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## A Descriptive Study to Assess Knowledge on Screening and Prevention of Cervical And Breast Cancer Among Women in Selected Urban Areas of Ahmedabad City, Gujarat State, with A View to Develop an Information Booklet

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### ABSTRACT

Cervical Cancer is a malignant tumor deriving from cells of the “cervix uteri”, which is the lower part, the “neck” of the womb, the female reproductive organ. Breast cancer is defined as malignant neoplasm of the breast arising from epithelial lining of the lobule, duct and nipple. The present study aims to assess the knowledge regarding screening and prevention of cervical and breast cancer among 100 women residing at urban areas of Ahmedabad city. The research design adopted for this study was Non experimental descriptive research design and non-probability convenient sampling technique was used for data collection. The study was conducted in urban areas of different societies of Ahmedabad city. Data collection tool consisted of semi structured knowledge questionnaire with multiple choice questions. Data was analysed through descriptive and inferential statistics. The study revealed that 22% of the samples had good knowledge and 78% had average knowledge. Mean score regarding screening and prevention of cervical and breast cancer was 33.83. Among demographic variables Age in years, Education, Occupation, marital status, no. of children, family income and diet pattern, it was found that there was significant association between family income of participants and knowledge of women. Chi square value was 8.009, and calculated P value was 0.045 which was less than 0.05 which indicates that it was significant. After analysis the investigator developed and distributed an information booklet regarding screening and prevention of cervical and breast cancer.

### KEYWORDS

*Cervical Cancer, Breast Cancer, Women, Knowledge, Screening*



## INTRODUCTION

### “Attention to health is life’s greatest hindrance” – Plato

Breast cancer and cervical cancer are the most prevalent cancers among the women of India. Cervix forms the lower part of the uterus, and cervical cancer affects the cells lining the cervix. Breast cancer starts when cells from breast begin to grow out of control. If one looks at the global statistics, a study Of World Health Organization reveals that the most commonly diagnosed cancers among female population were breast cancer (1.7 million, 11.9%) and cervical cancer (2,66,000) in 2012.

Incidence of breast and cervical cancers in India is among

The top three positions of global statistics. During 2012, 1, 44,937 women were newly detected with breast cancer and 70,218 (12.7%) died, which indicates that, of every 2 women newly diagnosed with breast cancer, one woman is dying of it. On the other hand, cervical cancer in India holds second position with an incidence of 1, 22,844 (22.9%). Cervical cancer is a malignant tumour deriving from cells of the “cervix uteri”, which is the lower. Part, the “neck” of the womb, the female reproductive organ. Cervical cancer is cause by human papilloma virus .HPV infection causes more than 90% of cases, most people who have had HPV infection. When HPV infects the cervix, it causes change in cell growth. Breast cancer is defined as malignant neoplasm of the breast arising from the epithelial lining of the lobule, duct and the nipple. Breast cancer is the second most common cancer worldwide and is the most common cancer in women. In India 67,477 deaths annually. Approx. 185 women die every day. Approx. 8 women die every hour. Women aged 15 years and older who are at risk of developing cervical cancer. 80 – 90 % of women who get breast cancer are the first in their families to have breast cancer. 80% breast lumps are benign. 1/8 women are at risk of developing breast cancer. Five year survival among women ages 15 -49 initially diagnosed with distant stage breast cancer. 1992 -1994 - 18 % 2005 -2012 – 36%.

## STATEMENT OF THE PROBLEM

“A descriptive study to assess knowledge on screening and prevention of cervical and breast cancer among women in selected urban areas of Ahmedabad city, Gujarat state, with a view to develop an information booklet.”

## OBJECTIVES



1. Assess the existing knowledge on screening and prevention of cervical and breast cancer among women in selected urban areas of Ahmedabad city
2. Find association of knowledge score with selected demographic variables
3. Develop and distribute the information booklet on screening and prevention of cervical and breast cancer.

### **ASSUMPTION OF THE STUDY:-**

Women in urban areas of Ahmedabad city may have knowledge regarding screening and prevention of cervical and breast cancer.

The information booklet May be useful source to improve the knowledge regarding the screening and prevention of cervical and breast cancer.

**RESEARCH APPROACH:** The research study approach is Non- Experimental Descriptive approach.

**RESEARCH DESIGN:** The research design selected for the study is Non experimental, descriptive survey research design.

**RESEARCH SETTING:** In a partially controlled situation, the environment is partially modified to control extraneous variables, while in highly controlled situations, the study environment is fully controlled to combat the effect of extraneous variables. The present study was conducted in the selected urban areas of Ahmedabad city, Gujarat state. The selected area (Kameshwar park society) for pilot study was selected conveniently by investigator. Study was conducted successfully.

