# EFFECTIVENESS OF INFORMATION, EDUCATION, COMMUNICATION PACKAGE ON QUALITY

# OF LIFE AMONG PATIENTS WITH

# **BREAST CANCER**



Dissertation Submitted To

# THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY CHENNAI

IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF DEGREE OF

MASTER OF SCIENCE IN NURSING

**APRIL 2016** 

# A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION, EDUCATION, COMMUNICATION PACKAGE ON QUALITY

# OF LIFE AMONG PATIENTS WITH BREAST CANCER

# AT DR. KAMAKSHI MEMORIAL HOSPITAL, CHENNAI, 2013 – 2014.

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# ABSTRACT

Breast cancer is cancer that develops from breast tissue. Signs of breast cancer may include a lump in the breast, a change in breast shape, dimpling of the skin, fluid coming from the nipple, or a red scaly patch of skin. In those with distant spread of the disease, there may be bone pain, swollen lymph nodes, shortness of breath, or yellow skin.

The study was conducted to evaluate the effectiveness of Information, Education, Communication package on Quality of life among patients with breast cancer at Dr.Kamakshi Memorial Hospital, Chennai. The objective of the study was to determine the effectiveness of information education and communication package on quality of life among patient with breast cancer.

The conceptual framework developed for the study was based on modified kings goal attainment theory. An extensive review of literature, professional experience and expert's guidance helped the investigator to design the methodology. This study was conducted in Dr. Kamakshi Memorial Hospital at Pallikarani, Chennai. The population of the study was patients with breast cancer who are undergoing chemotherapy with the age group of 20-60 years. Purposive sampling technique was selected, one group pretest and post test design was used.

The comparison of mean and standard deviation of pre and post test level of quality of life among patients with breast cancer. The mean value of quality of life was increased from 180.72 to 293.75 and standard deviation score increased from 67.55 to 73.53 after administering Information, Education and Communication package on quality of life. The "t" value was 111.289 shows the effectiveness of intervention on quality of life of the patients with breast cancer. The p value is < 0.05 level there is Statistical Significance difference between pre and Post test at 95%.

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# **CHAPTER I**

## INTRODUCTION

A disease is an abnormal condition that affects the body of an organism. It is often constructed as a medical condition associated with specific signs and symptoms. It may be caused by various factors originally from an external source, such as infectious disease or it may caused by internal dysfunction such as autoimmune disease. In humans disease is often used more broadly to refer to any condition that causes pain, distress, social problems and death. In this broader sense, it sometime includes injuries, disabilities, disorders, syndromes, infections and isolated symptoms.

Cancer is known as medically a malignant neoplasm. It is broad group of various disease, all involving unregulated cell growth. In cancer, cell divided and grow un controllable, forming malignant tumors and invade nearby parts of the body. The cancer may also spread to more distant parts of the body through the lymphatic system or blood stream, not all tumours are cancerous benign tumour do not grow uncontrolled do not invade neighbouring tissues and do not spread throughout the body. There are over 200 different known cancers in humans.

Determing the causes of cancer is complex many factors are known to increase the risk of cancer, including tobacco use, certain infections, radiation, lack of physical activity, obesity and environmental pollutants. These can directly damage the genes or combined with existing genetic faults with in cells to cause the disease. approximately five to ten percent of cancer are entirely hereditary.

Cancer can be detected in a number of way including the presence of certain sign and symptoms, screening tests or medical imaging. Once a possible cancer is detected, it is diagnosed by microscopic examination of a tissue sample. Cancer is usually treated with chemotherapy, radiation therapy, and surgery. The chances of surviving the disease vary greatly by the type and location of the cancer and the extant of disease at the start of the treatment, while cancer can affect people of all ages and of few types of cancer are more common in children, the risk of developing cancer generally increase with age .in 2007 cancer caused about 13% of all human death

worldwide which as 7.9 million. Rates are rising as more people live to an old age and as mass life style changes occur in the developing world.

The main problems facing long term cancer survivors are related to social emotional support health habits, spiritual, philosophical view of life and body image concerns. Many studies have shown good or adequate overall quality of life in these cancer patients. However among long term survivors, psycho social issues and physical symptoms such as pain and lymphedema, particularly the adverse effects of systemic chemotherapy on quality of life still persist.

Palliative care refers to treatment which attempt to make the patient feel better and may or may not be combined with attempt to attack the cancer palliative care includes action to reduce the physical, emotional, spiritual and psycho-social distress experienced by people with cancer. Unlike treatment that is aimed at directly killing cancer cells the primary goal of palliative care is to improve the patients quality of life.

Quality of life refers to the level of satisfaction in life experienced by patient undergoing chemotherapy which includes domains like negative feeling, positive feeling, cognitive problems, sexual problems, physical pain, fatigue and social avoidance. According to the world health organization (WHO) quality of life is defined as individual perception of life, values, objectives , standard and interest in the frame work of culture.

#### **NEED FOR THE STUDY**

Cancer is a group of diseases with similar characteristics, this can occur in all living cell in the body and different cancer types have different natural history. The myth that cancer affects people mostly in developed countries is being broken by the fact that, of the 10 million new cancer cases in seen each year worldwide, nearly 5.5 million are in the less developed countries. Cancer is the second most common cause of death in the developed world and the similar trend has emerged in the developing countries.

Cancer prevalence in India is estimated to be around 2.5 million with over 5,00,000 new cases and 5,50,000 death occurring each year due to this disease. More than 70% of the cases report for diagnostic and its treatment service in the advanced stages of the disease, which has lead to a poor survived and high mortality rate.

The impact of cancer is far greater than mere number. Its diagnostic causes immense emotional trauma and its treatment, a major economic burden, especially in a developing country like India.

The initial of cancer is perceived by many patients as a grave event, with more than one - third of them suffering from anxiety and depression. Cancer is equally distressing for the family as well. It could greatly affect both the family's daily functioning and economic situation. The economic shock often includes both the less of income and the increase of expenses because of the treatment and health care. This disease is associated with a lot of fear and despair in the country.

(WHO) Stated that cancer diagnosis around the world have steadily been rising and arc excepted to hit 12 million by the year 2013. Global cancer deaths are expected to reach 7.9 million. According to new report by WHO each year, 40,000 women die of breast cancer, making it the second-leading cause of cancer deaths among women after lung cancer. The lifetime risk of dying of breast cancer is approximately 3.4%. WHO estimated that the new cancer cases will likely mushroom to 27 million annually by 2030, with deaths hitting 17 million.

Annually, over 3 lakhs new cases of oral cancer are diagnosed all over the world where the majority are diagnosed in the advanced stages III or IV. Such data make the oral cancer an important public health matter which is responsible for 3% to 10% of cancer mortality worldwide. It is therefore possible to conclude that, the incidence and mortality rates of oral cancer can be reduced by means of health promotion policies, early detection.

The diagnosis of cancer often brings with a serious of physical, emotional, social and practical response. Such responses and reaction are often related to the stage of illness or treatment and vary for each individual. The presence of cancer disrupts virtually every aspect of life of patient and family. Psychiatric disorders, anxiety, physical and practical issues occur in a significant percentage of cancer patients, particularly as disease advances and as cancer treatments become more aggressive. Physicians and other health care personnel have an active role in helping patients and families to cope and function.

India officially recorded over half a million deaths due to cancer in 2011 it was estimated 5.35 lakhs and also 5.24 lakhs in 2010.over 70% of cancer cases in India are diagnosed during the advance stages of disease, resulting in high mortality rates. It is estimated that the number of people living with cancers will be diagnosed in 2015 compared to about 8, 07,000 in 2004 and about 6,70,000 people are expected to die. The information regarding occurrence of cancer for individual states is not certainly maintained and that the government has taken several steps for prevention and early detection of cancer in India.

Dikshit, R., et. al., (2012) Conducted a structure non-medical survey on cancer mortality among 1.1 million home in India. A randomizing sample technique was used to collect data. The study finding was that 7137 of 122,429 study deaths were due to cancer corresponding to 556,400 national cancer deaths in India.

