What are the treatment modalities that followed for the breast cancer?
    a. Chemotherapy ( )
    b. Radiation therapy ( )
    c. Surgery ( )
    d. Surgery, chemotherapy and radiation therapy ( )
22. What do you mean by radiation therapy?
    a. Apply ionizing radiation to the affected cells ( )

b. Apply electric current to the affected cells ( )
c. Apply lotions to the affected cells ( )
d. None of the above ( )

23. What are the common side effects of radiation therapy?

a. Nausea and vomiting ( )
b. Nausea, vomiting, diarrhea and loss of hair ( )
c. Diarrhea ( )
d. Loss of hair ( )

24. What are the screening techniques used to detect the breast cancer?

a. Fine needle aspiration biopsy ( )
b. Histopathological examination ( )
c. Breast self examination and mammography ( )
d. Mammography ( )

25. What is the preventive measure to be followed?

a. Drinking alcohol ( )
b. Eating anti-oxidants food stuffs ( )
c. Meat ( )
d. None of the above ( )

ஆராய்ச்சி கருவி

கருவி:1

மார்பக புற்றுநோய் ஆரம்ப கண்டறிதல் குறித்த விழிப்புணர்வு:-

மக்கள் தொகை மாறிகள்:- **மாதிரி : எண் :**

1. தற்போதைய வயது

அ) 21 – 30 ( )

ஆ) 31 – 40 ( )

இ) 41 – 50 ( )

2. பூப்படைந்த வயது

அ) 10 – 12 ( )

ஆ) 13 – 16 ( )

இ) 17 வயதுக்கு மேல் ( )

3. திருமண நிலை

அ) திருமணம் ஆகாதவருர் ( )

ஆ) திருமணம் ஆனவர் ( )

இ) விவாகரத்து ஆனவர் அல்லது பிரிந்திருப்பவர் ( )

4. கல்வித் தகுதி

அ) படிப்பறிவில்லாதவர் ( )

ஆ) முதல் நிலை கல்வி ( )

இ) இரண்டாம் நிலை கல்வி ( )

ஈ) பட்டபடிப்பு ( )

5. பணி

அ) குடும்ப தலைவி ( )

ஆ) தனியார் வேலை ( )

இ) அரசாங்க வேலை ( )

6. குழந்தைகளின் எண்ணிக்கை

அ) இல்லை ( )

ஆ) 2 குழந்தைகளுக்கு கீழ் ( )

இ) 2 குழந்தைகளுக்கு மேல் ( )

7. முதல் முறையாக முழு கர்ப்பம் அடைந்த போது உங்களின் வயது

அ) 30 வயதுக்கு கீழ் ( )

ஆ) 30 வயதுக்கு மேல் ( )

இ) கர்ப்பம் அடையவில்லை ( )

8. கருத்தடை மாத்திரை பயன்படுத்துவரா?

அ) ஆம் ( )

ஆ)இல்லை ( )

9. குடும்பத்தினர் யாரேனும் மார்பக புற்றுநோயால் பாதிப்பு அடைந்துள்ளரா?

அ) ஆம் ( )

ஆ)இல்லை ( )

10. உட்கொள்ளும் உணவு முறை?

அ) சைவம் ( )

ஆ) அசைவம் ( )

11. மார்பக புற்றுநோய் பற்றிய முந்தைய அறிவு வெளிப்பாடு?

அ) குடும்ப உறுப்பினர்கள் மூலம் ( )

ஆ) நண்பர்கள் மூலம் ( )

இ) சுகாதார பணியாளர்கள் மூலம் ( )

ஈ) வெகுஜன ஊடகங்கள் மூலம் ( )

12. நோயாளியுடையே ஆன உங்களது உறவுமுறை

அ) மகள் ( )

ஆ) சகோதரி ( )

இ) தாய் ( )

கருவி:2

மார்பக புற்றுநோய் ஆரம்ப கண்டறிதல் குறித்த விழிப்புணர்வு:-

அரை கட்டமைக்கப்பட்ட கேள்வித்தாள்:-

1. பெண்ணின் மார்பு எந்த பருவம் வரை சிறியதாகவும், முதிராத, வளர்ச்சியடையாமலும் இருக்கும்

   அ) பிரசவம் வரை ( )

   ஆ) கர்ப்பம் வரை ( )

   இ) பூப்படையும் வரை ( )

   ஈ) மாதவிலக்கு அடையும் வரை ( )

2. ஒவ்வொரு மார்பக லொபியூல்ஸ் மொத்த எண்ணிக்கை

   அ) 5 ( )
   ஆ) 10 ( )

   இ) 15 ( )

   ஈ) 20 ( )

3. மார்பகப் புற்றுநோய் என்றால் என்ன?

   அ) செல்களின் சாதாரண வளர்ச்சி ( )

   ஆ) செல்கள் சமநிலையிலிருந்து அசாதாரண

   முறையில் அளவில்லாமல் வளருவது ( )

   இ) வளர்ச்சியடையாத கட்டி ( )
   ஈ) எதுவும் இல்லை ( )

4. எந்த வயது பெண்மணிக்கு அதிக அளவு மார்பகப் புற்றுநோய் வரும் வாய்ப்புள்ளது?

   அ) 11 – 20 ( )

   ஆ) 21 – 30 ( )

இ) 31 – 40 ( )

ஈ) 41 – 50 ( )

5. மார்பக புற்றுநோயை உண்டாக்கும் அதிக வாய்ப்புள்ள காரணிகள் என்னென்ன?

அ) இளம் வயதிலேயெ பூப்படைதல் ( )

ஆ) குழந்தை பிறப்பே இல்லாமலிருந்தல் ( )

இ) பரம்பரை ( )

ஈ) இவை அனைத்தும் ( )

6. தாய்மார்கள் தங்கள் குழந்தைக்கு கண்டிப்பாக எத்தனை காலம் தாய்ப்பால் கொடுக்க வேண்டும்?

அ) 1 – 3 மாதங்கள் ( )

ஆ) 1 – 6 மாதங்கள் ( )

இ) 1½ வருடங்கள் ( )

ஈ) 1½ வருடங்களுக்கு மேல் ( )

7. எந்த உணவு வகை மூலமாக மார்பகப் புற்றுநோய் அதிகம் வரும் வாய்ப்புள்ளது?

அ) கொழுப்பு நிறைந்த உணவு வகைகள் ( )

ஆ) பச்சை காய்கறிகள் அல்லது பசுமையான காய்கறிகள் ( )

இ) பழங்கள் ( )

ஈ) பச்சை காய்கறிகளும், பழங்களும் ( )

8. மார்பகப் புற்றுநோயின் தொடக்க நிலையில் வரும் அறிகுறி ஒன்று

அ) நெஞ்சு வலி ( )

ஆ) தலை வலி ( )

இ) வலியற்ற கட்டி ( )

ஈ) மூச்சு திணறல் ( )

9. மார்பகப் புற்றுநோயின் பொதுவான அறிகுறிகள் என்னென்ன

அ) வீக்கம் ( )

ஆ) மார்புக் காம்பிலிருந்து திரவம் அல்லது இரத்தம் கலந்த கசிவு ( )

இ) மார்பக சமச்சீற்ற நிலை ( )

ஈ) வீக்கம், மார்புக் காம்பிலிருந்து திரவம் அல்லது இரத்தம் கலந்த கசிவு மற்றும் மார்பக சமச்சீரற்ற நிலை ( )

10. மார்பகப் புற்றுநோயால் மார்பக காம்பில் என்னென்ன மாற்றங்கள் நிகழும்?

அ) மார்புக் காம்பிலிருந்து திரவம் அல்லது இரத்தம் கலந்த கவிவு வெளியேறுதல், உள்ளிழுந்த மார்பகக் காம்புக் குறி, மார்பக காம்பின் தோல் உறிதல் ( )

ஆ) மார்பக காம்புக்குறி உள்ளிழுத்தல் ( )

இ) மார்பக காம்பிலிருந்து திரவம் அல்லது இரத்தம் கலந்த கசிவு வெளியேறுதல் ( )

ஈ) மார்பக காம்பின் தோல் உறிதல் ( )

11. மார்பக காம்பின் தோல் உறிதல்

அ) எதுவும் செய்ய தேவையில்லை ( )

ஆ) உடனடியாக மருத்துவரை அணுக வேண்டும் ( )

இ) சுயமாக சிகிச்சை அளித்து கொள்வது ( )

ஈ) மேலே குறிப்பிட்டுள்ள எதுவும் இல்லை ( )

12. எந்த முறையில் மார்பக கட்டியை மிகவும் சிரமம் இன்றி எளிதாக கண்டுப்பிடிக்கலாம்?

அ) மார்பக சுயபரிசோதனை ( )

ஆ) எக்ஸ் - கதிர் ( )

இ) மேமோகிராபி ( )

ஈ) இரத்த பரிசோதனை ( )

13. மார்பக சுயபரிசோதனை என்றால் என்ன?