**TARGET POPULATION:-**In this study the target population consist of women residing in urban areas of Ahmedabad city, Gujarat state.

### **SAMPLE SIZE AND SAMPLING TECHNIQUE**

A sample consists of a subset of the units that compose the population. Sampling is necessary because it is more economical and efficient to work with a small group of elements. In present study, sample of study comprise of 100 women available at selected urban areas of Ahmedabad city, Gujarat state. Non probability convenience sampling technique was used in this study. The samples who met the criteria for sampling selection were selected.

### **SELECTION OF TOOLS FOR DATA COLLECTION**

**Semi-Structured knowledge questionnaire:**



Considering the setting of the research and characteristics of the subject, a semi-structured Knowledge Questionnaire, with multiple choice questions were used for assessing Knowledge on Screening and prevention of cervical and breast cancer among women's in selected urban areas of Ahmedabad city, Gujarat state.

### **DEVELOPMENT OF THE TOOLS:**

The development of tool is a step by step procedure in order to make the tool more practically oriented. The investigator reviewed the literature on screening and prevention of cervical and breast cancer among women's such as books, articles, published and unpublished thesis and also to develop the tool to assess the knowledge on Screening and prevention of cervical and breast cancer among women's in selected urban areas of Ahmedabad city, Gujarat state.

### **DESCRIPTION OF THE TOOLS:**

**The investigator prepared tool in two sections as follows, Semi Structured Knowledge Questionnaires**

**Section I-** Consists of Demographic variables of the samples such as Age, education, Occupation, marital status, number of children, family income per month, diet pattern.

**Section II-** Comprised items on semi structured knowledge question regarding knowledge of screening and prevention of cervical cancer. Consist of 40 items each item carry one mark. Maximum score of the questionnaire is 40. Investigator gives 1 mark for correct answer and 0 marks for wrong answer. This questions related to introduction, risk factors , causes and risk factor ,sign and symptoms , diagnosis , screening , prevention, complication of cervical and breast cancer among women in selected urban areas of Ahmedabad city, Gujarat state.

### **RELIABILITY**

KR-21 :

$$r = \frac{n}{n-1} \left[ 1 - \frac{\sum pq}{\sigma_x^2} \right]$$

Where  $n$  = Number of items in the test

$$p = \frac{\text{Number of persons answering item correctly}}{\text{Number of persons taking the test}}$$

$$q = \frac{\text{Number of persons answering item wrongly}}{\text{Number of persons taking the test}}$$

$\Sigma$  = Summation sign indicating the  $pq$  is summated over all items

$\sigma_x^2$  = Variance of the total test.

$r$  = Reliability of a test.

The reliability of semi structured knowledge questionnaires was 0.07 which is less than 0.5, hence the questionnaires was determined by spearman's rank correlation formula found to be reliable.

### **PROCEDURE FOR DATA COLLECTION**



Formal permission from each chairman of selected society of Ahmedabad city were taken. The investigator had collected data after getting permission. The data collection procedure was started from 30/04/19 to 05/05/19.

An informed written consent from all the participants was taken before starting the study. The investigator approached the samples individually, discussed the objectives of the study and obtained consent for participation in the study. All samples gave cooperation during data collection procedure and no problem was faced during data collection.

### PLAN OF DATA ANALYSIS:

The investigator planned to analyse the data in following manner. Demographic data was analysed using frequency and percentage and had presented in the table form.

### ANALYSIS AND INTERPRETATION OF DEMOGRAPHIC DATA OF SAMPLES.

**Table 1** Frequency and Percentage Distribution of Samples according to as age in years, education, occupation, marital status, number of children, family income per month, and diet pattern

Sr.No	Variable	Frequency	Percentage
1.	Age : (years )		
	a. 25 to 30	12	12%
	b. 31 to 35	20	20%
	c. 36 to 40	32	32%
	d. 41 to 45	36	36%
2.	Education		
	a. Illiterate	00	00%
	b. Primary education	11	11%
	c. Secondary education	41	41%
	d. Graduate and above	48	48%
3.	Occupation		
	a. Government employee	15	15%
	b. Semi government employee	04	04%
	c. Private employee	14	14%
	d. Self employed	67	67%
4.	Marital status		
	a. Married	93	93%
	b. Unmarried	4	4%
	c. Divorce	1	1%
	d. Widow	2	2%
5.	No of children		
	a. 0	10	10%
	b. 1	33	33%
	c. 2	47	47%
	d. More than 2	10	10%
6.	Monthly income		
	a. 5000/-	02	02%
	b. 5001 to 10000/-	19	19%
	c. 10001 to 20000/-	49	49%
	d. Above 20001/-	30	30%



