

## ASSESS THE LEVEL OF KNOWLEDGE REGARDING THE RISK FACTORS AND SYMPTOMS OF BREAST CANCER AMONG 1ST YEAR BSC NURSING STUDENTS STUDYING IN WHITE MEMORIAL COLLEGE OF NURSING

\*<sup>1</sup>T. S. Christal Jancy, <sup>2</sup>Dr. Jeyalekshmi S. and <sup>3</sup>Dr. Arzta Sophiya

<sup>1</sup>Associate Professor, White Memorial College of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

<sup>2</sup>Reader, Rani Meyammai College of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

<sup>3</sup>Associate professor, Christian College of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

\*Corresponding Author: T. S. Christal Jancy

Associate Professor, White Memorial College of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

Article Received on 31/08/2023

Article Revised on 20/09/2023

Article Accepted on 10/10/2023

### ABSTRACT

The study aimed at to assess the level of knowledge regarding the risk factors and symptoms of breast cancer among Ist year Bsc Nursing students studying in white memorial college of nursing in Kanyakumari District. **Methods** is Qualitative research approach is be used for this study. The sample consists of 30 students from Ist year B.Sc Nursing are selected for the study. Knowledge Questionnaire is used to find out the level of knowledge regarding side effects of chemotherapy among Ist year B.Sc (N) students. It consists of 20 questions related to risk factors and symptoms of breast cancer. Data are collected within the period of one day. 20 minutes spent for each sample. Totally 30 samples are taken to assess the knowledge regarding risk factors and symptoms of breast cancer. **Results:** The collected data way statistically analysed by chi-square value. Level of knowledge regarding risk factors and symptoms of breast cancer among Ist year B.Sc. Nursing students in White Memorial College of Nursing, Attoor. shows that 50% (15) are having adequate level of knowledge 50% (15) are having moderately adequate knowledge regarding risk factors and symptoms of breast cancer among Ist year B.Sc. students in White Memorial College of Nursing, Attoor. **Conclusion:** The study concluded that White Memorial college of Nursing Ist year B.Sc. Nursing students have adequate knowledge regarding the risk factors and symptoms of breast cancer.

### INTRODUCTION

“The only person who can save you is you.” – Sheryl Crow

Breast cancer arises in the lining cells (epithelium) of the ducts (85%) or lobules (15%) in the glandular tissue of the breast. Initially, the cancerous growth is confined to the duct or lobule (“in situ”) where it generally causes no symptoms and has minimal potential for spread (metastasis). Over time, these in situ (stage 0) cancers may progress and invade the surrounding breast tissue (invasive breast cancer) then spread to the nearby lymph nodes (regional metastasis) or to other organs in the body (distant metastasis). If a woman dies from breast cancer.

Breast cancer treatment can be highly effective, especially when the disease is identified early. Treatment of breast cancer often consists of a combination of surgical removal, radiation therapy and medication (hormonal therapy, chemotherapy and/or targeted biological therapy) to treat the microscopic cancer that has spread from the breast tumor through the blood. Such treatment, which can prevent cancer growth and spread,

thereby saves lives. In 2020, there were 2.3 million women diagnosed with breast cancer and 685 000 deaths globally. As of the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in the past 5 years, making it the world’s most prevalent cancer. There are more lost disability-adjusted life years (DALYs) by women to breast cancer globally than any other type of cancer. Breast cancer occurs in every country of the world in women at any age after puberty but later it is increasing in life. Breast cancer mortality changed little from the 1930s through to the 1970s. Improvements in survival began in the 1980s in countries with early detection programmes combined with different modes of treatment to eradicate invasive disease. Breast cancer is not a transmissible or infectious disease. Unlike some cancers that have infection-related causes, such as human papillomavirus (HPV) infection and cervical cancer, there are no known viral or bacterial infections linked to the development of breast cancer.

Approximately half of breast cancers develop in women who have no identifiable breast cancer risk factor other than gender (female) and age (over 40 years). Certain

factors increase the risk of breast cancer including increasing age, obesity, harmful use of alcohol, family history of breast cancer, history of radiation exposure, reproductive history (such as age that menstrual periods began and age at first pregnancy), tobacco use and postmenopausal hormone therapy.

Behavioural choices and related interventions that reduce the risk of breast cancer include: prolonged breastfeeding; regular physical activity; weight control; avoidance of harmful use of alcohol; avoidance of exposure to tobacco smoke; avoidance of prolonged use of hormones; and avoidance of excessive radiation exposure. Unfortunately, even if all of the potentially modifiable risk factors could be controlled, this would only reduce the risk of developing breast cancer by at most 30%.