அ) மார்பக ஆய்வு ( )

ஆ) மார்பக தொட்டுணர்தல் ( )

இ) மார்பக காட்சி கவனிப்பு ( )

ஈ) மார்பக ஆய்வு, மார்பக தொட்டுணர்தல் மற்றும் மார்பக காட்சி கவனிப்பு ( )

14. பெண்கள் எந்த வயதில் இருந்து மார்பக சுயபரிசோதனையை செய்ய தொடங்க வேண்டும்?

அ) 20 ( )

ஆ) 30 ( )

இ) 40 ( )

ஈ) 50 ( )

15. மார்பக சுயபரிசோதனை செய்து கொள்ள ஏற்ற காலம்?

அ) மாதவிடாய் முடிந்து 5 – 7 நாட்கள் ( )

ஆ) மாதவிடாய் காலம் ( )

இ) மாதவிடாய்க்கு முன் 5 – 7 நாட்கள் ( )

ஈ) எந்த காலமும் செய்து கொள்ளலாம் ( )

16. மாதவிடாய் காலக்கட்டத்தில் தான் மார்பக சுயபரிசோதனை செய்ய வேண்டும் ஏன்னென்றால்

அ) மார்பகம் மென்மையாகவும், சாதாரணமாக இருக்கும் கட்டிகள் குறைந்து காணும் ( )

ஆ) நிறம் மாற்றம் இருக்கும் ( )

இ) வீக்கமாக இருக்கும் ( )

ஈ) மிகவும் எளிதாக அசையும் ( )

17. மார்பக சுயபரிசோதனை செய்து கொள்வதன் நோக்கம் என்ன?

அ) மார்பகத்தில் உண்டாகும் மாற்றங்கள் கண்டறிதல் ( )

ஆ) மார்பக புற்றுநோயை எளிமையாக கண்டறிதல் ( )

இ) ஆரம்பகட்டத்திலே புற்றுநோயை கண்டறிந்து சிகிச்சை தொடங்குதல் ( )

ஈ) இவை அனைத்தும் ( )

18. மார்பக பரிசோதனை செய்யும் போது மிகவும் கவனமாக கையாள கூடிய பகுதி

அ) அக்குள் பகுதியும், மார்பகமும் ( )

ஆ) மார்பகத்தை சுற்றி உள்ள வெளிமுனை ( )

இ) மார்பக காம்பு ( )

ஈ) முதுகு பகுதி ( )

19. கையில் உள்ள எந்த பகுதியின் மூலமாக மார்பக

சுயபரிசோதனையில் இடம் பெரும் மார்பக தொட்டுத்தெரிந்துணர்தல் செய்யப்படும்?

அ) நகம் ( )

ஆ) மணிக்கட்டு ( )

இ) விரல் துண்டு அல்லது உள்ளங்கையில் ( )

ஈ) உள்ளங்கையில் மட்டும் ( )

20. மாதவிலக்கு அடைந்த பின் எந்த காலத்தில் மார்பக சுயபரிசோதனை மேற்கொள்ள வேண்டும்

அ) வாரத்திற்கு ஒரு முறை ( )

ஆ) மாதத்திற்கு ஒரு முறை ( )

இ) 3 மாதத்திற்கு ஒரு முறை ( )

ஈ) வருடத்திற்கு ஒரு முறை ( )

21. மார்பக புற்றுநோயின் பாதிப்பை ஆய்வு செய்ய எது சிறந்த முறை?

அ) நுண்ணிய ஊசி மூலம் திசு, சதை எடுத்து பரிசோதித்தல் ( )

ஆ) நுண்ணோக்கி மூலம் திசு பரிசோதனை செய்து புற்றுநோய் உறுதி படுத்துதல் ( )

இ) மேமோகிராபி ( )

22. மார்பக புற்றுநோய்க்கு பின்பற்ற வேண்டிய சிகிச்சை முறைகள் என்னென்ன?

அ) கீமோதெரபி அல்லது வேதிய சிகிச்சை ( )

ஆ) கதிர்வீச்சு சிகிச்சை ( )

இ) அறுவை சிகிச்சை ( )

ஈ) அறுவை சிகிச்சை வேதிய சிகிச்சை

மற்றும் கதிர்வீச்சு சிகிச்சை ( )

23. கதிர்வீச்சு சிகிச்சை என்றால் என்ன?

அ) பாதிக்கப்பட்ட செல்கள் மேல்
அயனாக்கற்கதிர்ப்பு செலுத்தப்படுவது ( )

ஆ) பாதிக்கப்பட்ட செல்கள் மேல் மின்சாரம்
செலுத்தப்படுவது ( )

இ) பாதிக்கப்பட்ட செல்கள் மேல் லோசன்
செலுத்தப்படுவது ( )

ஈ) எதுவும் இல்லை ( )

24. கதிர்வீச்சு சிகிச்சை மூலமாக என்னென்ன பக்கவிளைவு ஏற்படும்?

அ) குமட்டலும், வாந்தியும் ( )

ஆ) குமட்டல், வாந்தி, பேதி, முடி உதிர்தல் ( )

இ) பேதி ( )

ஈ) முடி உதிர்தல் ( )

25. மார்பக புற்றுநோயினை தடுக்க எந்த வழியை பின்பற்ற வேண்டும்?

அ) மது அருந்துதல் ( )

ஆ) ஆக்ஸிஜனேற்ற உணவுப்பொருட்கள் ( )

இ) மாமிச உணவுகள் ( )

ஈ) எதுவும் இல்லை ( )

ANSWER KEY

Answer the key and score for the knowledge questionnaire to assess the knowledge on awareness of early detection of breast cancer:

SI:NO	ANSWER KEY	SCORE
1	(c)	1
2	(d)	1
3	(b)	1
4	(d)	1
5	(d)	1
6	(b)	1
7	(a)	1
8	(c)	1
9	(d)	1
10	(a)	1
11	(b)	1
12	(a)	1
13	(a)	1
14	(d)	1
15	(a)	1
16	(a)	1
17	(d)	1
18	(a)	1
19	(c)	1
20	(c)	1
21	(d)	1
22	(a)	1
23	(b)	1
24	(c)	1
25	(b)	1

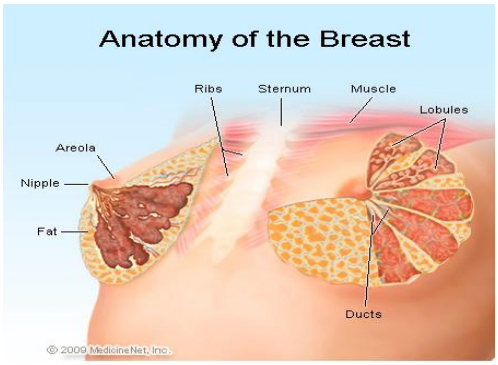
SELF INSTRUCTIONAL MODULE REGARDING ON AWARENESS OF EARLY DETECTION OF BREAST CANCER AMONG CAREGIVERS

SELF-INSTRUCTIONAL MODULE REGARDING ON AWARENESS OF EARLY DETECTION OF BREAST CANCER

INTRODUCTION:

Cancer is the uncontrolled growth of abnormal cells in the body. Cancer is one among the three leading diseases in the world and it is found that cancer of breast is the leading cancer among women.

STRUCTURE OF THE BREAST:



The structure of the breast is made up of mainly:

- 20 Lobules-milk producing glands
- Ducts-tiny tubes that carry the milk from the lobules to the nipple. The pigmented area around the nipple is “areola”.
- Stroma-fatty tissue and connective tissue, blood vessels and lymphatic vessels.

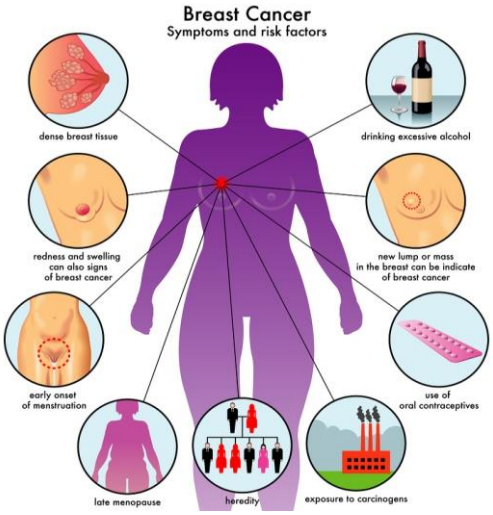
DEFINITION:

“BREAST CANCER” begins when abnormal cancerous cells in the breast grow and multiply without stopping, creating a tumor. Breast cancer usually starts in the ducts or lobules of the breast.