Swaminathan R., et.al., (2011) conduct a study on trends in cancer incidence in Chennai city and state wide prediction of future burden in Tamil Nadu. A cohort study was used to collect the data. The study was revealed in Chennai the total cancer burden is predicted to increase by 32% by 2012- 2016.

Breast cancer ranks as one of the leading cancer types in the number of new cases diagnosed and is second only to long cancer as the most prevalent cancer death in women. In 2010 American cancer society estimates approximately 209,060 new case of breast cancer will be diagnosed and 40,230 deaths due to breast cancer will occur in United States. It is important to note men also develop breast cancer. Approximately 3900f the estimated deaths due to breast cancer in 2010 will be higher in men. There are several different kinds in breast cancer.

Lobular carcinoma describes breast cancer that is confined to the milk producing grand lobules of the breast. Tumours are classified made up of small uniform cells that are similar to the cells found in breast lobules. Ductal carcinoma describes breast cancer that is confined to the milk ducts of the breast. Tumours classified are made up of irregular cells that resemble cells found in ductal system of the breast.

Invasive lobular carcinoma develops in the milk the production grand lobules of the breast. It has the ability to spread to other parts to other parts of the body, most commonly bone, brain, liver, and lungs either through the bloodstream of the lymphatic system. Invasive ductal carcinoma is the most common type of invasive breast cancer, responsible for almost 85% of cases. It starts in the milk ducts. While cancer can affect people of all ages, and a few types of cancer are common in children, the risk of developing cancer generally increases with age. In 2007, cancer caused about13% of all human deaths world wide which has 7.9 million. Rates are rising as more live to an old age and as mass lifestyle changes occur in developing world.

The main problems facing long term cancer survivors are related to social emotional support, health habits, spiritual. Philosophical view of life and body image concerns. Many studies have shown good or adequate overall quality of life in these cancer patients. However among long term survivors, psychological issues and physical symptoms such as pain and lympnedema, particularly the adverse effects of systemic chemotheraphy on quality of life still persist.

Palliative care refers to treatment which attempts to make the patient feel better and may not be combined with an attempt to attack the cancer. Palliative care includes action to reduce the physical, emotional, spiritual, and psycho social distress experienced by people with cancer. Unlike treatment that is aimed at directly killing cancer cells, the primary goal of palliative care is improve the patients quality of life. Quality of life refers to the level of satisfaction in life experienced by people with cancer. Unlike treatment that is aimed at directly killing cancer cells the primary goal of palliative care is to improve the patients quality of life. Cancer is group of diseases with similar characteristics, which can occur in all living cells in the body and different cancer types have different natural history. The myth that cancer affects in people mostly in the developed countries is being broken by fact that, of the 10 million new cancer cases seen each year world wide, nearly 5.5 million are in the less developed countries. Cancer is the second most common cause of death in the developed world and a similar trend has emerged in the developing countries.

When the investigator was posted in day care unit at Dr. Kamakshi memorial: hospital. The investigator had noticed that many patients with breast cancer are coming for treatment. When the investigator communicated with the patient, he identified that many patients exhibits poor quality of life. By considering this fact, the investigator felt it as a strong need to study the quality of life of patients with breast cancer and to give information, education and communication package to improve their quality of life.

#### STATEMENT OF THE PROBLEM

A study to assess the effectiveness of Information, Education, Communication package on Quality of life among patients with breast cancer at Dr.Kamakshi Memorial Hospital.

## **OBJECTIVES**

- 1. To assess the pretest level of Quality of life among patients with Breast cancer.
- 2. To assess the posttest level of Quality of life among patients with Breast cancer.
- 3. To determine the effectiveness of Information, Education, package on Quality of life among patient with Breast cancer.
- 4. To associate the pretest and post test level of Quality of life among patients with Breast cancer with their selected demographic variables.

#### **OPERATIONAL DEFINITIONS**

**Effectiveness:** Refers to the positive outcome of Information, Education, communication package on Quality of life among patients undergoing chemotherapy

**Information, Education, Communication, Package:** Refers to the systematically developed information and visual aids regarding Quality of life among patients undergoing chemotherapy

**Quality of Life :** Refers to the level of satisfaction in life experienced by patients undergoing chemotherapy which includes domains like physical well being, psychological well being, social and spiritual well being.

**Patients with Chemotherapy:** Refers to individuals those who are diagnosed as Breast cancer by a oncologist

#### HYPOTHESIS

There is significant association between formation, Education, Communication package and Quality of life among patients with Breast cancer.

# DELIMITATIONS

- Study is delimited to 60 patients only
- Study duration is delimited to 4 weeks.

# **CHAPTER II**

## **REVIEW OF LITERATURE**

Review of literature is a key step in research process. Nursing research may be a considered as a continuing process in which knowledge gained from earlier studies is an integral part of research in general.

Review of literature is an important step in the development of any project. The task of reviewing literature induces the identification, selection, analyzing, and reporting off existing information and the problem chosen for the study. It also reveals constraints of data collection and relates the findings from another with help to establish a comprehensive study of scientific knowledge in a professional discipline.

It is an organized critique of the important scholarly literature that supports a study and a key step in the research process. It informs about what researcher has already been done on a given subject.

## PART I REVIEW OF RELATED LITERATURE

This chapter deals with the literature review related to various aspects of breast cancer, which were grouped under the following headings.

- Studies related to Breast cancer
- Studies related to knowledge on quality of life among patient with breast cancer
- Studies related to effectiveness of IEC Package regarding quality of life among patient with breast cancer.

## PART II CONCEPTUAL FRAME WORK

#### PART I

## **REVIEW OF RELATED LITERATURE**

#### Studies related to Breast Cancer

Key TJ et.al., (2012) conducted a epidemiological study on <u>Breast cancer</u>. The samples were taken from general population and interview methods were used. The results showed that breast cancer was the most commonly diagnosed cancer among women, with approximately 182,000 women diagnosed with breast cancer annually in the United States, accounting for approximately 26% of all incident cancers among women.

A study was conducted on breast cancer in general population at London. The participants were 720, the samples were taken from general population and interview method were used. The results showed that Breast cancer is the commonest cause of cancer death in women worldwide. Rates vary about five-fold around the world, but they are increasing in regions that until recently had low rates of the disease. Many of the established risk factors are linked to oestrogens. Risk is increased by early menarche, late menopause, and obesity in postmenopausal women op.

Smith, RA et.al., (2010) conducted a prospective study on breast cancer in general population in UK. The samples were taken from general population and questionnaire method was used. The results showed that high concentrations of endogenous oestradiol was associated with an increase in risk and childbearing reduces risk, with greater protection for early first birth and a larger number of births; breastfeeding probably has a protective effect. Both oral contraceptives and hormonal therapy for menopause cause a small increase in breast-cancer risk, which appears to diminish once use stops. Alcohol increases risk, whereas physical activity was probably protective. Mutations in certain genes greatly increase breast cancer risk, but these account for a minority of cases.

Fedewa, S.A. et.al., (2009) conducted a study on breast cancer among Women with a family history of breast cancer who were at increased risk of the disease. The participants were 515 women with breast cancer and samples were selected randomly, interview methods were used. The results showed that Eight out of nine women who develop breast cancer did not have an affected mother, sister, or daughter. Although women who had first-degree relatives with a history of breast cancer were at increased risk of the disease, most would never develop breast cancer, and most who would be aged over 50 when their cancer was diagnosed. In countries where breast cancer was common, the lifetime excess incidence of breast cancer was 5.5% for women with one affected first-degree relative and 13.3% for women with two.

# STUDIES RELATED TO QUALITY OF LIFE AMONG PATIENT WITH BREAST CANCER

Thomas, P et.al., (2014) conducted a study on quality of life among women with breast cancer in general population at china. A convenience sample of 156 Chinese women with breast cancer was recruited from five teaching hospitals. Participants completed the Revised Life Orientation Test, the Perceived Social Support Scale, the Symptom Distress Scale, the Appraisal of Illness Scale, the Medical Coping Modes Questionnaire, and the Functional Assessment of Cancer Therapy-Breast. Path analysis was used to examine factors influencing quality of life. The results showed that significant relationships were found between optimism, symptom distress, social support, appraisal of illness, a give-in coping mode and quality of life. Optimism, social support, symptom distress, lymph node status, appraisal of illness, and a give-in coping mode accounted for 66.6% of the variance in quality of life..