Female gender is the strongest breast cancer risk factor. Approximately 0.5-1% of breast cancers occur in men. The treatment of breast cancer in men follows the same principles of management as for women. Family history of breast cancer increases the risk of breast cancer, but the majority of women diagnosed with breast cancer do not have a known family history of the disease. Lack of a known family history does not necessarily mean that a woman is at reduced risk. Certain inherited "high penetrance" gene mutations greatly increase breast cancer risk, the most dominant being mutations in the genes BRCA1, BRCA2 and PALB-2. Women found to have mutations in these major genes could consider risk reduction strategies such as surgical removal of both breasts. Consideration of such a highly invasive approach only concerns a very limited number of women, should be carefully evaluated considering all alternatives and should not be rushed.

Breast cancer most commonly presents as a painless lump or thickening in the breast. It is important that women finding an abnormal lump in the breast consult a health practitioner without a delay of more than 1-2 months even when there is no pain associated with it. Seeking medical attention at the first sign of a potential symptom allows for more successful treatment. Generally, symptoms of breast cancer include: a breast lump or thickening; alteration in size, shape or appearance of a breast; dimpling, redness, pitting or other alteration in the skin; change in nipple appearance or alteration in the skin surrounding the nipple (areola); and/or abnormal nipple discharge.

There are many reasons for lumps to develop in the breast, most of which are not cancer. As many as 90% of breast masses are not cancerous. Non-cancerous breast abnormalities include benign masses like fibroadenomas and cysts as well as infections. Breast cancer can present in a wide variety of ways, which is why a complete medical examination is important. Women with persistent abnormalities (generally lasting more than one month) should undergo tests including imaging of the

breast and in some cases tissue sampling (biopsy) to determine if a mass is malignant (cancerous) or benign.

Advanced cancers can erode through the skin to cause open sores (ulceration) but are not necessarily painful. Women with breast wounds that do not heal should have a biopsy performed. Breast cancers may spread to other areas of the body and trigger other symptoms. Often, the most common first detectable site of spread is to the lymph nodes under the arm although it is possible to have cancer-bearing lymph nodes that cannot be felt. Over time, cancerous cells may spread to other organs including the lungs, liver, brain and bones. Once they reach these sites, new cancer-related symptoms such as bone pain or headaches may appear.

Age-standardized breast cancer mortality in high-income countries dropped by 40% between the 1980s and 2020. Countries that have succeeded in reducing breast cancer mortality have been able to achieve an annual breast cancer mortality reduction of 2-4% per year. If an annual mortality reduction of 2.5% per year occurs worldwide, 2.5 million breast cancer deaths would be avoided between 2020 and 2040.

Factors that are associated with an increased risk of breast cancer include.

- **Being female.** Women are much more likely than men are to develop breast cancer.
- **Increasing age.** Your risk of breast cancer increases as you age.
- **A personal history of breast conditions.** If you've had a breast biopsy that found lobular carcinoma in situ (LCIS) or atypical hyperplasia of the breast, you have an increased risk of breast cancer.
- **A personal history of breast cancer.** If you've had breast cancer in one breast, you have an increased risk of developing cancer in the other breast.
- **A family history of breast cancer.** If your mother, sister or daughter was diagnosed with breast cancer, particularly at a young age, your risk of breast cancer is increased. Still, the majority of people diagnosed with breast cancer have no family history of the disease.
- **Inherited genes that increase cancer risk.** Certain gene mutations that increase the risk of breast cancer can be passed from parents to children. The most well-known gene mutations are referred to as BRCA1 and BRCA2. These genes can greatly increase your risk of breast cancer and other cancers, but they don't make cancer inevitable.
- **Radiation exposure.** If you received radiation treatments to your chest as a child or young adult, your risk of breast cancer is increased.
- **Obesity.** Being obese increases your risk of breast cancer.
- **Beginning your period at a younger age.** Beginning your period before age 12 increases your risk of breast cancer.

- **Beginning menopause at an older age.** If you began menopause at an older age, you're more likely to develop breast cancer.
- **Having your first child at an older age.** Women who give birth to their first child after age 30 may have an increased risk of breast cancer.
- **Having never been pregnant.** Women who have never been pregnant have a greater risk of breast cancer than do women who have had one or more pregnancies.
- **Postmenopausal hormone therapy.** Women who take hormone therapy medications that combine oestrogen and progesterone to treat the signs and symptoms of menopause have an increased risk of breast cancer. The risk of breast cancer decreases when women stop taking these medications.
- **Drinking alcohol.** Drinking alcohol increases the risk of breast cancer.