INCIDENCE:

For the year 2015, in India, there will be an estimated 1, 55,000 new cases of breast cancer and about 76,000 women are expected to die.

ETIOLOGY AND RISK FACTORS:

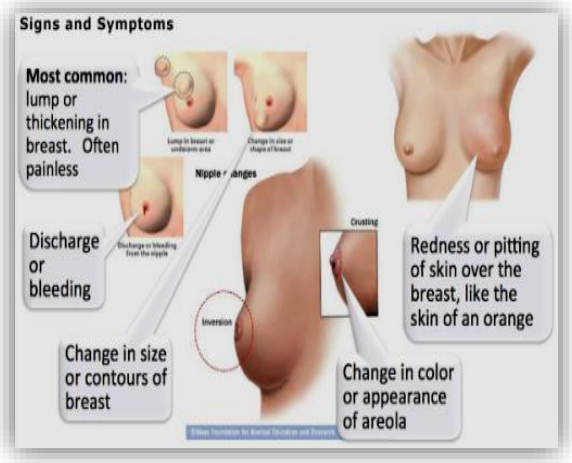


- Unknown
- Female
- Getting older
- Genetics
- A history of breast cancer
- Early menarche(before age 12)
- Late menopause(above 50years)
- First pregnancy after age 30
- Nulli- parity
- Breast lumps
- Dense breast tissue
- Obesity(post menopausal women)
- Estrogen exposure in the form of hormone replacement therapy
- High fat rich diet
- Radiation exposure
- Lack of breast feeding the baby
- Women who worked at night shift prior to a first pregnancy
- Cosmetic implants

CLINICAL MANIFESTATION:

- A lump or thickened tissue in the women's breast

- Pulled in nipple
- Dimpling of breast skin
- One of the nipple has a discharge, sometimes it may contain blood
- Redness or rash
- Changes in skin colour or texture of the breast
- Changes in breast size and shape
- Constant pain in the breast or armpit



DIAGNOSTIC STUDIES:

- **History Collection:**

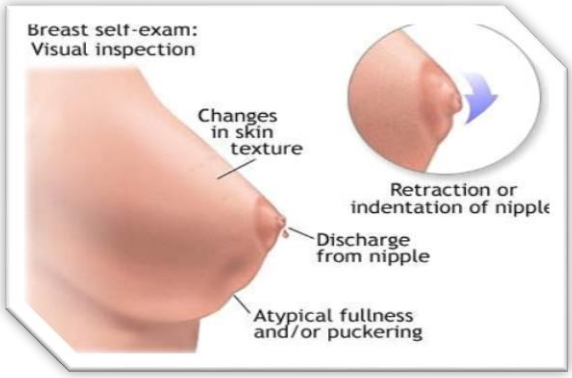
Collect the detailed history regarding any abnormalities seen in their breast and family history of breast cancer including risk factors.

- **Screening for breast cancer:**
- **Breast self examination**:

At the age of 20 years, all women should start to do the breast self examination. In this, observes the breasts for symmetry, size, shape,

skin colour, vascular patterns, dimpling, and the presence of unusual lesions. The best time to practice breast self examination is 5 to 7 days after the menstrual period.

Post menopausal women should choose the most convenient or easily remembered time such as first or last day of the month.



STEP: 1:

- Begin by looking at your breasts in the mirror with your shoulders straight and your arms on your hips.

Should look for:

- ✓ Usual size, shape and colour of the breast.
- ✓ Breasts are evenly shaped without visible distortion or swelling. If see any of the following changes, bring to your doctors attention:
- ✓ Dimpling, puckering or bulging of the skin.
- ✓ A nipple has changed position or inverted nipple.
- ✓ Redness, soreness, rash or swelling.

STEP: 2:

- Now, raise your arms and look for the same changes.

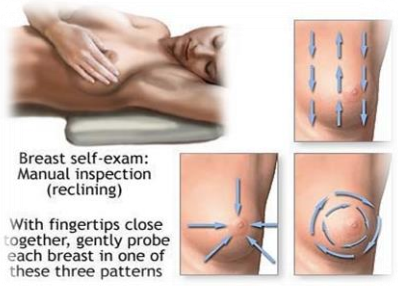
STEP: 3:

- While you're at the mirror, look for any signs of fluid coming out of one or both nipples (this could be a watery, milky or yellow fluid or blood).

STEP: 4:

- Feel your breast while lying down, using right hand to feel your left breast and then your left hand to feel your right breast.
- Use a firm pressure, smooth touch with the first few fingers flat and together.
- Use a circular motion, about the size of a quarter.

- Cover the entire breast from top to bottom, side to side from your collar bone to the top of your abdomen, and from your armpit to your cleanage.
- Cover the whole breast and begin at the nipple, moving in larger and larger circles until reach the outer edge of the breast.



STEP: 5:

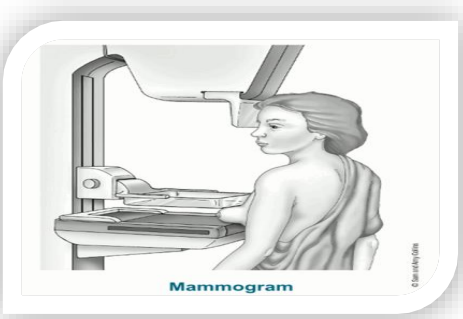
- Finally feel your breasts while you are standing or sitting. Many women find that the easiest way to feel their breasts is when their skin is wet and slippery, so they like to do this under the shower. Cover the entire breast, using the same hand movements.

- **Examination by the doctor/physician:**

  Physical examination of the breast must perform by the physician or health care provider, can offer an appropriate likelihood that a lump is cancer and may also detect simple cyst.

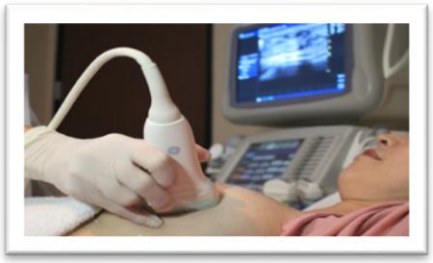
- **Mammogram:**

  This method is used to visualize the internal structures of the breast using x-rays. This simple, safe procedure can detect tumors and cysts that be cannot be felt by palpation.



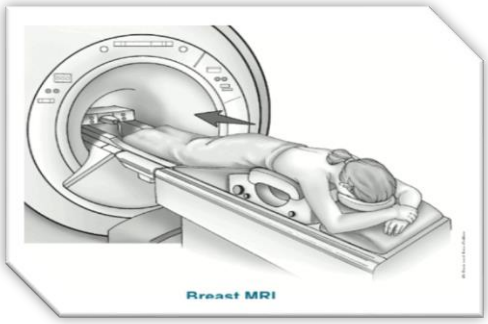
- **Breast Ultrasound:**

  It is another diagnostic procedure that can be used to differentiate a benign tumor from a malignant tumor.Unlike a mammogram, an ultrasound will not detect microcalcifications.



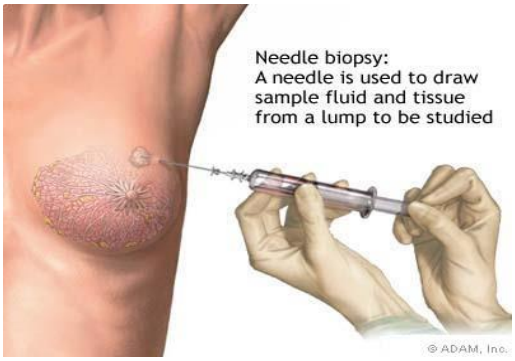
- **Magnetic resonance imaging and CT scan of the chest:**

  This can be used as a more sensitive non-specific screening tool for women at high risk for breast cancer, or in whom whose mammography or ultrasound is suspicious for malignancy.



- **Fine needle aspiration biopsy(FNAC):**

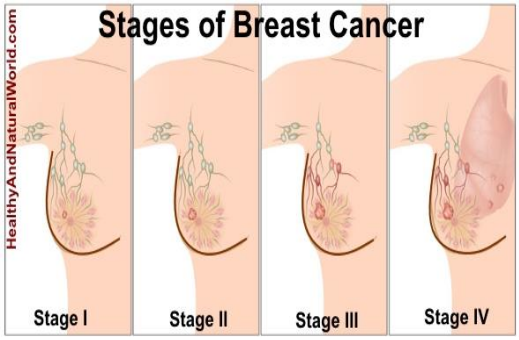
  FNAC is performed by inserting a needle into the lesion and aspirating cellular fluid into a syringe.



- **Histopathological examination:**

  It refers to the microscopic examination of tissues in order to study the manifestations of disease.