7	Diet Pattern		
	a. Vegetarian	77	77%
	b. Non vegetarian	5	5%
	c. A and b both	17	17%

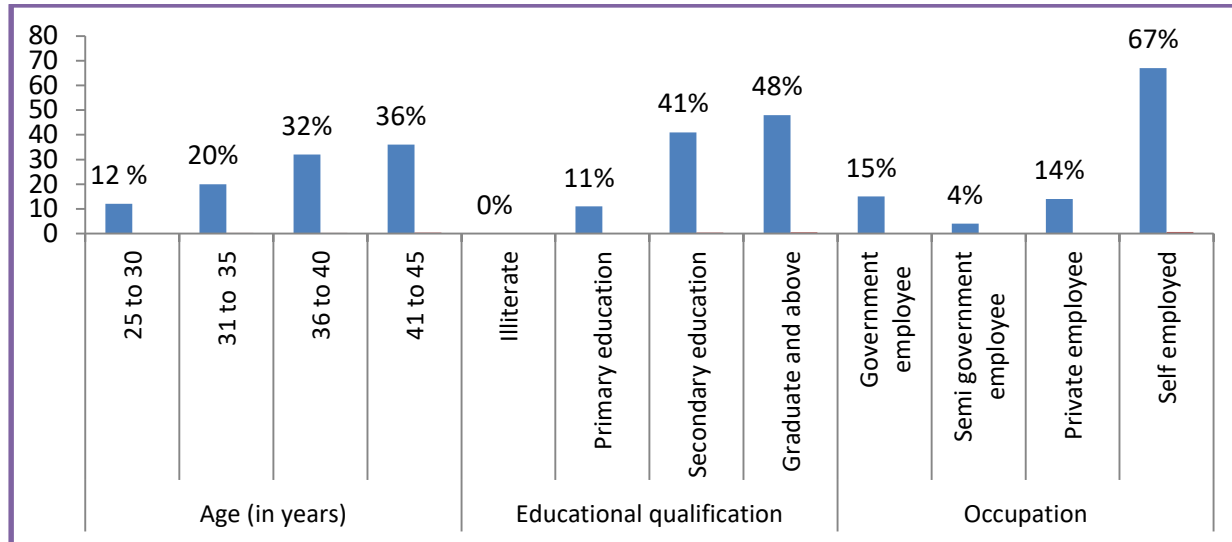


Figure 1 Bar graph showing demographic variable age, education, occupation

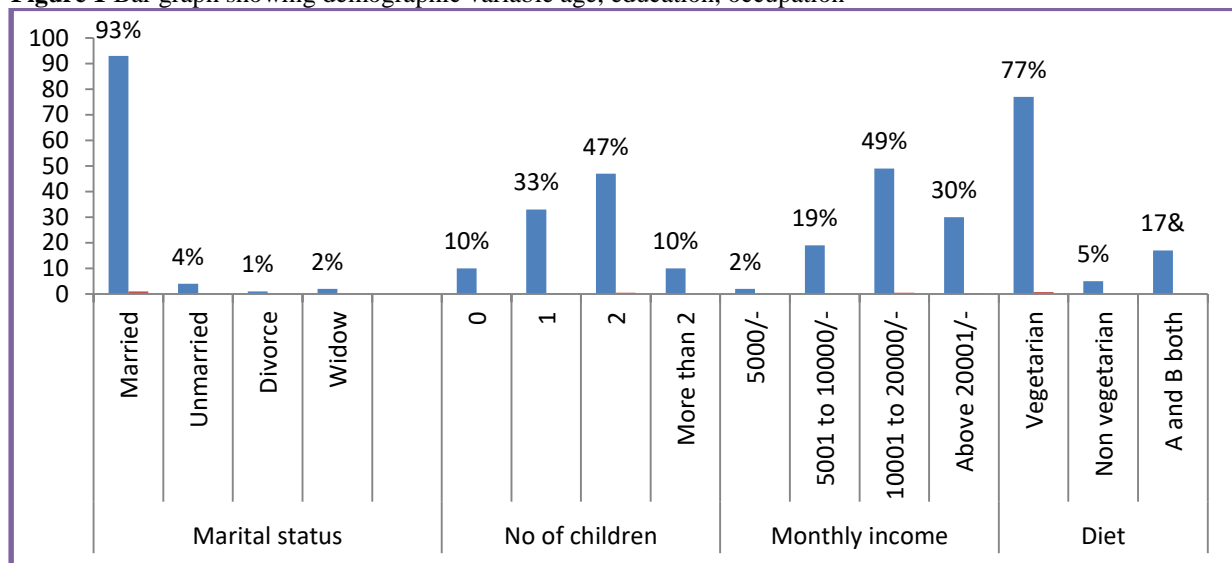


Figure 2 Bar Graph showing demographic variable marital status, no of children, monthly income, diet.