The strategies for improving breast cancer outcomes depend on fundamental health system strengthening to deliver the treatments that are already known to work. These are also important for the management of other cancers and other non-malignant noncommunicable diseases (NCDs). For example, having reliable referral pathways from primary care facilities to district hospitals to dedicated cancer centres. The establishment of reliable referral pathways from primary care facilities to district hospitals to dedicated cancer centres is the same approach as is required for the management of cervical cancer, lung cancer, colorectal cancer and prostate cancer. To that end, breast cancer is an “index” disease whereby pathways are created that can be followed for the management of other diseases.

The objective of the WHO Global Breast Cancer Initiative (GBCI) is to reduce global breast cancer mortality by 2.5% per year, thereby averting 2.5 million breast cancer deaths globally between 2020 and 2040. Reducing global breast cancer mortality by 2.5% per year would avert 25% of breast cancer deaths by 2030 and 40% by 2040 among women under 70 years of age. The three pillars toward achieving these objectives are: health promotion for early detection; timely diagnosis; and comprehensive breast cancer management.

By providing public health education to improve awareness among women of the signs and symptoms of breast cancer and, together with their families, understand the importance of early detection and treatment, more women would consult medical practitioners when breast cancer is first suspected, and before any cancer present is advanced. This is possible even in the absence of mammographic screening that is impractical in many countries at the present time.

#### STATEMENT OF THE PROBLEM

A study to assess the level of knowledge regarding the risk factors and symptoms of breast cancer among Ist

year Bsc Nursing students studying in white memorial college of nursing in Kanyakumari District.

#### OBJECTIVES

- To assess the level of knowledge regarding the risk factors and symptoms of breast cancer among Ist year Bsc Nursing students studying in white memorial college of nursing in Kanyakumari District.
- To find out the association between the level of knowledge regarding the risk factors and symptoms of breast cancer among Ist year Bsc Nursing students studying in white memorial college of nursing in Kanyakumari District.

#### HYPOTHESIS OF THE STUDY

There will be a significant association between knowledge regarding the risk factors and symptoms of breast cancer of among Ist year B.Sc (N) students with selected demographic variable such as Age, Sex, Source of information, family history of cancer.

#### CONCEPTUAL FRAMEWORK

The theory was used in this study is Nola.J. Peuder health promotion model. The health promotion model was proposed by Nola.J. Peuder (1982 revised 1996) was designed to be complementary counterpart to model of health protection.

#### MAJOR CONCEPT OF HEALTH PROMOTION

- Individual characteristics and experience prior related behaviour and personal factors.
- Behaviour specific cognitions and affect perceived benefit of action, perceived self-efficacy actively related affect, interpersonal influences and situational influences.
- Behavioural outcomes commitment to a plan of action immediate competing demands preference & health promotion behaviour.

#### MATERIALS AND METHODS

##### RESEARCH DESIGN

Descriptive research design will be used for this study.

##### SETTINGS OF STUDY

The study will be conducted in White Memorial College of Nursing, Attoor in Kanyakumari District. White Memorial College of Nursing is run by White Memorial Educational Society. Nearly 250 students are studying in White Memorial College of nursing and 50 students are studying in 1<sup>st</sup> year B.Sc(N).

##### POPULATION

The target population selected for this study will be Ist year B.Sc(N) students studying in White Memorial College of Nursing.

**SAMPLE**

The Sample of study comprised of Ist year B.Sc(N) students of White Memorial College of Nursing.

**SAMPLE SIZE**

30 students from Ist year B.Sc Nursing will be selected for the study.

**CRITERIA FOR SAMPLE****Inclusive Criteria**

- Students of Ist year B.Sc(N) from White Memorial College of Nursing, Both Boys and girls will be included.
- Students who are present at the time of Data Collection.
- Students who are willing to participate in study.

**RESEARCH TOOL**

The tools developed by the investigator to collect Data after intense search Review of literature internet search and guidance from expert in the field of nursing.

The tool consists of two sections.

Section A: - Demographic Variable.

Section B: - Knowledge Questionnaire.

**Section A**

It deals with the demographic characters lies of Ist year B.Sc(N) Students. It consists of demographic variable such as age, sex, family history of cancer, since of Information.

**Section B**

Knowledge Questionnaire will be used to find out the level of knowledge regarding side effects of chemotherapy among Ist year B.Sc (N) students. It consists of 20 questions related to risk factors and symptoms of breast cancer.