STAGES OF BREAST CANCER:

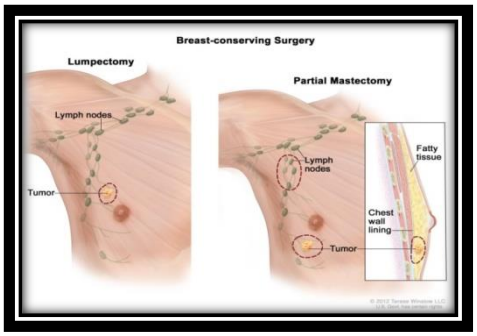


MANAGEMENT:

The management of breast cancer depends on various factors, including the stages of cancer and the age of the patient. Breast cancer is usually treated with surgery, which may be followed by chemotherapy or radiation therapy, or both.

- **Surgical therapy**:

  Breast conservation surgery with radiation therapy and modified radical mastectomy with or without reconstruction are currently the most common options for respectable breast cancer.



Breast cancer is usually treated with surgery, which may be followed by chemotherapy or radiation therapy, or both.

- Modified radical mastectomy
- Lympectomy
- Tissue expansion and breast implants

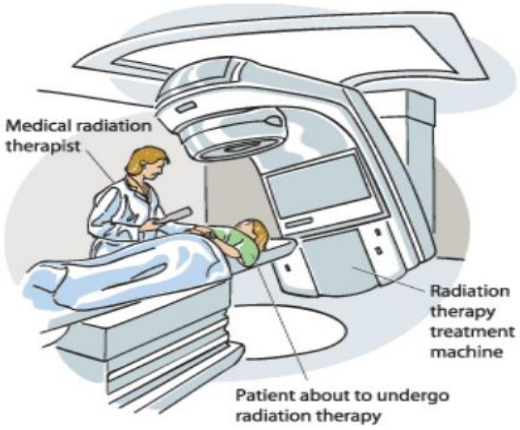
- Musculocutaneous flap procedure
- Quadrantectomy

❖ **Chemotherapy:**

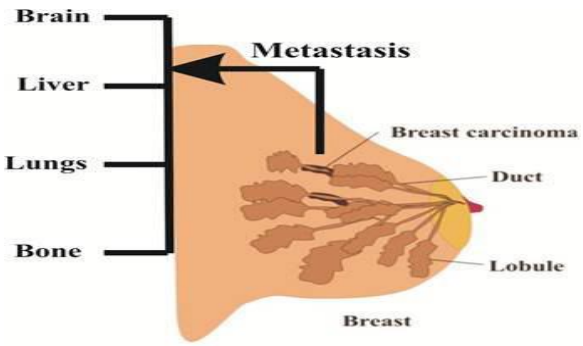
Chemotherapy refers to the use of cytotoxic drugs to destroy the cancer cells.

❖ **Radiation therapy**:

Radiation is the emission and distribution of energy through space or material medium. Delivery of high-energy beams, when absorbed into tissue, produces ionization of atomic particles to shrink tumors and kill cancer cells.



COMPLICATIONS:



Metastatic breast cancer

- Local recurrence(skin)
- Regional recurrence(lymph nodes in axilla)
- Distant metastasis(away or spread away from axilla to other parts of the body)

PREVENTIVE MEASURES:

Some lifestyle changes can help significantly reduce a woman's risk of developing breast cancer.

- **Physical exercise:**

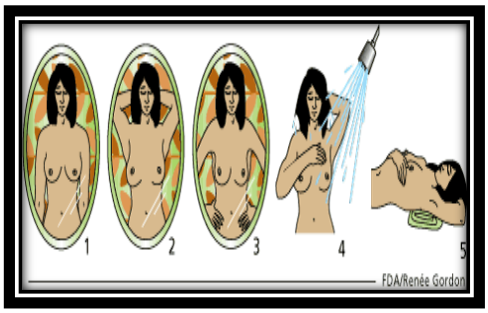
  Exercising has been shown to reduce a woman's risk of developing breast cancer.

- **Healthy well-balanced diet:**

  A healthy, well balanced diet may reduce their risk of developing breast cancer.

❖ **Breast cancer screening:**

Patient should discuss with the doctor when to start breast cancer screening exams and tests.



❖ **Breast feeding the baby for at least 6 months:**

Breast feeding for at least 6months reduces the risk of early breast cancer.

❖ **Post menopausal hormone therapy:**

Limiting hormone therapy may help to reduce the risk of developing breast cancer.

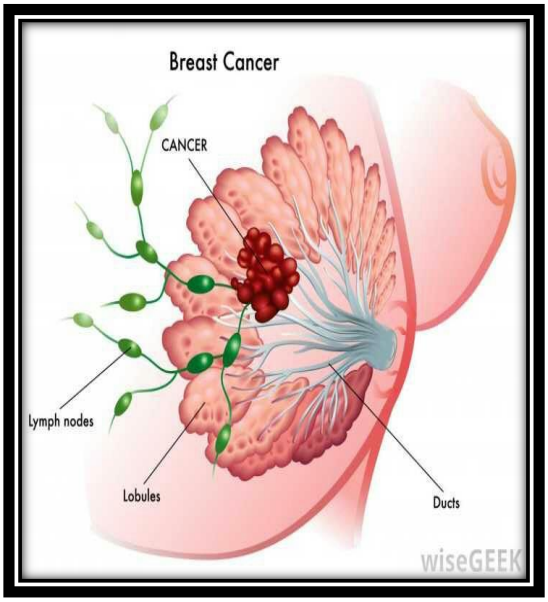
❖ **Healthy body weight:**

Women who have a healthy body weight have a considerably lower chance of developing breast cancer compared to obese and overweight females.

CONCLUSION:

"Prevention is better than cure". So, we have to do this breast self examination monthly to prevent ourselves from getting breast cancer by means of early detection of signs and symptoms.

மார்பக புற்றுநோய் ஆரம்ப கண்டறிதல் குறித்த விழிப்புணர்வு



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மார்பக புற்றுநோய் ஆரம்ப கண்டறிதல் குறித்த விழிப்புணர்வு

முன்னுரை:-

மக்கள் அதிக அச்சத்துடன் உணரும் நோய்களில் புற்றுநோய் முதலிடத்தை பிடிக்கிறது. நமது உடலில் உள்ள செல்கள் சமநிலையிலிருந்து அசாதாரண முறையில் அளவில்லாமல் வளருவதால் ஏற்படும் பாதிப்பே **"புற்றுநோய்"** ஆகும்.

இந்நோய் நமது உடலில் எந்த பாகத்தில் வேண்டுமானாலும் வரலாம். இவை வருவதற்கு பல்வேறு வெளி மற்றும் உன்காரணங்கள் இருக்கின்றன.

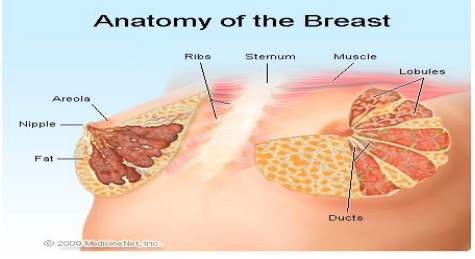
"நோய்நாடி நோய்முதல்நாடி அதுதணிக்கும் வாய்நாடி வாய்ப்பச் செயல்".

-குறள்

இவற்றில் வெளிக்காரணிகளை கட்டுப்படுத்துவதன் மூலம் புற்றுநோய் உருவாகுவதை பெரும்பான்னமையாக தடுக்க முடியும்.மார்பகத்தில் உருவாகும் புற்றுநோயை மார்பக புற்றுநோய் எனப்படும். ஏந்த ஒரு நோயை போலவும், மார்பக புற்றுநோயை ஆரம்ப நிலையிலேயே கண்டுபிடித்துவிட்டால், ஒருவரை இந்நோயில் இருந்து குணப்படுத்தும் வாய்ப்புகள் அதிகம்.

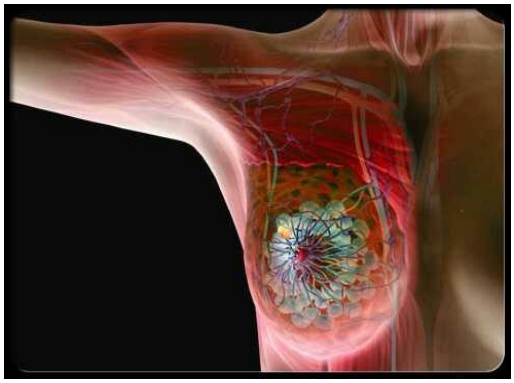
மார்பக அமைப்பு:-

- பெண்ணின் மார்பகத்தில் மொத்தம் 20 லோபியூக்கள் இருக்கின்றன. அவை **"பால் உற்பத்தி"** செய்யும் சுரப்பிகள் ஆகும்.
- பெண்ணின் மார்பகத்தில் குழாய்கள் உள்ளன. அவை லோபியூக்களில் சுரக்கும் பாலை மார்பக காம்பிற்கு எடுத்து செல்ல உதவுகிறது. மார்பக காம்பை சுற்றி கருவளையப் பகுதி உள்ளது. ஆதனை **"மார்பக சிற்றிடம்"** என்று அழைக்கப்படுகிறது.
- **"இழையவலை"** – பெண்ணின் மார்பகத்தில் உள்ள இழையவலையில் கொழுப்பு திசுக்கள், இணைப்பு திசு, இரத்த நாளங்கள் மற்றும் நிணநீர் நாளங்கள் உள்ளன.