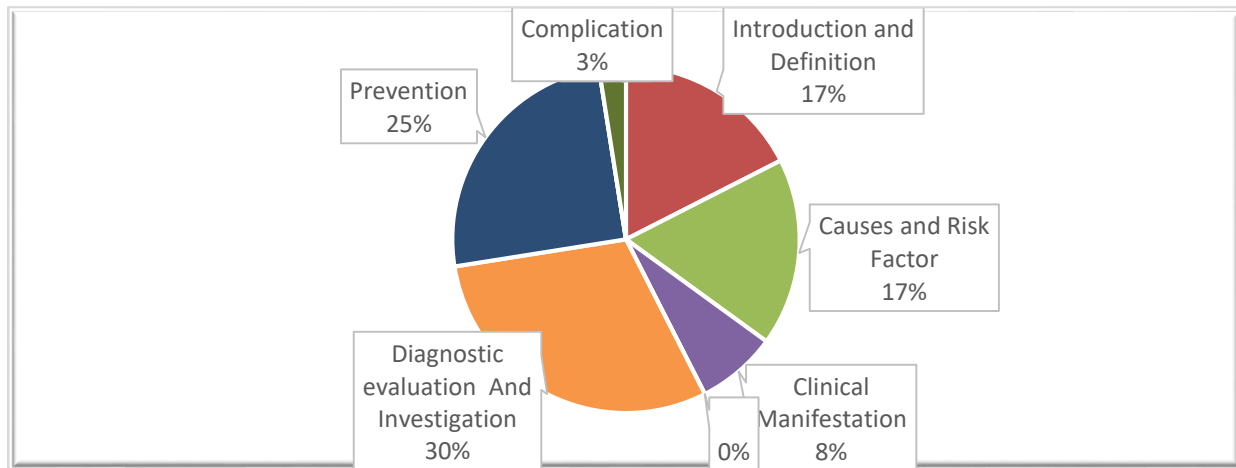
## ANALYSIS AND INTERPRETATION OF DATA RELATED TO THE KNOWLEDGE OF SAMPLES

Table 2 Area wise mean, score and percentage (N=100)

AREA	MAX. SCORE	MEAN. SCORE	PERCENTAGE
Introduction and Definition	7	6.41	91.57%
Causes and Risk Factor	7	5.95	85%
Clinical Manifestation	3	2.66	88.66%
Diagnostic evaluation And Investigation	12	9.87	82.25%



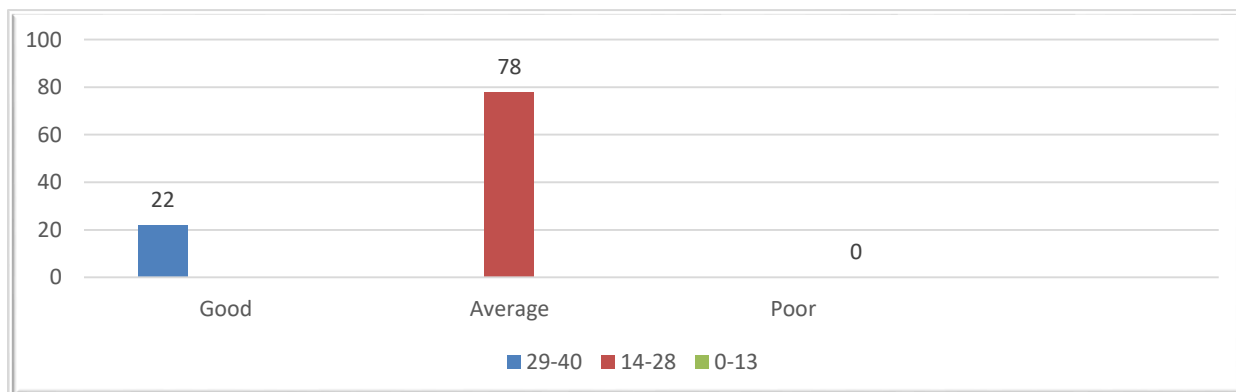
<b>Prevention</b>	10	8.16	81.6%
<b>Complication</b>	1	0.78	78%
<b>Total</b>	<b>40</b>	<b>33.83</b>	