**Scoring procedures**

11-20 - Adequate Knowledge

16-10 -Moderately adequate known

0-15 - Inadequate knowledge

**Data Collection procedure**

Data will be collected within the period of one day. 20 minutes will be spent for each sample. Totally 30 samples will be taken to assess the knowledge regarding risk factors and symptoms of breast cancer. The investigator introduced herself to the patient and maintain rapport to ensure co-operation. After explaining the purpose of the study, written consent was obtained from sample subjects Self-administered questionnaire was given to collect the demographic variables. By using Knowledge Questionnaire will be used to find out the level of knowledge regarding side effects of chemotherapy among Ist year B.Sc (N) students. It consists of 20 questions related to risk factors and symptoms of breast cancer.

**PLAN FOR DATA ANALYSIS:**

Data collected was analysed by using both descriptive and inferential statistics such as mean, Standard deviation, chi Square.

**DESCRIPTIVE STATISTICS**

1. Frequency and percentage distribution of sample according to demographic variables.
2. Frequency and percentage distribution were used to assess the Level of knowledge among regarding maintaining the weight of school aged children during this pandemic.

**INFERENTIAL STATISTICS**

- Chi-Square test was used to find out the association with their selected demographic variables.

**ETHICAL CONSIDERATION**

In this study the investigator looks in consideration of the ethical issues. No ethical issues raised by conducting the study.

- The subjects were informed that the confidentiality of the data will be maintained.
- Permission obtained from the concerned authority that is principal madam from White Memorial College of Nursing.
- A verbal concern will be obtained from 30 samples and assurance will be given to the subject. Confidentiality will be maintained.

**RESULTS AND DISCUSSION****Section -1**

**Frequency & percentage distribution of sample characteristics.**

**Table –1: Frequency and percentage distribution of samples according to selected demographic variables.**

Demographic Variable	Component of Variable	Frequency	Sample %
Age	19	8	26.6%
	21	21	70%
	21 Above	1	3.03%
Sex	Male	12	40%
	Female	18	60%
Source of information	Internet	22	76%
	Newspaper	5	16%
	Television	3	10%

Previous history of cancer	Yes	-	-
	No	30	100%

The data presented in table –I shows that 26.6% (8) where in the age group of 20 yrs, 70% (21) where in the age group of 21 yrs, (3.03%) (1) Where in the age group of above 21 yrs. In sex 40% (12) Where belongs to male,

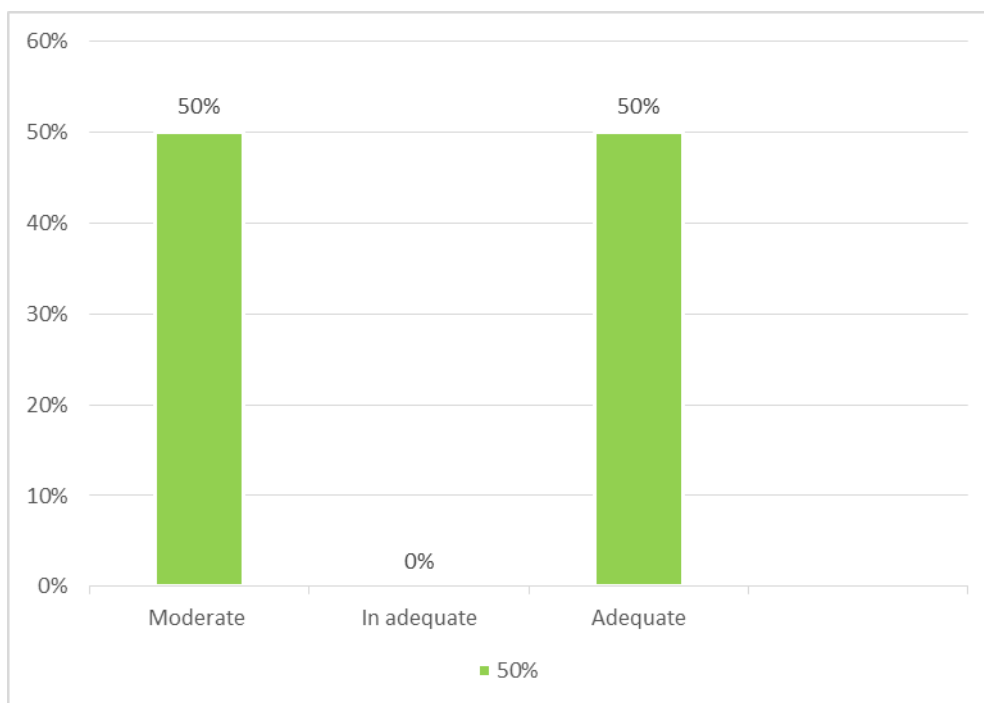
60% (18) belongs to female. Source of information 76% (22) internet 16% (5) from newspaper, 10% (3) from Television. In pervious history of cancer 100% (30) Where answer is no.