மார்பக புற்றுநோய் - விளக்கம்:-

மார்பகத்தில் உள்ள திசுக்களில், முக்கியமா மார்புக் காம்பிற்கு பாலை எடுத்து செல்லும் குழாய் மற்றும் பால் சுரப்பிகளில் உள்ள திசுக்களில் ஏற்படும் புற்றுநோயே **"மார்பக புற்றுநோய்"** ஆகும்.



நிகழ்வு:-

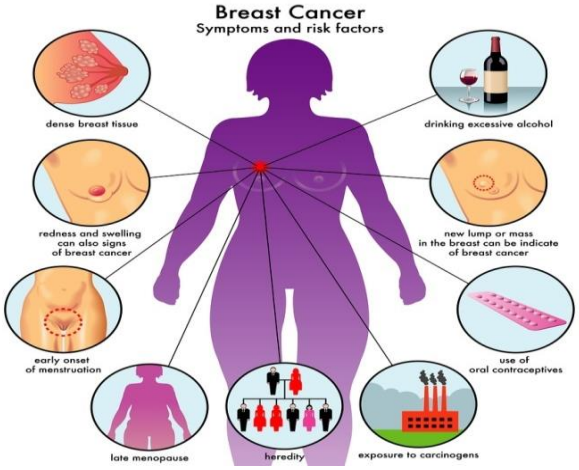
- உலக அளவில் வருடத்திற்கு 8லிருந்து 10 இலட்சம் பேர் இந்த நோய்க்கு ஆளாகிறார்கள்.
- 2020 ஆம் ஆண்டில் உலகளவில் மற்றும் இந்தியாவில் மார்பக புற்றுநோயின் நிலை – ஆண்டிற்கு 2,50,000 பெண்கள் பாதிக்கப்படக் கூடும்.
- நோய் பாதிப்பில் 70மூ இந்தியா போன்ற வளரும் நாடுகளில் இருக்கும்.
- இந்தியாவில் 22 பேர்களில ஒருவர் பாதிக்கப்படக் கூடும்.
- அமெரிக்காவில் எட்டில் ஒருவர் பாதிக்கப்படக் கூடும்.

மார்பக புற்றுநோயை ஏற்படுத்தும் காரணிகள்:-

மிக அதிக வாய்ப்புள்ள காரணிகள்:-

- மற்றொரு மார்பகத்தில் ஏற்கனவே புற்றுநோய் வந்திருத்தல்
- பரம்பரை வழியாக மார்பக புற்றுநோய் வந்திருத்தல்
- நீண்ட நாட்களாக மார்பகப் பகுதியில் ஆறாத புண்

அதிக வாய்ப்புள்ளகாரணிகள்:-

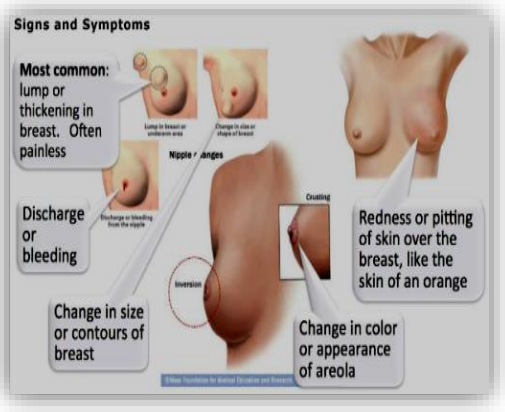


- பெண்கள்
- அதிகவயது
- இளம் வயதிலேயே பூப்படைதல் (12 வயதிற்குள்)
- ஆதிக வயதிற்கு மேல் மாதவிலக்கு தொடர்தல் (50 வயதிற்கும் மேல்)
- முதல் பிரசவம் 30 வயது வரையில் ஏற்படாமல் இருத்தல்
- குழந்தை பிறப்பே இல்லாமலிருத்தல்
- உடல் பருமன் (மாதவிடாய் நின்ற பின்)
- அதிக அளவு கருத்தடை மாத்திரை உடகொள்ளுதல்
- அடர்ந்த மார்பக திசுக்கள்
- அதிக அளவு கொழுப்பு சத்துள்ள உணவை உட்கொள்ளுதல்
- மார்பக பகுதியில் வேறு ஏதேனும் கராணமாக அடிக்கடி கதிர்வீச்சு சிகிச்சை அளிக்கப்பட்டு இருத்தல்

- குழந்தைக்கு தாய்பால் கொடுக்காமல் இருத்தல்
- சுறுசுறுப்பாக வேலை செய்யாமல் இருத்தல்

மார்பக புற்றுநோயின் அறிகுறிகள்:-

- தோல் கடினமாக இருத்தல்
- மார்பக காம்பில் உள்ளிழுத்து அல்லது அழிந்த நிலை
- மார்பக பகுதியில் புள்ளி விழுதல், குழி ஏற்படுதல் மார்பகத்தில் கட்டி ஏற்படுதல்
- மார்பு காம்பிலிருந்து திரவம் அல்லது இரத்தம் கலந்த கசிவு ஏற்படுதல்
- சிவந்த நிறம்
- தோலில் அரிப்பு
- மார்பக சமச்சீரற்ற நிலை ஆரஞ்சு பழத்தோல் போன்ற தோற்றம்
- தோல் அமுங்கிய அல்லது சுருங்கிய நிலை
- மார்பக இரத்தக்குழாய் புடைத்து காணப்படுதல்
- மார்பக உள்பகுதியில் காணப்படும் கட்டி



மார்பக புற்றுநோயை கண்டறியும் முறைகள்:-

வரலாறு தொகுப்பு:-

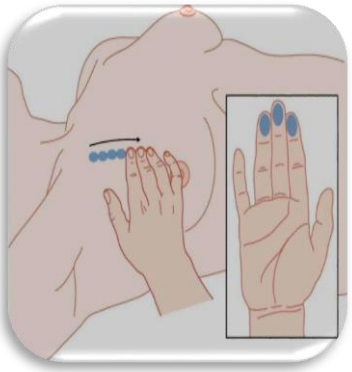
மார்பகத்தில் ஏதேனும் அசாதாரண மாற்றங்கள் ஏற்பட்டுள்ளது என்பதை அறிய வேண்டும். குடும்பத்தில் பரம்பரை ரீதியாக யாரேனும் பாதிப்பு அடைந்துள்ளரா என்பதையும் கேட்டு அறிய வேண்டும். பின்பு, அதிக வாய்ப்புகளை காரணிகளை பற்றி அறிய வேண்டும்.

மார்பக திரையிடல் அல்லது மார்பக ஸ்கிரீனிங்:-

மார்பக புற்றுநோய் கண்டறிதல் என்பது ஆரோக்கியமான பெண்ணுக்கு முன்னதாகவே மார்பக புற்றுநோய் இருக்கிறதா என்று கண்டறியும் முயற்சியாகும். முன்னதாகவே கண்டறிவதால் எளிதாக குணமாக்க முடியும் என்று நம்பப்படுகிறது.பல கண்டறிதல் சோதனைகள் பயன்படுத்தப்படுகின்றன.

மார்பக சுய பரிசோதனை:-

- 20 வயதின் தொடக்கத்தில் இருந்தே பெண்கள் அனைவரும் மார்பக சுயபரிசோதனையை கண்டிப்பாக செய்ய தொடங்க வேண்டும்.
- அசாதாரண மாற்றங்கள் ஏற்படுகிறதா என்று கண்டறிய முடியும்
- மார்பக சுயபரிசோதனையை மாதவிடாய் முடிந்து 5-7 நாட்களுக்குள் செய்து கொள்ள வேண்டும்
- மாதவிடாய் நின்ற பெண்கள் மாதம் முதல் அல்லது கடைசி நாள் ஒன்றை தேர்த்தெடுத்து மார்பக சுயபரிசோதனை மேற்கொள்ள வேண்டும்.
- இந்த மிக எளிமையான, அதிக முக்கியத்துவம் வாய்ந்த சுயபரிசோதனையானது மார்பகபுற்றுநோயை ஆரம்ப நிலையிலேயே அறிந்து கொள்ள உதவும் மார்பக சுயபரிசோதனை மேற்கொள்ளும் போது கையின் நடு மூன்று விரல்களின் மேல் மற்றும் நடுபகுதியையும், உள்ளங்கையையும்,பெருவிரல்களையும் பயன்படுத்தவும்.



