



# **SURVEY STUDY TO ASSESS KNOWLEDGE REGARDING BREAST CANCER AMONG SCHOOL GIRLS**

Patel Het Rajeshkumar, N.Sivasubramaniun, Parmar Pritiben Rajanikant, Kharadi Krinaben Sureshkumar,  
Thakor Mangiben Keshaji, Rana Rajusinh Pravinsinh

**Nootan College of Nursing, Sankalchand Patel University, Visnagar, Gujrat-384315.**

## **ABSTRACT**

Cancer affects everyone the young and the old, rich and poor, women and children. Breast cancer is the most commonly occurring cancer in women, comprising almost one third of all malignancies in females. It is the second leading cause of cancer deaths in women and poses a global public health concern. There is an increased burden of breast cancer in both developed and developing countries. Globally, over one million breast cancer cases are diagnosed annually. It is estimated that about half (60%) of breast cancer deaths occur in economically developing countries. Therefore, the purpose of this study was to assess girls' knowledge regarding breast cancer and to provide information booklet regarding steps involved in examining the breast which will enable for early detection of breast lesion and to reduce the mortality rate. The study revealed that 45% of adolescent girls have average knowledge and only a few (10%) adolescent girls have good knowledge regarding breast cancer. However, this difference was statistically non significant as ( $p > 0.05$ ). Association of knowledge regarding breast cancer was statistically tested and found to be significant with age, type of family, family's monthly income and source of health information ( $p < 0.05$ ).

**Key Words :** Study, Knowledge, Adolescent girls, Breast cancer

## INTRODUCTION

Health is wealth goes the saying. Health is an essential factor for a happy contented life. According to Newman's system model, Health is a condition in which the parts and subparts of the whole person are in harmony.

Health is the level of functional or metabolic efficiency of an organism. Health may also refer to; it is the general condition of a person's mind and body, usually meaning to be free from illness, injury or pain.

### **-WORLD HEALTH ORGANIZATION**

Cancer is a journey, but you walk the road alone. There are many place to stop along the way and get nourishment - you just have to be willing to take it.

### **-EMILY HOLLENBERG**

Cancer is a generic term for a large group of diseases that can affect any part of the body. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can then invade adjoining parts of the body and spread to other organs, the latter process is referred to as metastasizing. Metastases are a major cause of death from cancer.

Cancer is one of the most important diseases which threaten human health. In the world, breast cancer is the most commonly seen type of cancer in woman. Cancer is ultimately the result of cells that uncontrollably grow and do not die. Normal cells in the body follow an orderly path of growth, division and death. Programmed cell death is called 'apoptosis' and when this process breaks down, cancer begins to form. Unlike regular cells, cancer cells do not experience cells that growth out of control. **-KARA AND ACIKEL,(2013)**

The breast is made up of different tissues, ranging from very fatty tissue to very dense tissue. Within this tissue is a network of lobes. Each lobe is made up of small, tube- like structures called lobules that contain milk glands. Small ducts connect the glands, lobules, and lobes, carrying milk from the lobes to the nipple. The nipple is located in the middle of the areola, which is the darker area that surrounds the nipple.

Blood and lymph vessels also run throughout the breast. Blood vessels nourish the cells by delivering oxygen and nutrients and also removing waste and carbon dioxide. Lymph vessels, unlike blood vessels, only carry fluid away from tissues. They connect to lymph nodes and the lymphatic system, which drains bodily waste products. Lymph nodes are the small, bean – shaped organs that help fight infection. Groups of lymph nodes are located in different areas throughout the body, such as in the neck, groin, and abdomen. Regional lymph nodes of the breast are those nearby the breast, such as the lymph nodes under the arm, which are called axillary lymph nodes.

Breast cancer is a kind of cancer that develops from breast cells. Breast cancer usually starts off in the inner lining of milk ducts or the lobules that supply them with milk. A malignant tumor can spread to other parts of the body. A breast cancer that started off in the lobules is known as lobular carcinoma, While one that developed from the ducts is called ductal carcinoma.