**Patricia**, A et.al., (2014) conducted a longitudinal study on quality of life among 921 low-income women with breast cancer. Patients were interviewed at 6 months, 18 months, 36 months, and 60 months after their diagnosis of breast cancer. The results showed that there was no significant changes noted over time in QOL except with regard to physical functioning, with survivors reporting a significant decrease over time (P<.0001) and patient self-efficacy in interacting with physicians and physician information-giving were found to be positively associated. So the researcher concluded that Low-income women with breast cancer experienced poor physical and mental health. The results of the current study suggest that QOL among low-income women with breast cancer would be enhanced by interventions aimed at empowering patients in communicating with physicians and increasing the amount of information provided by physicians.

**Nordin, K et.al., (2013)** conducted a population- based study on health related quality of life (HRQoL) among women with breast cancer in Sweden. The samples were taken from general population and questionnaire method were used. The results showed that Recently diagnosed breast cancer patients reported poorer health related quality of life in several dimensions compared to normative data. In addition to clinical and demographic factors, an unfavorable socio-economic standing was associated with more problems/symptoms. So the researcher concluded that the present findings emphasize the importance of taking a variety of factors into account when assessing health related quality of life in the clinical setting.

Dorval, M et.al., (2012) conducted a case control study on quality of life after breast cancer .The participants were selected, Random-digit dialing was used to identify controls with the same age and residential distribution as the survivors. Quality of life was assessed in terms of physical health, functional status, psychological distress, and social functioning. Participation was obtained from 96% (n = 124) of 129 eligible survivors and 61% (n = 262) of 427 potentially eligible controls. The results showed that Consistently smaller proportions of survivors reported positive quality-of-life outcomes compared with controls, but these differences were generally small and non significant statistically. When limited to women who remained free of disease over the entire follow-up period (n = 98), survivors' quality of life was similar to that among controls, with the exception of arm problems and sexual satisfaction for those women who lived with a partner. So the researcher concluded that women without further disease events after diagnosis, quality of life does not seem to be permanently and globally impaired by breast cancer. Consequently, breast cancer survivors who remain free of disease probably do not need organized late psychosocial follow-up to improve quality of life. However,

arm problems and sexuality were two areas in which additional effort might be still needed to improve quality of life of long-term survivors.

Laurel, L et.al., (2011) conducted a study on quality of life of women with recurrent breast cancer and their family members. The participants were 189 Quality of life was measured with both generic (Medical Outcomes Study SF-36) and cancer-specific (Functional Assessment of Cancer Therapy) scales. The results showed that Patients reported significant impairments in physical, functional, and emotional well-being. Family members reported significant impairments in their own emotional well-being. Structural equation modeling revealed that self-efficacy, social support, and family hardiness had positive effects on quality of life, whereas symptom distress, concerns, hopelessness, and negative appraisal of illness or care giving had detrimental effects. So the researcher concluded that Women with recurrent breast cancer are in need of programs to assist them with the severe effects of the disease on their quality of life. Programs need to include family members to help counteract the negative effects of the recurrent disease on their mental health, and to enable them to continue as effective caregivers.

**Vahdaninia, M et.al., (2010)** conducted a prospective study on Quality of life in patients with breast cancer .The questionnaires were administered to all suspected identified patients while both patients and the interviewer were blind to the final diagnosis. The results showed that there were significant differences in patients' functioning and global quality of life at three points in time (P < 0.001). Although there were deteriorations in patients' scores for body image and sexual functioning, there were significant improvements for breast symptoms, systematic therapy side effects and patients' future perspective (P < 0.05). so the researcher concluded that overall breast cancer patients perceived benefit from their cancer treatment in longterm. However, patients reported problems with global quality of life, pain, arm symptoms and body image even after 18 months following their treatments.

**Montazeri**, A et.al., (2008) conducted a study on health related quality of life in breast cancer patients. A total of 971 citations were identified and after exclusion of duplicates, the abstracts of 606 citations were reviewed. of these, meetings abstracts, editorials, brief commentaries, letters, errata and dissertation abstracts and papers that appeared online and were indexed ahead of publication were also excluded. The remaining 477 papers were examined. The results showed that *Instruments*-Several valid instruments were used to measure quality of life in breast cancer patients. The European Organization for Research and Treatment of Cancer Core Cancer Quality of Life Questionnaire (EORTC QLQ-C30) and its breast cancer specific complementary measure (EORTC QLQ-BR23) and the Functional Assessment Chronic Illness Therapy General questionnaire (FACIT-G) and its breast cancer module (FACIT-B) were found to be the most common and well developed instruments to measure quality of life in breast cancer patients.

Abdel W et.al., (2007) conducted a controlled study was on factors associated with quality of life with breast cancer patients and their family care givers. The participants were taken from general population and WHO 26-item QOL instrument method were used and data were analysed by univariate and multivariate statistics. The results showed that the cancer groups had similar quality of life domain scores, which were significantly lower than those of their caregivers, but higher than the control group as well as those of psychiatric and diabetic patients.

# STUDIES RELATED TO EFFECTIVENESS OF IEC PACKAGE REGARDING QUALITY OF LIFE AMONG PATIENTS WITH BREAST CANCER

Altorfer, (2014) conducted a study to assess the effect of audio – visual information, based on computer technology, on quality of life among patients with breast cancer outpatient department in Zurich. Total numbers of 72 patients was randomly allocated to study the available computer programme. Knowledge level was measured by questionnaire directly before and after attending the outpatient department. Nearly two thirds of the patients (60%) stated that their knowledge level was increased by watching the computer programme. About 96% of the patients felt comfortable with this type of information. So the researcher concluded that the structured teaching programme was effective.

**Harris Bernd, (2013)** conducted a study to demonstrate structured teaching is the best method of patient education. A one group pre test – post test design was used. A sample of 62 patients were selected. Scale completed questionnaires and saw structured teaching regarding breast cancer. The researcher concluded that structured teaching programme was helpful in improving their quality of life among breast cancer patients.

**Tandon, (2012)** conducted a experimental study to examine the effectiveness of structured teaching on quality of life among breast cancer in Italy. The pre test – post test control design was used for this study, which included 215 subjects with 106 in experimental group, and 109 in control group. The finding of the study revealed a significant gain in knowledge for patients who received structured teaching. The experimental group(t= 5.43, df=213, p<0.005) were more satisfied with their education compared with the control group(t=4.75,df=213,p<0.001). The researcher concluded that structured teaching programme was effective and efficient interaction for disseminating information on quality of life among patients with breast cancer.

**Culler, (2011)** conducted a study to assess the effect of visual information through structured teaching programme on quality of life among breast cancer patients in German. The participants 52 were randomly assigned to an experimental and control group. The experimental group shown video on the quality of life and relaxation therapy. Knowledge was increased for the structured teaching group and no change in the control group. The researcher concluded that this study demonstrated the positive effects of structured teaching programme on quality of life and relaxation therapy among patients with breast cancer.

**Bernd**, (2011) conducted a study to compare quality of life between two groups of patients with and without structured teaching programme in London. A questionnaire was developed to assess the benefits of structured teaching to those who elected to participate in it. Patients who completed the structured teaching program had overall satisfaction with the information. So the researcher concluded that the structured teaching programme was effective. Lambert, (2010) conducted a comparative study was to assess the effectiveness of structured teaching programme of patients with breast cancer in New Delhi .The sample of 55 women were assessed with the help of questionnaire. One group received (n=17) information through flash cards and the other group (n=21) received written information. The group received information through the flash card had increased(p>0.005). when compared to the control group (p>0.05). The researcher concluded that structured information was an effective intervention.

**Norma, (2010)** conducted a study to assess the effects of structured teaching programme in quality of life among breast cancer patients in Mumbai. The participants were 45 and simple random technique was adopted, questionnaire was used. In a controlled trial 20 patient who received structured teaching were compared with 25 control group patients who received only routine information. The researcher compared both the groups, patients who received teaching had more knowledge than control group. So it is concluded that structured teaching is effective in improving their quality of life.