படி: 1:

- ✓ கண்ணாடி முன் நின்று உங்கள் கைகளை இடுப்பின் பக்கவாட்டில் வைத்துக் கொண்டு மார்பகங்களை தனிதனியாக நோக்கவும்.

படி: 2

- ✓ பின்னர் கைகளை தலைக்கு மேலே தூக்கிய நிலையில் மார்பகங்களை பார்த்தால் அளவிலும், வடிவத்திலும் ஒரே மாதிரியாக இருக்காது. இந்த பொது நிலை குறித்து கவலை கொள்ள வேண்டாம்.
- ✓ வடிவத்தில் வடிவ விளிம்பில் வீக்கம் அல்லது மாற்றம் ஏதாவது உள்ளதா என பார்க்க வேண்டும்.
- ✓ தோலில் மரு, குழி அல்லது சுருக்கம் மார்பக காம்பு தோற்றத்தில் ஏதாவது மாறுதல் உள்ளதா என்பதை உற்று நோக்கவும்.

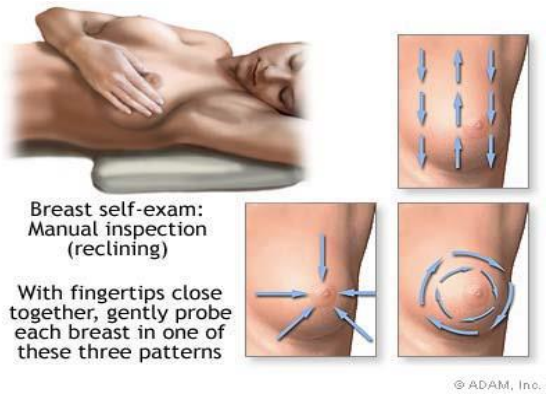
படி: 3

- ✓ உங்கள் அக்குள் பகுதியில் தொடங்கி மார்பகங்களை நான்கு பகுதிகளாக ஏதேனும் திரவமோ அல்லது இரத்தமோ வெளிவருகின்றதா என்பதை உறுதிப்படுத்திக் கொள்ளவும்.

- ✓ கண்ணாடி முன் நின்று உங்கள் கைகளை தலைக்கு மேலே தூக்கிய நிலையில், மார்பக காம்பு இரண்டினையும் மென்மையாக அழுத்தி திரவம் அதாவது இரத்தம் நீர் அல்லது இரத்தம் கலந்த திரவம் வெளிவருகின்றதா என்பதை உறுதிப்படுத்திக் கொள்ளவும்.

படி: 4

- ✓ கீழே படுத்த நிலையில் இரு மார்பகங்களையும் பரிசோதிக்கவும் வலம்புற மார்பகத்தைப் பரிசோதிக்க உங்கள் வலது தோலுக்குக் கீழே தலையனையை வைத்து உங்களின் தலைக்கு கீழே இருக்குமாறு வைத்துக் கொள்ளவும். நீங்கள் நின்று கொண்டு மார்பகத்தை சுயபரிசோதனை செய்து கொண்டதை போலவே வலது மற்றும் இடது மார்பகப் பரிசோதனையை மேற்கொள்ளுங்கள்.
- ✓ மார்பகம் அல்லது அக்குள் பகுதியில் கட்டிகலோ அல்லது வீக்கம் ஏதாவது இருக்கிறதா என்பதை உறுதி செய்து கொள்ளவும்
- ✓ உங்கள் அக்குள் பகுதியில் தொடங்கி மார்பகங்களை நான்கு பகுதிகளாக பிரித்து முழுமையாக தடவிப் பார்க்கவும்
- ✓ வட்டமடிப்பதைப் போன்று மார்பை சுற்றியும் பின்னர் மேலும் கீழுமாகவும் தடவிப் பார்க்கவும். மார்பக காம்பு உட்பட மார்பக பகுதியின் அனைத்து பகுதியும் உங்களுக்கு முழுமையாக தடவி பரிசோதிக்கவும்.



படி: 5

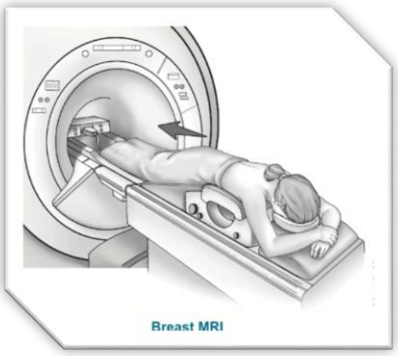
- ✓ குளியலறையில் சவரில் முன் நின்று இரு மார்பகங்களையும் பரிசோதிக்கவும். இவ்வாறு, செய்வதால் தோலில் உள்ள ஈரப்பதத்தினால் மிகவும் எளிமையாகவும் பரிசோதனை செய்ய முடியும். மார்பகம் அல்லது அக்குள் பகுதியில் கட்டிகளோ அல்லது வீக்கம் ஏதாவது இருக்கிறதா என்பதை உறுதி செய்து கொள்ளலாம்.
- ✓ வட்டமடிப்பதைப் போன்று மார்பை சுற்றியும் பின்னர் மேலும் கீழுமாகவும் தடவிப் பார்க்கவும். மார்பக காம்பு உட்பட மார்பக பகுதியின் அனைத்து பகுதியையும் முழுமையாக தடவி பரிசோதிக்கவும்.

- ***மருத்துவமனையில் மேற்கொள்ளப்படும் மார்பக பரிசோதனை:-***

- ✓ இப்பரிசோதனை, முறையாக பயிற்சி பெற்ற பெண் மருத்துவர் மற்றும் பெண் செவிலியர்கள் மூலமாகவே செய்யப்படுகிறது.
- ✓ இப்பரிசோதனை முறை மிக எளிதானது வலியில்லாதது மற்றும் உடனேயே ஆய்வு முடிவுகளை தெரிந்துக் கொள்ள கூடியது.
- ✓ இப்பரிசோதனையில் சாதாரண மற்றும் புற்றுநோய் தாக்கம் இல்லை என்று கண்டறியப்பட்ட பெண்களுக்கு, மார்பக சுயபரிசோதனை செய்துகொள்ளும் முறை கற்பிக்கப்பட்டு இரண்டு வருடங்கள் கழித்து மீண்டும் பரிசோதனைக்கு வருமாறு வலியுறுத்தப்படுவர்.

- ✓ 20 முதல் 39 வயதுக்குள் இருக்கும் சாதாரண பெண்கள் முன்று ஆண்டுகளுக்கு ஒரு முறை இப்பரிசோதனையை செய்து கொள்ள வேண்டும்.
- ✓ 50 வயதுக்கு மேல் இருக்கும் சாதாரண பெண்கள் ஆண்டுக்கு ஒரு முறை இப்பரிசோதனையை செய்து கொள்ள வேண்டும்.

➢ ***மேமோகிராம்:-***



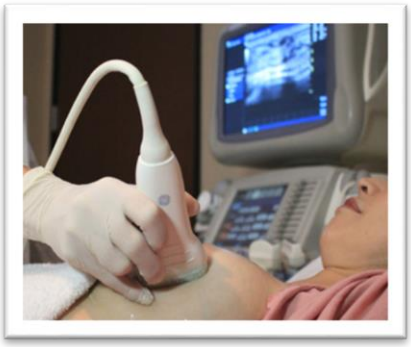
✓ மார்பகத்தை எக்ஸ்ரே கதிர்மூலம் எடுக்கப்படும் ஒரு விஷேசமான படமே மேமோகிராம் எனப்படும். இரு தகடுகளுக்கு இடையில் மார்பகம் தட்டையாக இருக்கம்படி வைத்து படம் எடுக்கப்படும். பொதுவாக இரண்டும் ஒப்பிட்டுப்பார்க்கப்படும்

✓ மார்பக பரிசோதனையில் புற்றுநோய் ஏற்படுவதற்கான அசாதாரண மாற்றங்கள் மற்றும் அதிக வாய்ப்புள்ள காரணிகள் இருப்பின் மேமோகிராம் பரிசோதனை பரிந்துரைக்கப்படும்.

✓ 40 முதல் 49 வயதுக்குள் இருக்கும் சாதாரண பெண்கள் இரண்டாண்டுகளுக்கு ஒரு முறை மேமோகிராம் செய்து கொள்ள வேண்டும்.

✓ 50 வயதுக்கு மேல் இருக்கும் சாதாரண பெண்கள் ஆண்டுக்கு ஒரு முறை மேமோகிராம் செய்து கொள்ள வேண்டும்.