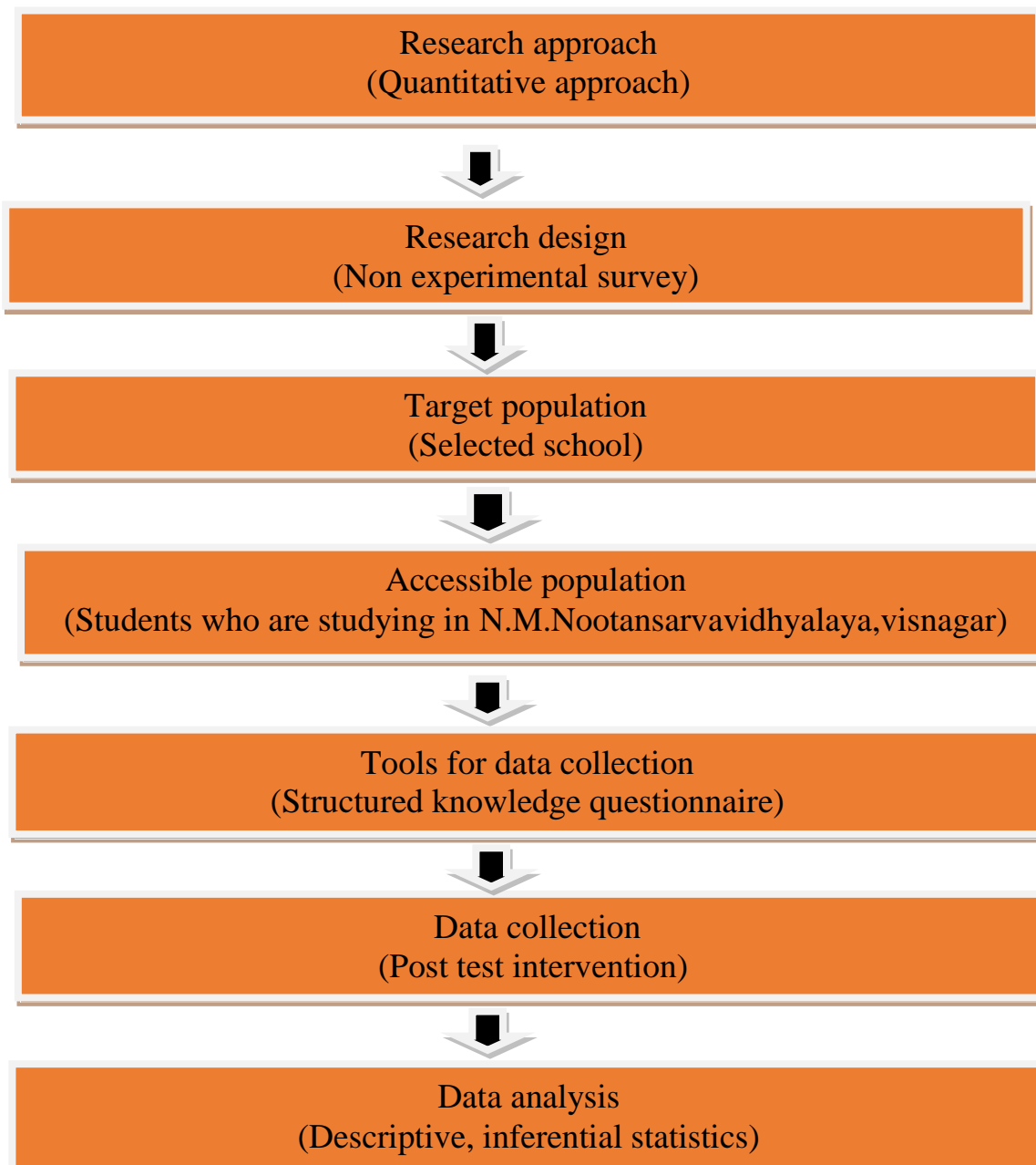
Breast development occurs in distinct stages throughout a woman's life from birth to puberty, during menstruation period, child bearing age and till women reaches menopause once ovulation and menstruation being the maturing of the breast being and continues to grow.

Girls may also experience change in breast texture and feeling particularly lumpy as age increases by 35 years.

## METHODS AND MATERIALS

Research methodology is the systematic, theoretical analysis of the method applied to a field of the study.

Research methodology refers to controlled investigation of the ways of obtaining organizing and analyzing data. Methodology studies address the development, validation and evaluation of research tools or techniques. **-Pilot and hanger 1999**





**Criterion measure**  
**(Knowledge regarding breast cancer among adolescent girls)**

**Research approach :-**Quantitative approach was felt to be appropriate and thus used for the study was aimed at assess the knowledge regarding breast cancer among adolescent girls.

**Research design:-**Research design used for the proposed study was non-experimental survey research design.

Assess knowledge regarding breast cancer among adolescent girls in selected school of Visnagar city.

**Population :-**

A population is complete set of person or project those process common characteristics that are of interest to the researcher.

In present study, the population consist of students in selected school of Visnagar city.

**Sample size :-**

Sample is a subject of the population selected to participate in a research study. In the present study, the sample consists of 40 adolescent girls were considered as samples for the study.

**Sampling criteria:-**

Sampling criteria is the list of the characteristic essential inclusion or exclusion in the target population.