**Samuelsson et.al., (2009)** conducted a study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding quality of life among patients with breast cancer . 40 samples were taken and one group pre test and post test design was used. The results showed that after the teaching the patient's knowledge was improved and had most favourable attitude towards quality of life. The researcher concluded that structured teaching was effective.

#### PART – II

# **CONCEPTUAL FRAMEWORK**

A conceptual framework or a model is made up of concepts, which are the mental images of the phenomenon. It provides the guidelines to proceed to attain the objectives of the study based on the theory. It is a schematic representation of the steps, activities and outcomes of the study.

Imogene King is a nationally recognized theorist, leader and educator. She developed the Theory of Goal Attainment while trying to outline content for a new graduate program (Leddy & Pepper, 2006). It has become the basis of establishing health care goals for patients and directing patient care. The main purpose of the theory is to help patients attain, maintain or restore health.

The Theory of Goal Attainment identifies three levels found in the environment such as personal, international and social. The primary level is the personal system level where the care of the patient is the main focus. The second level is the international level where the nurse deals with small groups. The final level is the social level with nurses providing care through social programs (Catalano, 2006). Hence the investigator adopted Kings Goal Attainment theory as a basis for the conceptual framework, which is aimed to assess the effectiveness of information education and communication package on to improve the quality of life among patient with breast cancer at Kamakshi Memorial Hospital, Pallikaranai.

The theorist defined nursing as the process of human interaction between the nurse and the client where by each perceives the other and the situations through communication. They set goals, explore means and agree on means to achieve the goals.

Imogene Kings Goal Attainment theory is based on the personal and interpersonal system including interaction, perception, transaction and action. According to this theory people meet in some situation, perceive each other, make judgment about each other, take some means to react each other, the next step is the process of interaction and then transaction which is dependent upon the achievement of the goal. The six major concepts phenomenon are described as follows:

#### Perception

Perception is the person's representation of the reality. It influences all other behaviour of a person and it is more subjective and unique to each person. The investigator perceives the need to improve the quality of life among patient with breast cancer.

#### Judgment

The Judgment is a decision is made to improve the quality of life among patient with breast cancer and then to improve the quality of life of patient with breast cancer.

## Action

This refers to the changes that have to be achieved. Action is the step taken by the investigator to the improve the quality of life among patient with breast cancer for the information education and communication package and ready to listen and understand the improvement of quality of life among patient with breast cancer.

#### **Mutual Goal Setting**

Here the investigator plan to teach about to improve the quality of life of patient with breast cancer are actively involving in information education and communication package on patient with breast cancer.

## Reaction

The reaction means decides to act. Here the investigator developed the tool to assess the existing level to improve the quality of life among patient with breast cancer.

## Interaction

The interaction is the perception and communication between person ad environment and between person and person represented by verbal and nonverbal behaviours that are goal directed. Here the investigator gave information education and communication package by giving adequate information with three components yoga, meditation, regular exercise to improve the quality of life among patient with breast cancer.

#### Transaction

The transaction are purposeful interaction that leads to goal attainment, between the investigator and the couples. At this stage the investigator assess the effectiveness of information education and communication package on to improve the quality of life in patient with breast cancer.

Positive outcome is good and excellent quality of life among patient with breast cancer which as to be enhanced further. Negative outcome is poor and fair quality of life among patient with breast cancer which needs reassessed for further improvement. Thus the investigator adopted this model and perceived appropriate to assess the quality of life among patient with breast cancer.



## **RESEARCH DESIGN**

The design selected for this study was pre experimental one group pre test post test design.

### **RESEARCH VARIABLES**

Independent variable: Infonnation, Education, Communication, package on Quality of life Dependent variable: Quality of life among patients with Breast cancer

#### SETTING OF THE STUDY

This study was conducted in Dr. Kamakshi Memorial Hospital at Pallikarani, Chennai. This is a 350 bedded hospital, which is well equipped with all facilities. It consists of all the specialties including medicine, surgery, oncology, orthopedic, diabetalogy, obstetrics and gynecology. It has the services like outpatient department, inpatient department, emergency and intensive care units. Especially around 30 patients are coming to oncology unit for regular treatment and reviews.

## POPULATION

The population consists of patients with Breast cancer at Dr.Kamakshi Memorial Hospital, Pallikaranai, Chennai.

#### SAMPLE

The sample consists of patients who were undergoing chemotherapy with the age group of 20-60 years and who fulfills the inclusion criteria.

#### SAMPLE SIZE

The sample size consists of 60 patients who were undergoing chemotherapy in Dr. Kamakshi Memorial Hospital at Pallikaranai, Chennai.

#### SAMPLING TECHINIQUE

Purposive sampling technique was used to select the samples those who are with Breast cancer in Dr. Kamakshi Memorial Hospital at Pallikaranai, Chennai.

### **CRITERIA FOR SAMPLE SELECTION**

#### **Inclusion criteria**

- Patients those who were diagnosed as Breast cancer
  - Patients those who were undergoing treatment for Breast cancer Patient within the age group of 20-60 years.
  - Patient who are available during the period of study.
  - Patient who knew Tamil or English.

# **Exclusion Criteria**

- Patient those who were not willing to participate in this study.
- Patient were terminally ill.

## **DESCRIPTION OF THE INSTRUMENT**

The self administered tools was prepared to assess to improve the quality of life among patient with breast cancer. This consists of 3 parts.

## Part I

Demographic data of the patient with breast cancer which includes age, sex, marriage and educational status.

## Part II

The self administered structured tool was to assess the quality of life among patient with breast cancer. It consists of 0 to 10 mark the interpretation of scoring was graded as follows :

# SCORING INTERPRETATION

The items to be reversed are : 1-7, 9, 10, 17-29, 31, 33-39 & 43.

0-115	-	Poor
116-230	-	Fair
231-345	-	Good
346-460	-	Excellent

## Part III

Information education and communication package includes general information about to improve quality of life among patient with breast cancer in form of pamplets, handout and booklets.

### VALIDITY

The content validity of the instrument was obtained from the experts in medical and surgical oncology.

#### RELIABILITY

The reliability of the instrument was elicited by test retest method, statistical correlation coefficient was used to measure the reliability.

#### ETHICAL CONSIDERATION

The study was conducted after the approval of dissertation committee and medical director. Formal permission was obtained from the medical director of Dr. Kamakshi Memorial Hospital, Pallikaranai, Chennai.

Breast cancer patient have clearly explained about the purpose of the study to improve the quality of life among them.

## PILOT STUDY

The pilot study is the trial for the major study. The pilot study was conducted from 26.04.2013 to 30.04.2013 of Dr. Kamakshi Memorial Hospital, Pallikaranai, Chennai.

A formal written permission was obtained from the Medical Director at of Dr. Kamakshi Memorial Hospital, Pallikaranai, Chennai. It was carried out with 60 participant fulfilled the inclusive criteria and the oral consent was obtained from the participants. The investigator introduced himself to the patient and explained the purpose of the study to ensure better co-operation. Convenient sampling technique was used to select the participants.

A self administered structured tool was distributed to the participants, to assess the pre test quality of life among patient with breast cancer. The tool was explained in detail to the participants after 30 minutes the tool was collected. Then the information education and communication package was given to the patients for about 30 mins. Pilot study revealed the clarity, feasibility, reliability, practicability in all aspects to conduct the main study.

#### DATA COLLECTION PROCEDURE

The investigator used self administered structured tool to assess the quality of life among patient with breast cancer. A formal written permission was obtained from the Medical Director at of Dr. Kamakshi Memorial Hospital, Pallikaranai, Chennai. The data collection procedure was started from 01.05. 2013 to 31.05.2013. It was carried out with 60 participant fulfilled the inclusive criteria and the oral consent was obtained from the participants. The investigator introduced himself to the patient and explained the purpose of the study to ensure better co-operation. Convenient sampling technique was used to select the participants.