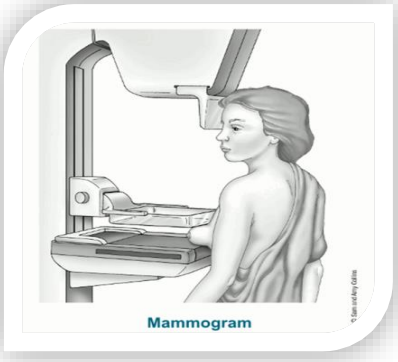
➢ ***மார்பக ஸ்கேன் பரிசோதனை:-***



✓ இதனை சோனோ மேமோகிராம் என்றும் கூறுவர். உடலுக்குள் ஒலி அலைகளை அனுப்புவார்கள் உடம்பின் உள்ளுறுப்புகளால் இந்த ஒலி அலைகள் தடுக்கப்படும் போது ஒருவித பிம்பத்தை கம்பியூட்டர் திரையில் ஏற்படுத்தும். இதை செய்யும்போது எந்த வலியும் இருக்காது. இதில் எந்த கதிர்வீச்சும் கிடையாது.

✓ மார்பகத்தில் காணப்படும் கட்டிகளின் அளவு தன்மை, வளரும் வேகம் ஆகிய அனைத்தையும் துல்லியமாக இப்பரிசோதனையில் தெரிந்துக் கொள்ளலாம்.

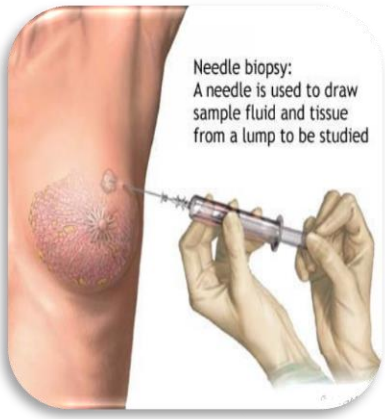
➢ ***காந்த அதிர்வு அலை வரைவு அல்லது (மாக்னடிக் ரெசொனன்ஸ் படமெடுத்தல்):-***



✓ மேமோகிராம் அல்லது மார்பக ஸ்கேன் பரிசோதனையின் மூலமாக புற்றுநோய் இருப்பதை அறிந்தால், உடனடியாக மாக்னடிக் ரெகொனன்ஸ் படமெடுத்தல் மூலமாக மார்பக புற்றுநோயை உறுதி செய்து கொள்ள வேண்டும்.

- ***நுண்ணிய ஊசி மூலம் திசு அல்லது சதை எடுத்து பரிசோதனை சதை பரிசோதனை அல்லது மார்பு காம்பில் கசிவு:***

✓ மருத்துவமனையில் மேற்கொள்ளப்படும் மார்பக பரிசோதனையில் புற்றுநோய் அல்லாத அசாதாரண மாற்றங்கள் இருப்பின் நுண்ணிய ஊசி மூலம் திசு அல்லது சதை எடுத்து பரிசோதித்தல் அல்லது சதை பரிசோதனை மார்பு காம்பில் கசிவு நீர் பரிசோதனை ஆகிய பரிசோதனைகளில் ஏதேனும் ஒன்றிற்கு பரிந்துரைக்கப்படுவர்.



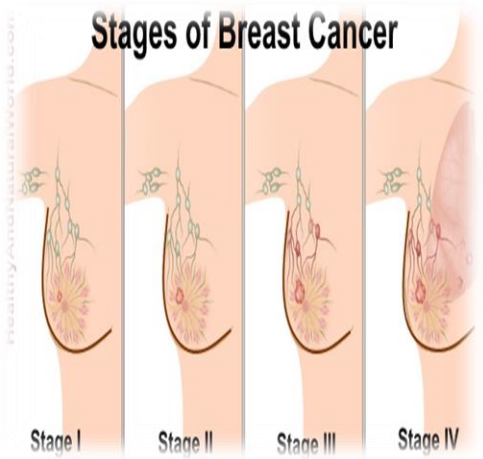
✓ அவ்வாறு எடுக்கப்பட்ட கசிவு மற்றும் திசு அருகாமையில் உள்ள மருத்துவமனை நோயியல துறைக்கு நுண்ணோக்கி மூலம் உறுதி செய்வதற்கு அனுப்பப்படும்.

➢ ***நுண்ணோக்கி மூலம் திசு பரிசோதனை செய்து புற்றுநோயை உறுதிப்படுத்துதல்:***

✓ எடுக்கப்பட்ட கசிவு மற்றும் திசுக்கள் பரிசோதனைக்கு மருத்துவமனைகளில் உள்ள நோய் குறியியல் துறைக்கு அனுப்பப்படும். இப்பரிசோதனை ஆய்வின் முடிவை பெற 15 நாள் 45 நாட்கள் வரை ஆகலாம்.

மார்பக புற்றுநோய் நிலைகள்:-

மார்பக சுய பரிசோதனை செய்யும் போது, கண்டுப்பிடிக்கப்படும் கட்டிகளின் அளவு.



- ***ஒரு நெல்லிகாய் அளவு →1செ.மீ***
- ***ஒரு பாதாம் பருப்பு அளவு →2 செ.மீ***
- ***ஒரு ஸ்ட்ராபெர்ரி பழ அளவு →3 செ.மீ***
- ***ஒரு எலுமிச்சை பழ அளவு →5 செ.மீ***

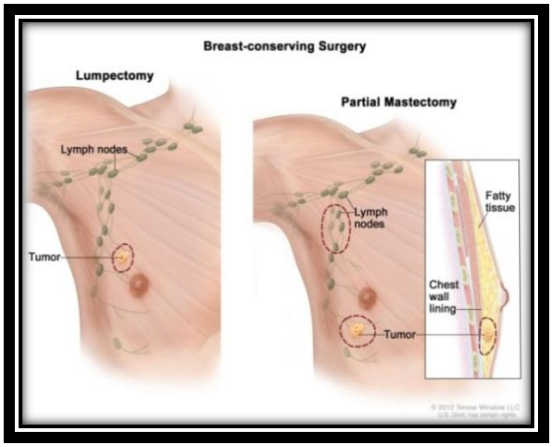
மார்பக புற்றுநோய் நுண்ணோக்கி மூலம் உறுதி செய்யப்பட்டபின் அதன் நிலை வகுக்கப்படும்.

சிகிச்சை முறைகள்:-

மார்பக புற்றுநோயானது முதலில், அறுவை சிகிச்சை மூலமாகவும் பின்னர் மருந்துகள், கதிரியக்கம் அல்லது இரண்டினாலும் சிகிச்சையளிக்கப்படுகிறது.

- ***அறுவை சிகிச்சை:-***

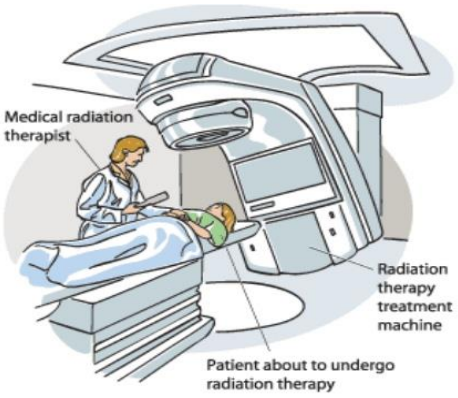
➢ திருத்தப்பட்ட ரேடிகல் மாஸ்டெக்டோமி
➢ லம்பக்டமி
➢ திசு விரிவாக்கம் மற்றும் மார்பக மாற்று சிகிச்சை
➢ மஸ்குலோகுடேனியஸ் ∴ப்ளாப் செயல்முறை
➢ குவாட்ரன்டெக்டமி



❖ ***கீமோதெரபி ∴ வேதிய சிகிச்சை:-***

அறுவை சிகிச்சை முடிந்த பின், மருந்துகளின் மூலமாக புற்றுநோயை உற்பத்தி செய்யும் செல்களை அழித்தலே **"வேதிய சிகிச்சை"** எனப்படும்.

❖ ***கதிர்வீச்சு சிகிச்சை:***

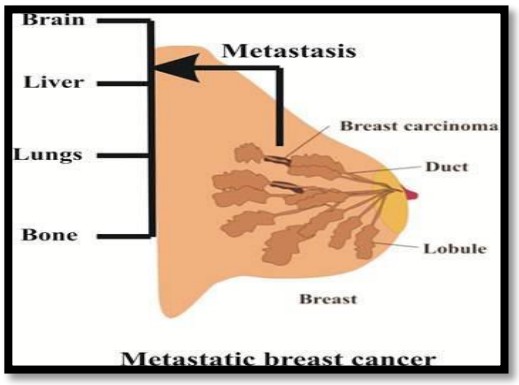


"கதிர்வீச்சு சிகிச்சை" என்பது பாதிக்கப்பட்ட செல்கள் மேல் அயனாக்கற்கதிர்ப்பு செலுத்தப்படுவது.