**Figure 3** Pie Chart showing the area wise mean, score and percentage

**Table 3** Overall Frequency and Percentage Distribution of Knowledge Score of Samples Regarding Screening and Prevention Breast and Cervical Cancer (N=100)

Knowledge level	Classification	Frequency	Percentage (%)
Good	29-40	22	22%
Average	14-28	78	78%
Poor	00 -13	00	00%
<b>Total</b>	<b>40</b>	<b>100</b>	<b>100%</b>



**Figure 4** Bar Graph showing over all frequency and percentage distribution of knowledge score

**ANALYSIS AND INTERPRETATION OF THE DATA SELECTED TO THE ASSOCIATION OF KNOWLEDGE SCORE WITH SELECTED DEMOGRAPHIC VARIABLES OF THE SAMPLES.**

**Table 4** Association of knowledge score with selected demographic variables of the samples (N=100)

Sr. no	Demographic variable	Frequency (f)	X <sup>2</sup> Calculat-ed value	df	P - value	Association
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1.	Age : (years )						
	a.	25 to 30	12	2.093	3	0.5533	Not significant
	b.	31 to 35	20				
	c.	36 to 40	32				
d.	41 to 45	36					
2.	Education						
	a.	Illiterate	00	1.376	2	0.502	Not significant
	b.	Primary education	11				
	c.	Secondary education	41				
d.	Graduate and above	48					
3.	Occupation						
	a.	Government employee	15	0.981	3	0.8058	Not significant
	b.	Semi government employee	04				
	c.	Private employee	14				
d.	Self employed	67					
4.	Marital status						
	a.	Married	93	0.8637	3	0.8637	Not significant
	b.	Unmarried	4				
	c.	Divorce	1				
d.	Widow	2					
5.	No of children						
	a.	0	10	6.447	3	0.0917	Not significant
	b.	1	33				
	c.	2	47				
d.	More than 2	10					
6.	Monthly income						
	a.	5000/-	02	8.009	3	0.0458	Significant
	b.	5001 to 10000/-	19				
	c.	10001 to 20000/-	49				
d.	Above 20001/-	30					
7.	Diet pattern						
	a.	Vegetarian	77	2.714	3	0.437	Not significant
	b.	Non vegetarian	5				
c.	A and b both	17					

## MAJOR FINDINGS OF THE STUDY

The data were analysed and interpreted in terms of objectives of the study. Descriptive and inferential statistics were utilized for data analysis .Data were organized and presented under the following manner: analysis and interpretation of demographic data of samples, knowledge of samples regarding screening and prevention of cervical and breast cancer. According to age the data shows that out of 100 samples ,12% belongs to the age group of 25 to 30 years, 20% belongs





to the age group of 31 to 35 years, 32% belongs to the age group of 36 to 40 years, and 36% belongs to the age group of 41 to 45 years. According to Education qualification the data shows that out of 100 sample illiterate 00(0%), primary education 11(11%), secondary education 41(41%), graduate and above 48(48%). According to job pattern out of 100 samples 15% belongs to government employee, 4% belongs to semi government employee, 14% belongs to private employee, and 67% belongs to self-employee. According to the data of the marital status out of 100 samples, 93% were married, 4% were unmarried, 1% were divorce, 2% were widow.

According to the data out of 100 samples, 10% belongs to no any children, 33% belongs to 1 child, 47 belongs to 2 children, 10% belongs to are having more than 2 children. According to data out of 100 samples, 2% belong 5000/-monthly income of family, 19% belongs to 5001 to 10000, 49% belongs to 10001 to 20000, 30% belongs to 20001 and above monthly family income. According to data 77% belongs to vegetarian diet pattern, 5% belongs to non-vegetarian diet pattern, 17% belongs to mixed diet pattern.

### **Knowledge of sample regarding screening and prevention of cervical and breast cancer.**

The mean knowledge score of the study was 33.83

## **CONCLUSIONS**

At the end of the study, the investigator comes to know about the following highlights.

1. This survey was conducted only for 100 women. So it is only validated to 100 samples.
2. From the survey of 100 samples of women of 25 to 45 years from selected areas of Ahmedabad city, Gujarat state, 78% women know very well about screening and prevention of cervical and breast cancer.
3. Association of one demographic variable was found in monthly income of family as P value (0.0458) was found less than 0.05.
4. An information booklet may be effective in enhancing knowledge of the sample regarding screening and prevention of cervical and breast cancer.



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### UNPUBLISHED THESIS

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