Everyday ten to fifteen participants were assessed the quality of life among patient with breast cancer. A self administered structured tool was distributed to the participants, to assess the pre test to improve the quality of life among patient with breast cancer. The tool was explained in detail to the participants after 30 minutes the tool was collected. Then the information education and communication package was given to the patients for about 30 mins. After the IEC package the post test was done by using the same tool

# DATA ANALYSIS

Demographic variables of patient with breast cancer were analysed in terms of frequency and percentage. Mean and standard deviation was used to compute pre and post test quality of life among patient with breast cancer. Paired `t' test was used to evaluate the effectiveness of Information education and communication package among patient with breast cancer. Chi-square test was used to associate the pre and post test level of quality of life among patient with breast cancer with selected demographic variables.

# **CHAPTER IV**

# DATA ANALYSIS AND INTERPRETATION

This chapter deals with the description of the study subjects, classification, analysis and interpretation of data collected to assess the effectiveness of Information, Education, Communication package on quality of life among patients with breast cancer at Dr. Kamakshi Memorial Hospital, Pallikarani, Chennai.

Abdellah and Levine mentioned that interpretation of tabulation data could bring light to the real meaning of the findings of a study. According to Kerlingers, "Analysis is the categorizing, ordering, manipulating and summarizing of data to obtain the research questions." The analysis of the data was done using descriptive and inferential statistical methods, organized and presented in the forms of tables and graphs. The data analysis was done based on the objectives of the study. As per the objectives of the study the interpretation has been tabulated and organized as follows:

- Section A: Frequency and percentage distribution of demographic variables of patient with breast cancer.
- **Section B:** Frequency and percentage distribution of pre test level of quality of life among patients with breast cancer.
- **Section C:** Frequency and percentage distribution of post test level of quality of life among patients with breast cancer.
- Section D: Frequency and percentage distribution of pre test and post test level of quality of life among patients with breast cancer.
- Section E: Comparison of mean and standard deviation of pre and post test level of quality of life among patients with breast cancer.
- Section F: Association of pre test level of quality of life among patients with breast cancer with their demographic variables
- **Section G:** Association of post test level of quality of life among patients with breast cancer with their demographic variables

**TABLE 1:**Frequency and percentage distribution of demographic variables of<br/>patient with breast cancer.N=60

S.N O	Demo	ographic variables	Frequency	Percentage
1	Age	30 - 40 Years	4	6.7
		41 - 50 Years	53	88.3
		> 50 Years	3	5.0
2	Religion	Hindu	32	53.3
		Christian	27	45.0
		Muslim	1	1.7
3	Education	No Formal Education	19	31.6
		Primary Education	25	41.7
		Higher Education	12	20.0
		Graduates	4	6.7
4	Occupation	Self Employed	13	21.7
		Private	23	38.3
		Government	17	28.3
		Daily Wages	7	11.7
5	Monthly	< Rs. 5000	16	26.6
	Income	Rs. 5001 - Rs. 10,000	22	36.7
		>Rs. 10,000	22	36.7
6	Type of	Joint Family	31	51.7
	Family	Nuclear Family	29	48.3
7	Family	Present	27	45.0
	History	Not present	33	55.0
8 Dur	Duration of	<1 Year	24	40.0
	Illness	1-2 Year	22	36.7
		>2 Year	14	23.3
9	Mode of	Surgery and CT	13	21.7
	Treatment	Surgery and RT	23	38.3
		CT and RT	21	35.0
		Surgery RT and CT	3	5.0

Table 1 represents the frequency and percentage distribution of demographic variables among patients with breast cancer. With respect to the age of the patient most 53 (88.3%) belongs to the age group of 41-50 years, 4 (6.7%) were in the age of 30- 40 years and the rest 3 (5%) were belongs to the age above 50 years.

In relation to the religion most 32 (53.3%) were Hindus, rest 27 (45%) were Christians, 1 (1.7%) were Muslim. In concern with the educational level majority 25 (41.7%) were primary education, 19 (31.6%) were no formal education, 12 (20%) were up to higher educational level and rest 4 (6.7%) were Graduates.

In respect to the Occupation of the samples 23 (38.3%) were employed in private, 17 (28.3%) were government employees and the rest 13 (21.7%) were self employed, 7 (11.7%) undergoing daily wages. In concern with the monthly income 22 (36.7%) have a monthly income of more than Rs5001 - 10,000 and >Rs.10,000 respectively, rest 16 (26.6%) have a monthly income of < Rs. 5000.

Regarding the family type 31 (51.7%) majority belongs to joint family and the rest 29 (48.3%) were belongs to nuclear family. The distribution of family history of cancer was distributed as majority 33 (55%) were not present and the rest 27 (45%) had presence of family history of cancer.

In concern with the duration of illness 24 (40%) had illness < 1 year, 22 (36.7%) were suffer from 1-2 years and the rest 12 (23.3%) had more than 2 years. Regarding the mode of treatment 23 (38.3%) had surgery and RT, 21 (35%) had both CT and RT, 13 (21.7%) had surgery and CT, 3 (5%) had a combination of surgery, RT, and CT.

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Religion

Fig.2: Percentage distribution of religion among patients with breast cancer



Fig.3: Percentage distribution of educational status among patients with breast cancer



Fig.4: Percentage distribution of occupational status among patients undergoing breast cancer



Fig.5: Percentage distribution of monthly income among patients with breast cancer



Fig.6: Percentage distribution of type of family among patients with breast cancer



Fig.7: Percentage distribution of family history of cancer among patients with breast cancer



Fig.8: Percentage distribution of duration of illness of patients with breast cancer



Fig.9: Percentage distribution of mode of treatment among patients with breast cancer

### **SECTION - B**

**TABLE 2:**Frequency and percentage distribution of pre test level of quality of life<br/>among patients with breast cancer.

#### N=60

S.N O	Pre test quality of life	Frequency	Percentage	
1	Poor	14	23.3	
2	Fair	38	63.3	
3	Good	6	10.0	
4 Excellent		2	3.4	
	Total	60	100.0	

Table 2 represents the frequency and percentage distribution of pre test level of quality of life among patients with breast cancer. In pretest, the score of quality of life was distributed as majority 38 (63.3%) have a score of fair, 14 (23.3%) had poor quality of life, 6 (10%) had good quality of life and the rest 2 (3.4%) had excellent quality of life.

### **SECTION – C**

**TABLE 3:**Frequency and percentage distribution of post test level of quality of<br/>life among patients with breast cancer.

N =60	
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S.NO	Post test quality of life	Frequency	Percentage
1	Poor	0	0
2	Fair	12	20.0
3	Good	33	55.0
4	Excellent	15	25.0
	Total	60	100.0

Table 3 represents the frequency and percentage distribution of Post test level of quality of life among patients with breast cancer. In posttest, the score of quality of life was distributed as majority 33 (55%) have a score of good, 15 (25%) had excellent quality of life, 12 (20%) had fair quality of life and the rest none of them were poor scorers.

### SECTION – D

**TABLE 4:**Frequency and percentage distribution of pre test and post test level of<br/>quality of life among patients with breast cancer.

		Pre Tes	t Level	Post Test Level		
S.N O	QUALITY OF LIFE	Frequency	Percentag e	Frequency	Percentage	
1	Poor	14	23.3	0	0	
2	Fair	38	63.3	12	20.0	
3	Good	6	10.0	33	55.0	
4	Excellent	2	3.4	15	25.0	
	Total	60	100.0	60	100.0	

Table 4 represents the frequency and percentage distribution of pre test and post test level of quality of life among patients with breast cancer. In pretest, the score of quality of life was distributed as majority 38 (63.3%) have a score of fair, 14 (23.3%) had poor quality of life, 6 (10%) had good quality of life and the rest 2 (3.4%) had excellent quality of life. After imparting the IEC package on quality of life of patients with breast cancer the post test score of quality of life was distributed as majority 33 (55%) have a score of good, 15 (25%) had excellent quality of life, 12 (20%) had fair quality of life and the rest none of them were poor scorers.

### **SECTION – E**

**TABLE 5:**Comparison of mean and standard deviation of pre and post test level<br/>of quality of life among patients with breast cancer.