**Inclusive criteria :**

1. Students who are present at the time of data collection.
2. Students who are willing to participate in the study.

**Exclusive criteria :**

1. Students who are not present during data collection.
2. Students who are on leave.
3. Students who are not willing to participate in the study.

**Variable of study :-**

Variable are the characteristics and qualities or attributes of persons or object that the experimenter manipulates control or observe. Variables can be changed and this change is studied.-**Best J and KHAN(2009)**

**Research variable :-**In descriptive, exploratory, comparative and qualitative research studies variables are observed or measured in natural setting as they exists, without manipulating or improving the effect of intervention or treatment. Here no independent variable is manipulated and no case effect relationship is examined, these variables are considered as research variable.

**Independent variable :-**

It is a stimulus or activity that is manipulated or varied by the researcher to create the effect on the dependent variable.

In this study independent variable is knowledge about breast cancer.

**-Dependent variable :-**

The dependent variable measure of the study the after offered to as outcome variables, response variables, disease variables, or effect variables.

In this study the dependent variable is knowledge.

**-Demographic variable :-**

Demographic variables is defined as the characteristic or attribute of the subject that are collected to describe the sample.

Age, Religion, Educational status, Type of family, Monthly family income, Source of health information.

**Descriptive of data collection tool :-**

**Section A:-** Demographic data perform.

**Section B:-** Self structured knowledge questionnaire to assess the knowledge of breast cancer among the adolescent girls.

Structured knowledge questionnaire:-

Self structured knowledge questionnaire and pencil instruments that a research subject is asked to complete.

The tool was prepared to assess the knowledge regarding breast cancer among adolescent girls based on;

1. Review of related literature.
2. Consultation with the guide.

**Section C:-** 40 items of multiple choice question type to assess the knowledge regarding breast cancer among adolescent girls.

- **Scoring :-**

The items were of multiple choices question type with one correct option. The respondents were given 1mark for each correct answer and 0 mark for wrong answer. The total maximum score should be 30 based on the contained scores the knowledge regarding breast cancer in adolescent girls classified as:

SR NO	SCORE	LEVEL OF KNOWLEDGE
1	0 – 10	Poor knowledge
2	11 – 20	Average
3	21 – 30	Good

**Data collection process :-**

Formal administration permission was obtained from principal of Nootan college of nursing, visnagar.

The study was conducted on 25<sup>th</sup>April.

The knowledge assessment was done by using a knowledge questionnaire. Time taken for test approximately 30 minutes. The main aim of the study was to assess the knowledge regarding breast cancer among adolescent girls students. The participate was selected by using non probability convenient

sampling technique. The purpose of procedure was explained properly in their own on language and consent was taken from students.

### Data analysis :-

Data analysis is the process of systematically applying statistical and/or logical technique to describe and illustrate and evaluate data. The data collected from students were analyzed by using descriptive and inferential statistics.

Results:

Table 2 : Distribution of adolescent girls according to their level of knowledge.

N = 40

Level of knowledge	Score	Pre test	
		Frequency	Percentage (%)
Poor knowledge	0-10	18	45
Average	11-20	18	45
Good	21-30	04	10

Table 2 Shows that Reveals 45% of adolescent girls were found to have poor knowledge, 45% of adolescent girls were found to have average knowledge and 10% of adolescent girls were found to have enough knowledge. Regarding breast cancer.