கதிர்வீச்சு சிகிச்சை மற்றும் வேதிய சிகிச்சை மூலமாகவும் குமட்டல், வாந்தி, பேதி, முடி உதிர்தல் போன்ற பக்கவிளைவுகள் ஏற்படும்.

மார்பக புற்றுநோயினால் உண்டாகும் விளைவுகள்:

சில நேரங்களில் மார்பக புற்றுநோய் எலும்பு; கல்லீரல் ; நுரையீரல் மற்றும் மூளை போன்ற பாகங்களுக்கு பரவும்.



மார்பக புற்றுநோயை வராமல் தடுக்கும் முறை:-

பரிந்துரைக்கப்பட்ட வாழ்க்கை முறை மாற்றங்கள்.

❖ ***உடற்பயிற்சி:-***

- ✓ வீட்டு வேலைகளில் ஈடுபடலாம்
- ✓ தினமும் அரைமணி நேரம் உடற்பயிற்சி செய்ய வேண்டும் (மெதுவாக உடற்பயிற்சி செய்யும் நேரத்தை அதிகப்படுத்தலாம்)

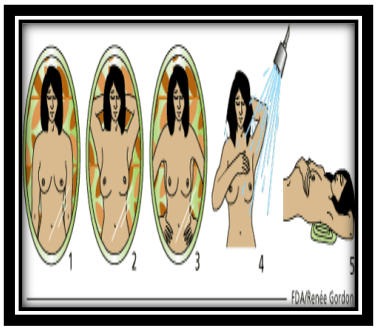
❖ ***ஆரோக்கியமான சரிவிகித உணவு:-***

- ✓ ஆரோக்கியமான சரிவிகித உணவை உட்கொள்ள வேண்டும்.
- ✓ அதிக கொழுப்புள்ள உணவை தவிர்க்க வேண்டும். பச்சை காய்கறிகளும், பழங்களும் உண்ண வேண்டும்.

❖ ***மார்பக சுயபரிசோதனை:-***

✓ மார்பக சுய பரிசோதனை மேற் கொள்வதால் மார்பக புற்றுநோய் வரும் அபாயத்தை தடுக்க வேண்டும்.

✓ இந்த மிக எளிமையான, அதிக முக்கியத்துவம் வாய்ந்த சுயபரிசோதனையானது மார்பகபுற்றுநோயை ஆரம்ப நிலையிலேயே அறிந்து கொள்ள உதவும் மார்பக சுயபரிசோதனை மேற்கொள்ளும் போது கையின் நடு மூன்று விரல்களின் மேல் மற்றும் நடுபகுதியையும், உள்ளங்கையையும், பெருவிரல்களையும் பயன்படுத்தவும்.



✓ இப்பரிசோதனை, முறையாக பயிற்சி பெற்ற பெண் மருத்துவர் மற்றும் பெண் செவிலியர்கள் மூலமாகவே செய்யப்படுகிறது.

❖ ***குறைந்தது 6 மாதத்திற்கு குழந்தைக்கு தாய்ப்பால் கொடுத்தல்:-***

✓ குழந்தை பிறந்த முதல் 6 மாதத்திற்காவது கட்டாயமாக தாய்பால்கொடுக்க வேண்டும்.

❖ ***மாதவிடாய் நின்ற பின் அளவாக ஹார்மோன் சிகிச்சை எடுத்து கொள்ளுதல்:-***

✓ ஹார்மோன் சிகிச்சையை குறைத்து கொள்ள வேண்டும்.

❖ **ஆரோக்கியமான உடல் எடை:-**

✓ வளமான வாழ்வை மேற்கொள்வதற்கு ஆரோக்கியமான உடல் எடையை கடைப்பிடிக்க வேண்டும்.

✓ கொழுப்பு மற்றும் எண்ணெய் நிறைந்த உணவு வகைகளை தவிர்க்க வேண்டும்.

முடிவுரை:-

"வரும் முன் காப்போம்" என்பதை மனதில் நிறுத்தி கொண்டு, ஒவ்வொரு மாதமும் கட்டாயமாக மார்பக சுய பரிசோதனையை நாம் அனைவரும் மேற்கொண்டு மார்பக புற்றுநோயை ஆரம்பத்திலே வராமல் தடுப்போம்.

Date: 23.07.2015

ETHICAL COMMITTEE

The following members of the ethics committee were present at the meeting held on 23.07.2015 at 2.30 pm in RASS Academy College of Nursing,Poovanthi.

CHAIR PERSON

1. Dr.Muthuselvam, B.Sc, M.B.B.S, M.S
   Professor of Surgery (Retired)
   Chief Surgical Consultant – Health Net Hospital, Madurai.

DEPUTY CHAIRMAN

2. DR.PROF.S.RAJINA RANI, M.Sc(N), Ph.D
   Principal, RASS Academy College of Nursing, Sivagangai – 630611

MEMBER SECRETARY

3. PROF.H.UMMUL HAPIPA, M.Sc(N)
   Vice Principal, RASS Academy College of Nursing, Sivagangai – 630611

MEMBERS

4. PROF.M.MALARVIZHI, M.Sc(N)
   HOD, Child Health Nursing,
   RASS Academy College of Nursing, Sivagangai – 630611

5. MRS.T.KARTHIHA, M.Sc(N)
   HOD, Community Health Nursing,
   RASS Academy College of Nursing, Sivagangai – 630611

6. MRS.M.VISALATCHI, M.Sc(N)
   HOD, Medical Surgical Nursing,
   RASS Academy College of Nursing, Sivagangai – 630611

RESOLUTION – 1/2016

It is resolved to accept Ms.C.DEVIKA to conduct an experimental study to assess the effectiveness of self-instructional module on awareness of early detection of breast cancer among caregivers at selected hospital in Madurai.

The institutional Ethics Committee expects to be informed about the progress of the study. Any changes in the protocol, patient information and asks to be provided a copy of the final report.

Yours Sincerely,

Chair Person
Ethics Committee
Dr. P. MUTHUSELVAM
BSc.,MBBS.,M.S.,FRCH.,[London]
Reg. No: 20464

Yours Sincerely,

Deputy Chairman
Ethics Committee
PRINCIPAL
RASS ACADEMY COLLEGE
OF NURSING
POOVANTHI - 630 311

APPENDIX IV

LETTER SEEKING PERMISSION TO CONDUCT THE STUDY

5th Dec 2015

From

Mrs.C.Devika,
M.Sc(N) II year Student,
RASS Academy College of Nursing,
Poovanthi, Sivagangai District.

To

The Managing Director,
Guru Hospital,
4/120f Pandikovil Ring road,
Madurai - 625107

Respected Sir/Madam,

Sub: Permission to collect data among the caregivers-Reg

I am Mrs.C.Devika, doing M.Sc(Nursing) in RASS Academy College of Nursing, Poovanthi, Sivagangai District, affiliated to the Tamilnadu Dr.MGR.Medical University, Chennai. As part of my curriculum, I am conducting a research study on the topic:

"A study to assess the effectiveness of Self – Instructional Module on awareness of early detection of breast cancer among caregivers in selected hospitals at Madurai District"

The purpose of this study is to give awareness among the caregivers and make them to understand the techniques of Breast Self-Examination. I request you to grant permission to undergo data collection in your esteemed hospital.

Thanking you

Forwarded

PRINCIPAL
RASS ACADEMY COLLEGE
OF NURSING
POOVANTHI - 630 316

Yours Faithfully,

C. Devika

Dr. S.G. BALAMURUGAN, M.S., M.Ch.,
(Surgical Oncologist)
Reg. No: 49688
Guru Hospital
4/120-F, Pandi Kovil Ring Road
Madurai-625 107

APPENDIX V

LIST OF EXPERTS CONDUCTED FOR CONTENT VALIDITY

1. Dr. Prof. S. Rajina Rani, M. Sc (N), Ph. D
   Principal,
   RASS Academy College of Nursing,
   Poovanthi.
2. Prof.Mrs.H.Ummul Hapipa, M.Sc (N).,
   Vice-Principal,
   RASS Academy College of Nursing,
   Poovanthi.
3. Dr.S.G.BalaMurugan, M.S., M.Ch,
   (Surgical Oncologist)
   Guru Hospital,
   Madurai.
4. Prof.Mrs.M.MalarVizhi, M.Sc (N),
   H.O.D.Of Child Health Nursing,
   RASS Academy College of Nursing,
   Poovanthi.
5. Associate Prof. Mrs.R. Visalatchi, M.Sc (N),
   Department Of Medical Surgical Nursing,
   RASS Academy College of Nursing,
   Poovanthi.
6. Assistant Prof. Mrs. M.Kavitha, M.Sc (N),
   Department Of Medical Surgical Nursing,
   RASS Academy College of Nursing,
   Poovanthi.

APPENDIX VI

PHOTOGRAPHICAL EVIDENCE OF DATA COLLECTION