S.NO	S.NO Assessment		Standard deviation score	Paired 't'- test	
1	Pre test	180.72	67.552		
2	Post test	293.75	73.539	t =11.289***	

P VALUE = 0.0001\*\*\*

Table 5 deplicts the comparison of mean and standard deviation of pre and post test level of quality of life among patients with breast cancer. The mean value of quality of life was increased from 180.72 to 293.75 and standard deviation score increased from 67.55 to 73.53 after administering Information, Education and Communication package on quality of life. The "t" value was 111.289 shows the effectiveness of intervention on quality of life of the patients with breast cancer. The p value is < 0.05 level there is Statistical Significance difference between pre and Post test at 95%.

# **SECTION – F**

TABLE 6:	Association of pre test level of quality of life among p	oatients	with
	breast cancer with their demographic variables	N= (	50

S. NO	Pre Test Levels		Poor N (%)	Fair N (%)	Good N (%)	Excellent N (%)	Chi Square Test
1	Age	30 - 40 Years	0(0)	3(7.9)	1(16.7)	0(0)	$\chi^2 = 4.126$ $df = 6$
		41 - 50 Years	14(100)	32(84.2)	5(83.3)	2(100)	NS
		> 50 Years	0(0)	3(7.9)	0(0)	0(0)	
2	Religion	Hindu	10(71.4)	18(47.4)	3(50)	1(50)	$\chi^2 = 2.804$
		Christian	4(28.6)	19(50)	3(50)	1(50)	6 df
		Muslim	0(0)	1(2.6)	0(0)	0(0)	
3	Education	No Formal Education	3(21.4)	12(31.6)	4(66.7)	0(0)	$\chi^2 = 7.577$ $df = 9$
		Primary Education	6(42.9)	16(42.1)	1(16.7)	2(100)	NS
		Higher Education	4(28.6)	7(18.4)	1(16.7)	0(0)	
		Graduates	1(7.1)	3(7.9)	0(0)	0(0)	
4	Occupation	Self Employed	5(35.7)	7(18.4)	1(16.7)	0(0)	$\chi^2 = 11.500$ $df = 9$
		Private	3(21.4)	16(42/1)	4(66.7)	0(0)	NS
		Government	5(35.7)	10(26.3)	0(0)	2(100)	
		Daily Wages	1(7.1)	5(13.2)	1(16.7)	0(0)	
5	Monthly	< Rs. 5,000	2(14.3)	13(34.2)	0(0)	1(50)	$\chi^2 = 10.547$
	Income	Rs. 5001- Rs.10,000	5(35.7)	15(39.5)	1(16.7)	1(50)	df = 6 NS
		> Rs. 10,000	7(50)	10(26.3)	5(83.3)	0(0)	
6	Type of	Joint Family	8(57.1)	20(52.6)	2(33.3)	1(50)	$\chi^2 = 0.992$
	гашцу	Nuclear Family	6(42.9)	18(47.4)	4(66.7)	1(50)	df = 3 NS

7	Family History of	Present	6(42.9)	18(47.4)	3(50.0)	0(0)	$\chi^2 = 1.809$
	cancer	Not Present	8(57.1)	20(52.6)	3(50.0)	2(100)	df = 3 NS
8	Duration of	< 1 Year	5(35.7)	16(42.1)	2(33.3)	1(50)	$\chi^2 = 1.295$
	micss	1-2 Year	6(42.9)	13(34.2)	2(33.3)	1(50)	df = 6
		>2 Year	3(21.4)	9(23.7)	2(33.4)	0(0)	NS
9	Mode of Treatment	Surgery and CT	2(14.3)	10(26.3)	0(0)	1(50.0)	$\chi^2 = 7.776$ $df = 9$
		Surgery & RT	6(42.9)	14(36.8)	3(50.0)	0(0)	NS
		CT and RT	4(28.6)	13(34.2)	3(50.0)	1(50.0)	
		Surgery RT and CT	2(14.3)	1(2.6)	0(0)	0(0)	

Table 6 shows the association between pre test level of quality of life among patients with breast cancer with their selected demographic variables. The analysis revealed that there was no significant association between pre test quality of life of patient with breast cancer with the demographic variables of age, religion, education, occupation, monthly income, type of family, family history of cancer, duration of illness and mode of treatment.

### SECTION – G

**TABLE 7:** Association of post test level of quality of life among patients with<br/>breast cancer with their demographic variablesN = 60

S. NO	Post Test Levels		Fair N (%)	Good N (%)	Excelle nt N (%)	Chi Square Test	
1	Age	30 - 40 Years	0(0)	1(3.0)	3(20.0)	$\chi^2 = 8.213$	
		41 - 50 Years	12(100)	29(87.9)	12(80.0)	df = 4	
		> 50 Years	0(0)	3(9.1)	0(0)	NS	
2	Religion	Hindu	6(50.0)	20(60.)	6(40.0)	$\chi^2 = 3.034$	
		Christian	6(50.0)	12(36.4)	9(60.0)	df = 4	
		Muslim	0(0)	1(3.0)	0(0)	NS	
3	Education	No Formal Education	3(25.0)	11(33.3)	5(33.3)	$\chi^2 = 5.778$	
		Primary Education	3(25.0)	14(42.4)	8(53.3)	df = 6	
		Higher Education	4(33.3)	6(18.2)	2(13.4)	NS	
		Graduates	2(16.7)	2(6.1)	0(0)		
4	Occupation	Self Employed	6(50.0)	5(15.1)	2(13.3)	2	
		Private	2(16.7)	13(39.4)	8(53.3)	$\chi^2 = 11.191$	
		Government	3(25.0)	9(27.3)	5(33.4)	df = 6	
		Daily Wages	1(8.3)	6(18.2)	0(0)	NS	
5	Monthly	< Rs. 5,000	3(25.0)	9(27.3)	4(26.7)	$\chi^2 = 3.071$	
	Income	Rs. 5001- Rs.10,000	5(41.7)	14(42.4)	3(20.0)	df = 4	
		> Rs. 10,000	4(33.3(	10(30.3)	8(53.3)	NS	
6	Type of Family	Joint Family	4(33.3)	20(60.6)	7(46.7)	$\chi^2 = 2.821$	
		Nuclear Family	8(66.7)	13(39.4)	8(53.3)	NS	
7	Family	Present	5(41.7)	17(51.5)	5(33.3)	$\chi^2 = 1.445$	
	History of cancer	Not Present	7(58.3)	16(48.5)	10(66.7)	df = 2 NS	
8	Duration of	<1 Year	5(41.7)	16(48.5)	3(20.0)	$\chi^2 = 5.699$	
	Illness	1-2 Year	6(50.0)	9(27.3)	7(46.7)	df = 4	
		>2 Year	1(8.3)	8(24.2)	5(33.3)	NS	
9	Mode of	Surgery and CT	2(16.7)	8(24.2)	3(20.0)		
	Treatment	Surgery and RT	7(58.3)	12(36.4)	4(26.7)	$\chi^2 = 10.246$	
		CT and RT	1(8.3)	12(36.4)	8(53.3)	df = 6	
		Surgery RT and CT	2(16.7)	1(3.0)	0(0)	NS	

Table 7 shows the association between p0st test levels of quality of life among patients with breast cancer with their selected demographic variables. The analysis revealed that there was no significant association between the post test quality of life of patient with breast cancer with the demographic variables of age, religion, education, occupation, monthly income, type of family, family history of cancer, duration of illness and mode of treatment.



Fig.10: Comparison of mean and standard deviation of pre test and post test level of quality of life among patients with breast cancer

# **CHAPTER V**

### **RESULTS AND DISCUSSION**

The purpose of the study was to assess the effectiveness of IEC package on quality of life among patients with breast cancer. The results of the study were based on the statistical analysis. The data was collected with the help of structured questionnaire to assess the knowledge. The effectiveness of IEC package was assessed by using paired 't' test. Chi-square was used to find out the association for knowledge with selected demographic variables. The results are provided according to the stated objectives.