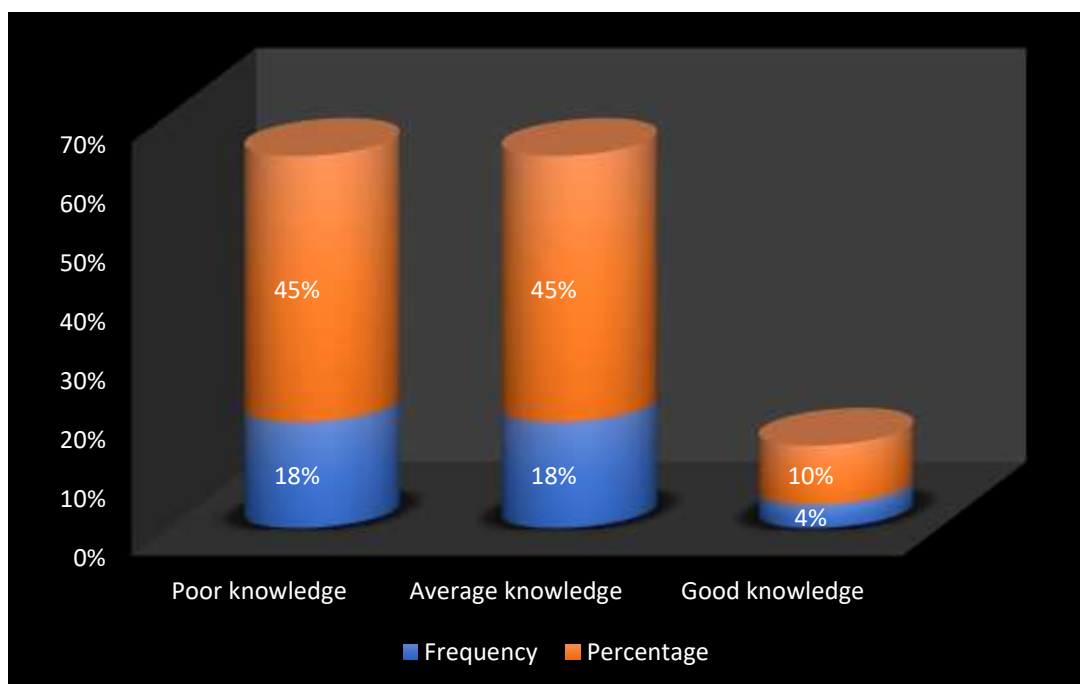


Fig no : 1 Assessment of pre test level of knowledge regarding breast cancer .

Table 3 : Association between Level of Knowledge and Their Demographic variables

Sr. no	Demographic variable	Total	Level of Knowledge						Chi Square value	P - Value
			Poor		Average		Good			
			No	%	No	%	No	%		
1.	Age									
	A.13 – 15	19	07	17.5%	08	20%	04	10%	5.02	0.0811
	B.16 – 18	21	11	27.5%	10	25%	0	0		
2.	Religion								15.80	0.014
	A. Hindu	30	14	35%	15	37.5%	01	2.5%		
	B. Christian	01	0	0	0	0	0	0		
	C. Muslim	02	02	5%	0	0	0	0		
	D. Others	07	02	5%	03	7.5%	02	5%		
3.	Educational Status								36.240	2.58
	A. Upper Primary	05	02	5%	0	0	03	7.5%		
	B. Secondary	20	15	37.5%	04	10%	01	2.5%		
	C. Higher Secondary	15	01	2.5%	14	35%	0	0		
4.	Type of Family								20.13	0.0004
	A. Nuclear Family	24	10	25%	12	30%	02	5%		
	B. Joint Family	14	08	20%	06	15%	0	0		
	C. Extended Family	02	00	0	0	0	02	5%		
5.	Family Monthly Income								10.92	0.027
	A. Less Than 10,000/-	15	05	12.5%	10	25%	0	0		
	B. Rs.10,000 - 20,000/-	10	03	7.5%	06	15%	01	2.5%		
	C. More Than 20,000/-	15	10	25%	02	5%	03	7.5%		
6.	Source Of Health Information								7.71	0.25
	A. Friends	04	02	5%	01	2.5%	01	2.5%		
	B. Health Professionals	08	03	7.5%	03	7.5%	02	5%		
	C. Mass Media	05	03	7.5%	01	2.5%	01	2.5%		
	D. Classroom Teaching	23	10	5%	13	32.5%	0	0		

## DISCUSSION

The results of the present study showed that 45% of adolescent girls have average knowledge and 45% of adolescent girls have poor knowledge and only a few (10%) adolescent girls have good knowledge regarding breast cancer. However, this difference was statistically non significant as ( $p>0.05$ ).

Association of knowledge regarding breast cancer was statistically tested and found to be significant with age, religion ,educational status, type of family, family monthly income ( $p<0.05$ ).

Hasanthika M Ranasinghe, Nilakshika Ranasinghe, Chaturaka Rodrigo, Rohini De A Seneviratne and Senaka Rajapakse (2013) conducted a similar study on the awareness of breast cancer among 859 adolescent girls in schools within the Colombo District, Sri Lanka using a self-administered questionnaire. This study revealed that there significant deficiencies in knowledge, attitudes and practices on breast cancer in the study population. In particular, knowledge on breast self examination was poor. There is a need for awareness programs aimed specifically at this important target group.

Another similar study conducted by Naif A.Alharbi, Malik S.Alshammari, Barjas M.Almutair, GamalMakboul, Medhat K.El-Shazly (2012) on Knowledge. Awareness, and practices concerning breast cancer among Kuwaiti female school teachers.

## CONCLUSION

This study concluded that most of the adolescent girls have average knowledge regarding breast cancer. Association of knowledge regarding breast cancer was statistically tested and found to be significant with age, religion, educational status, type of family, family monthly income( $p < 0.05$ ).

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