**Table –II: Level of knowledge regarding risk factors and symptoms of breast cancer among Ist year B.Sc. Nursing students in White Memorial College of Nursing, Attoor.**

Level of Knowledge	Frequency	Percentage %
Adequate	15	50%
Moderately Adequate	15	50%
In Adequate	0	0%

The table shows that 50% (15) are having adequate level of knowledge 50% (15) are having moderately adequate knowledge regarding risk factors and symptoms of breast

cancer among Ist year B.Sc. students in White Memorial College of Nursing, Attoor.



**Table –III: Association between level of knowledge of students with selected demographic variables.**

Sl. No	Demographic Variables	Level of knowledge						Chi-square value
		Adequate		Moderate		Inadequate		
		F	%	F	%	F	%	
1	Age							0 Df=4 =0.7107
	19	0	0	0	0	0	0	
	20	4	13.3%	4	13.3%	-	-	
2	21& above	11	36.6%	11	36.6	-	-	5 Df=2 0.1026 S
	Sex							
3	Male	9	30%	3	10%	-	-	3.587 Df=4 0.707 S
	Female	6	20%	12	40%	-	-	
3	Information							3.587 Df=4 0.707 S
	Internet	13	43.3%	9	30%	-	-	
	Newspaper	1	3.33%	4	13.3%	-	-	
	TV	1	3.33%	2	6.66%	-	-	

4	Previous History of cancer							0
	Yes	-	-	-	-	-	-	Df=2
	No	15	50%	15	50%	-	-	0.1026 N. S

The above table explains that for the demographic variables age the df value is 4, Chi-square value is 0.7107 and the table value is 2.132 and the table value is not significant at  $p < 0.05$ .

In regard to sex the df value is 2, Chi-square value is 0.1026 and the table value is 2.132 and the table value is significant at  $p < 0.05$ .

In regard to sources of information the df value is 4, Chi-square value is 0.707 and the table value is 0.7107 and the table value is significant at  $p < 0.05$ .

In regard to history of cancer the df value is 2, Chi-square value is 0.1026 and the table value 2.132 is and the table value is not significant at  $p < 0.05$ .

## CONCLUSION

Breast cancer is a disease in which cells in the breast grow out of control. There are different kinds of breast cancer. The kind of breast cancer depends on which cells in the breast cancer depends on which cells in the breast turn in to cancer. The investigator observed that along with Knowledge regarding the breast cancer, patients' family support, nutrition, and positive thinking should be there for a better outcome.

## REFERENCE

1. Basvanthappa B.T (2003) Medical Surgical Nursing (1<sup>st</sup> edition) New delhi Jaypee brothers.
2. Aiaer, Ayal. A "Lack of reduction in racial disparities in cancer specific mortality over a 20-year period" cancer, 2014; 120.10: 1532-1539.
3. American Cancer Society 2020 Cancer Statistics. Inc.
4. Joyce and Black J.M (2007) Medical Surgical Nursing Clinical Management for positive outcomes (10<sup>th</sup> edition) Elsevier Publications.

## JOURNAL REFERENCE

1. American cancer society, 1989, cancer statistics, 1989; cancer 39: 3-20.
2. American college of physicals 1989, personal communication with Linda Johnson white, March 1989.
3. American Healthcare Rodidogy, Administrators 1987, statistical surgery Sudbury, Massachusetts: American Healthcare Rodiobgy Administrators.
4. "Lifestyle 'behind 40% of cancers" BBC N.P; n.d web.03nlov 2014.
5. Medical Nurse todaly med lexicon internation, n.d Web. 02. Nov.2014.
6. Feeling tired – Google search. "feeling Tired – Google sear. n.p.n.d.web.03 Nov.2014.

7. "What is caner?" Kidshealth. The wib's most visited site about children's Health ed. Emit.cagwood. The Nomars foundation, oct.2012.web.02Nov.2014.
8. Handbook of systemic Treatments for cancer 7<sup>th</sup> edition. Eli Lilly and company Ltd.
9. Bai ley, C and corner, J: cancer Nursing : care in contact 2009-Blackwell oxford . 2<sup>nd</sup> edition, oxford Blackwell.