# 1. To assess the pretest level of quality of life among patients with breast cancer.

The pre test level of quality of life among patients with breast cancer was assessed by using structured questionnaire. The sample size was 60. Table-2 shows the distribution scores on regarding quality of life among patients with breast cancer. It represents the frequency and percentage distribution of pre test level of quality of life among patients with breast cancer. In pretest, the score of quality of life was distributed as majority 38 (63.3%) have a score of fair, 14 (23.3%) had poor quality of life, 6 (10%) had good quality of life and the rest 2 (3.4%) had excellent quality of life.

A descriptive study was conducted among breast cancer patients to assess the knowledge on quality of life. Samples of 50 patients were chosen by using convenient sampling method and the assessment was done by using a structured questionnaire. The results showed that 8(16%) of them had inadequate knowledge, 37(74%) of them had moderately adequate knowledge, 5(10%) of them had adequate knowledge with over mean score at 60.88. So the researcher concluded that the peoples had gained knowledge through mass media and peer groups but the results signify that inadequate level of knowledge needs improvement and this can be done by education (**Kimberly et al., 2008**).

# 2. To assess the post test level of quality of life among patients with breast cancer

The post test level of quality of life among patients with breast cancer was reassessed by using structured questionnaire. The sample size was 60. Table-3 shows the distribution scores on level of knowledge on quality of life among patients with breast cancer. It represents the frequency and percentage distribution of Post test level of quality of life among patients with breast cancer. In posttest, the score of quality of life was distributed as majority 33 (55%) have a score of good, 15 (25%) had excellent quality of life, 12 (20%) had fair quality of life and the rest none of them were poor scorers.

Arthur, (2009) Conducted a study to assess the effectiveness of IEC package on knowledge of patient with breast cancer regarding quality of life. The one group pretest and post test design was used and 50 samples were selected. The results showed that after the teaching programme 48 (96%) of peoples had adequate knowledge and 49 (98%) of them had highly favourable attitude regarding quality of life. So the researcher concluded that the IEC package is more effective.

# 3. To determine the effectiveness of information, education, communication package on quality of life among patient with breast cancer

The table-5 shows that there is Statistical Significance difference between pre and Post test at 95% [P < 0.05]. So there is a significant difference between pretest and posttest score on knowledge of patients with breast cancer on quality of life. The researcher concluded that the IEC Package is effective.

**Maddams J et.al., (2010)** Conducted a study was done to assess the effectiveness of IEC package on knowledge and attitude regarding quality of life among breast cancer patients. 40 samples were taken and one group pre test and post test design was used. The results showed that after the teaching the patient's knowledge were improved and had most favourable attitude towards to quality of life.

So the researcher concluded that IEC package is effective among patients with breast cancer.

# 4. Associate the pre test & post test level of quality of life among patients with breast cancer with the selected demographic variables

The table-6 & table-7 showed that the association pre test and post test level of quality of life with selected demographic variables such as age, religion, education, occupation, monthly income, type of family, family history, duration of illness, mode of treatment. Association was found by using chi-square test .The results showed that there was an no association between age, religion, education, occupation, monthly income, type of family, family history, duration of treatment and pre test and post test level of breast cancer.

Valier, (2009) conducted a study done on Asian India, to evaluate the association between quality of life and demographic variable of age, gender, and education. A total number of 150 subjects were selected. Convenient sampling technique was adopted and Results indicated that there is an association between age (p=0.02), gender (p=0.37), education (p=0.82) and quality of life.

The present study had been supported by a series of other studies. IEC Package on quality of life and increases knowledge. From this analysis and results it is concluded that IEC Package is effective to improves knowledge and develop positive attitude towards quality of life among breast cancer patients.

# **CHAPTER VI**

# SUMMARY, RECOMMENDATION AND NURSING IMPLICATION OF THE STUDY SUMMARY

Breast cancer is the top cancer in women both in the developed and the developing world. The incidence of breast cancer is increasing in the developing world due to increase life expectancy, increase urbanization and adoption of western lifestyles. 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 where breast cancer is diagnosed in very late stages. Therefore, early detection in order to improve breast cancer outcome and survival remains the cornerstone of breast cancer control.

The main focus of the study was to improve the Quality of life among patients with breast cancer. The conceptual framework developed for the study was based on modified kings goal attainment theory. An extensive review of literature, professional experience and expert's guidance helped the investigator to design the methodology. This study was conducted in Dr. Kamakshi Memorial Hospital at Pallikarani, Chennai. The population of the study was patients with breast cancer who are undergoing chemotherapy with the age group of 20-60 years. Purposive sampling technique was selected, one group pretest and post test design was used.

The data was collected by using for Farell Grant, Hassey-Dow (1995) quality of life questionnaire. Quality of life among patients with breast cancer. The pilot study, established the practicability and feasibility hence, the investigator proceeded for the main study. The main study was conducted at Dr. Kamakshi Memorial Hospital at Pallikarani, Chennai. Post test was conducted soon after the IEC package by using the same questionnaire to find the effectiveness of IEC Package regarding quality of life with breast cancer patients. Descriptive and inferential statistics was used for comparison and association of pretest and post test Information Education Communication package regarding Quality of life among patients with breast cancer. The results showed that there was no association between the pre test level of knowledge regarding quality of life among breast cancer patients with selected demographic variables like age, religion, education, occupation, monthly income, type of family, family history, duration of illness and mode of treatment.

Paired 't' test was used to analyse the effectiveness of IEC package in Quality of life among patients with breast cancer. It was found that 't' value was statistically significant at 5% level. This shows that structured teaching programme was effective.

## RECOMMENDATIONS

The study recommends the following

- A similar study can be undertaken for a large sample in different settings.
- A comparative study can be conducted between urban and rural patients.
- A similar study can be conducted among breast cancer patients through video teaching
- A similar study can be conducted among breast cancer patients at different settings.

### NURSING IMPLICATIONS

Some of the implications from the present study in various areas as follows:

### NURSING PRACTICE

 Nurse can conduct a survey to identify the clients with breast cancer within the community.

- Mass Screening can be arranged for early diagnosis and then provide the health education on management of breast cancer with quality of life to the patients who diagnosed during the mass screening.
- Awareness programmes such as mass health education can be conducted by using appropriate audio-visual aids on quality of life among breast cancer patients who are attending the awareness programmes.
- Self-instructional materials regarding quality of life can be distributed to the breast cancer patients who attending outpatient department.

### NURSING EDUCATION

- Conferences, workshops and seminars can be held for nurses to impart, update the knowledge and positive attitudes.
- In-service education to update their knowledge and skill in various health care settings should be given.
- Nursing curriculum has to focus on enabling the nursing students to develop skill in identifying risk groups and prevent the breast cancer.
- Make available literature in the library about quality of life with breast cancer patients to the students. \

### NURSING ADMINISTRATION

The present study is proposed to help the health administrators to strategically plan and meet the health needs of the breast cancer patients.

- The administrators in both private and government sectors should take initiative actions to update the knowledge regarding quality of life with breast cancer.
- The administrator can encourage the nurses for conducting research in various aspects regarding quality of life with breast cancer.

- The administrator can organize conference, workshop and seminars regarding quality of life with breast cancer for nurses working in the community.
- The administrator should support the staffs to conduct programmes on quality of life with breast cancer.

### NURSING RESEARCH

- > The study will be valuable reference material for further researchers.
- This study is a preliminary set up for exploring the concepts of knowledge on quality of life with breast cancer.
- The results of the study will encourage the patients to adopt healthy life styles.
- Adequate allocation of funds, manpower, time and adequate training should be provided to the nurse for conducting research on breast cancer.

### LIMITATIONS

During the period of study, the investigator faced problem while using IEC package for the patients.

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# MADHA COLLEGE OF NURSING

(Approved by Govt. of Tamil Nadu & Affiliated to the Tamil Nadu Dr. M.G.R. Medical University Recognised by the Tamil Nadu Nurses and Midwives Council & Approved by Indian Nursing Council, New Delhi)

Madha Nagar, Somangalam Road, Kunrathur, Chennai - 600 069. Phone : 2478 0736 / 34 / 32, Fax : 2478 0798 F-mail : contactus@madhagroup.org Website : www.madhagroup.org

B. Tamilarasi, M.Sc., M.Phil., Ph.D. PrincipalFrom Principal, Madha College of Nursing, Kunrathur, Chennai - 69. The Academic Officer,

Kamatchi Memorial Hospital, Medavakkam, Chennai.

**Respected Sir**,

Sub: MCON – Permission to carry out project – Oncology Department of Kamatchi Memorial Hospital, Chennai - Mr. Paul llavarasan. P M.Sc. (N) Student – Requested – regarding.

This is to bring to your kind information that our M.Sc. Nursing students have to carry out a project during their course of study as a partial fulfillment of M.Sc. Nursing curriculum.

In regard to this, we would be highly grateful to you if you could accord permission for Mr.Paul Ilavarasan. P I year M. Sc. (N) student of our college to carry out his project work in the Oncology Department of your esteemed hospital, during the period of one month (06.05.13 – 06.06.13). The title of the project is "A study to assess the effectiveness of Information, Education, and Communication package on Quality of life among patients with Breast cancer at Dr. Kamakshi Memorial Hospital at Chennai"

Kindly permit him to do the project. I assure you that his study will not interfere with the morale of patients and health care providers. The anonymity of the information will be kept confidential.

Thanking you, of Surger 26/4/13

Sincerely,

PRINCIPAL MADHA COLLEGE OF NURSING MADHANAGAR, KUNDRATHUR. CHENNAI - 600 069 PHONE: 24780736



Date: 25.04.13

# **APPENDIX-B**

# LIST OF EXPERTS FOR CONTENT VALIDITY

# **Prof. HEMA SURESH,**

Vice Principal, Meenakshi College of Nursing Chikkarayapuram, Chennai – 600 069.

# Prof. JAYASRI .N,

Principal, Miot College of Nursing, Porur, Chennai – 600 069.

### **CERTIFICATION FOR CONTENT VALIDITY**

This is to certify that the content and the tool to the statement of the problem "A study to assess the effectiveness of Information, Education, Communication package on Quality of life among patients with Breast cancer at Dr.Kamakshi Memorial Hospital at Chennai" prepared by Mr.Paul llavarasan.P M.Sc (N) I year student currently pursuing his M.Sc (N) degree programme for the partial fulfillment of his dissertation at Madha College of Nursing, Kunrathur, Chennai – 69 is found to be valid to the best of my knowledge.

ima Hema ies VICE-PRINCIPAL

MEENAKSHI COLLEGE OF NURSING Chikkarayapurem, Near Mangadu, Chemiai - 800 069.

### **CERTIFICATION FOR CONTENT VALIDITY**

This is to certify that the content and the tool to the statement of the problem "A study to assess the effectiveness of Information, Education, Communication package on Quality of life among patients with Breast cancer at Dr.Kamakshi Memorial Hospital at Chennai" prepared by Mr.Paul llavarasan.P M.Sc (N) I year student currently pursuing his M.Sc (N) degree programme for the partial fulfillment of his dissertation at Madha College of Nursing, Kunrathur, Chennai – 69 is found to be valid to the best of my knowledge.

MIOT COLLEGE OF NURSING No.1/70, Mariamman Koil Street, Mugalivakkam, Chennai - 116

# **APPENDIX-C**

### **CERTIFICATE FOR ENGLISH EDITING**

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that the dissertation prepared by Mr PAUL ILAVARASAN .P., II Year Madha College of Nursing Kundrathur, Chennai - 69, for his dissertation, "A Study to Assess the Effectiveness of Information Education Communication Package on Quality of Life among Patient with Breast Cancer at Dr. Kamakshi Memorial Hospital. Edited for English Language appropriateness by .....



Dr.Kamakshi Memorial Hospital Pvt. Ltd. No.1, Radial Road, Pallikkaranai, Chennai-600100 E-mail Id: academicboard@drkmh.com

#### Academic Section

#### Dr.S.RAJALAKSHMI.,M.D.(Path.)., ACADEMIC OFFICER

Phone: (044) 66300300 Ext.113

# Lr.No.Acad.A(12)/012/2013 / Dated:29.04.2013

To

Dr.B.Tamilarasi.,M.Sc.,M.Phil.,Ph.D. Principal, Madha College of Nursing, Madha Nagar, Somangalam Road, Kundrathur, Chennai-600 069, INDIA Phone: (044) 2478 0736

Madam,

Sub:-

### ACADEMICS – Project in Surgical Oncology Department for One Month – First Year PG Nursing – Permission – Reg.

Ref:- Your Letter No.<u>NIL</u> dated <u>25.04.2013</u>.

#### \*\*\*\*\*\*

With reference to your letter cited above, we would like to inform that it is approved that the candidate Mr.Paul Ilavarasan.P, I – M.Sc.(N) of your institution to carry out the Project in Surgical Oncology Department under the guidance of Dr.P.Rajkumar, (Surgical Oncologist and General SUrgeon) of our Hospital from 06.05.2013 to 06.06.2013 (one month).

2. A nominal fee of Rs.1500/- (Rupees One thousand and five hundred only) shall be paid at the earliest.

3. It is also expected that the candidates shall abide the rules and regulations of Hospital Administration during the project period.

4. The receipt of this letter may kindly be acknowledged.

Yours faithfully.

For ACADEMIC OFFICER

Copy forwarded for the information to:-

(1) Head, Dept. of Cardiothoracic Surgery

(2) Stock File



# **CERTIFICATE OF ETHICAL CLEARANCE**

### MADHA COLLEGE OF NURSING ETHICAL COMMITTEE

College Campus : Madha nagar, Somangalam road Kunrathur,

Date : 15.03.2013

#### Chairman of Committee:

Dr. S. Madan kumar. M.D., Dip. A & E Director, Madha Medical College & Research Institute,

#### Members:

Dr. K. Gajendran. M.D., D.V., Principal, Madha Medical College & Research Institute, Thandalam.

Dr. A. Dhanikachalam. M.S., Mch Medical Superintendent, Madha General Hospital, Madha Medical College & Research Institute, Thandalam

Dr. V. Vijai Krishna. M.P.T, Principal, Madha College of Physiotherapy, Kunrathur

Dr. B.Tamilarasi, M.Sc (N), P.hD., Principal, Madha College of Nursing, Kunrathu

Mrs. Grace Samuel, M.Sc (N), Vice Principal, Madha College of nursing, Kunrathur

#### CERTIFICATE OF ETHICAL CLEARANCE

This is to certify that the research proposal, "Effectiveness of Information Education Communication package on Quality of life among patients with Breast cancer at Dr. Kamakshi Memorial Hospital at Chennai", submitted by Mr. Paul Ilavarasan. P, student of I year M.Sc Nursing (Medical Surgical Nursing) is hereby approved and granted ethical clearance by the Ethical Committee of the institute.

This clearance is valid for the period of 2 years.

HAIRMAN

### PART I

#### **DEMOGRAPHIC VARIABLES**

- 1) Age in years
  - (a) 21 yrs. 30 yrs.
  - (b) 31 yrs. 50 yrs.
  - (c) Above 50 yrs.
- 2) Religion
  - (a) Hindu
  - (b) Christian
  - (c) Muslim
- 3) Education
  - (a) No formal education
  - (b) Primary education
  - (c) Higher education
  - (d) Graduates
- 4) Occupation
  - (a) Self employed
  - (b) Private
  - (c) Government
  - (d) Daily wages
- 5) Monthly Income
  - (a) < Rs. 5000
  - (b) Rs. 5000 lo Rs. 10000
  - (c) More than Rs. 10000

- 6) Type of family
  - a) Joint family
  - b) Nuclear family
- 7) Family history of cancer
  - (a) Present
  - (b) Not present
- 8) Duration of Illness
  - (a) < 1 yr
  - (b) 1-2 yrs
  - (c) > 2yrs
- 9) Mode of Treatment
  - (a) Surgery and CT
  - (b) Surgery and RT
  - (c) CT and RT
  - (d) Surgery, CT, RT
- 10) Stage of Illness
  - (a) Stage I
  - (b) Stage II
  - (c) Stage III
  - (d) Stage IV