



ASSESSMENT OF KNOWLEDGE REGARDING BREAST TUMOR AMONG WOMEN RESIDING IN SELECTED RURAL AND URBAN AREAS: A COMPARATIVE STUDY.

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ABSTRACT

Introduction- Unlike other cancers, breast cancer is easily detectable, affects an organ that is readily visible, and has an effective treatment. Lack of early diagnosis, insufficient diagnosis, or efficient treatment is one of the key factors contributing to the low survival rate of breast cancer patients in developing nations. **Objective-** To assess the knowledge regarding breast tumor among women residing in selected rural and urban areas. **Methodology-** A descriptive study was used to assess 100 women from rural and urban areas. The participant was chosen using a non-probability convenient sampling technique. Semi-structured questionnaire was created to assess the knowledge regarding breast Tumor. **Results-** The study shows that, in rural area 4% of women had poor level of knowledge score, 58% had average and 38% of women had good level of knowledge score. Minimum knowledge score was 5 and maximum knowledge score was 14. Mean knowledge score was 9.72 ± 2.09 and mean percentage of knowledge score was 38.88 ± 8.36 . Similarly in urban area shows that 22% of women had average level of knowledge score, 52% had good, 24% had very good and 2% of them had excellent level of knowledge score. Minimum knowledge score was 8 and maximum knowledge score was 21. Mean knowledge score was 13.38 ± 3.46 and mean percentage of knowledge score was 53.52 ± 13.87 . **Conclusion-** According to the study finding, Rural area reveals that there is an association of knowledge score with age and education. In urban area reveals that there is an association of knowledge score with age, education, occupation, monthly family income, and knowledge regarding breast tumor.

KEYWORDS : Breast Tumor, knowledge, Assessment, women,

INTRODUCTION

Breast tissue serves as the primary site of origin for breast cancer, most frequently the lobules or inner lining of milk ducts. A change in entropy or nuclear radiation, airborne chemicals, bacteria, fungi, electromagnetic radiation, viruses, parasites, heat, water, food, mechanical cell-level injury, free radicals, evolution, or ageing of DNA and RNA can all cause mutations that can cause normal cells to become cancerous. Making an accurate tumor diagnosis is crucial. The majority of breast tumors are caused by benign (non-cancerous) alterations, however if a malignant tumor is mistakenly identified as benign, it will pose substantial health risks.⁴

From birth until adolescence, during the menstrual cycle, when a woman is of childbearing age, and until she reaches menopause, the growth of the breasts happens in stages throughout her life. The developing of the breasts begins with the onset of ovulation and menstruation and continues to expand. Women may also notice changes in the texture and particularly lumpy feeling of their breasts. The mammary glands gradually diminish as age grows by 35 years. By the time a woman is in her late 40s or early 50s, menopause has set in, her levels of estrogen and progesterone are fluctuating, and her estrogen levels are dramatically declining, which causes a wide range of symptoms. Breast tissue shrinks, loses shape, and develops "sagging" due to the connective tissue of the breast being dry and inelastic.⁵

80%) beginning with cells lining the ducts and a small percentage (10%) beginning with lobule cells. Cancer begins when epithelial cells in the ducts or lobules grow out of control. When cancer cells grow sufficiently enough, they form a tumour, which can be seen on a mammogram or felt as a lump during a breast examination. Tumours may be cancerous or benign. A malignant tumour has the ability to grow and spread to other parts of the body, whereas a benign tumour can develop but does not spread. However, not all tumours are malignant unless confirmed by biopsy.⁶

BACKGROUND

The increased life expectancy, urbanization, and adoption of western lifestyles have all contributed to an increase in the incidence, morbidity, and mortality rates of breast cancer in both high- and low-resource countries. Female breast cancer was identified as the major cause of cancer incidence globally, according to research on global cancer statistics published in 2020. According to estimates, 2.3 million new cases of breast cancer were discovered, or around 11.7% of all new cancer cases worldwide. The World Health Organization (WHO) estimates that 685,000 women will lose their lives to breast cancer in 2020.⁷

Need For The Study

Breast tumors remain the leading cause of cancer death among women in underdeveloped countries. Conventionally, smoking or drinking is thought to increase the risk of developing cancer. But the truth is that it is multifaceted, and if found early, it may be controlled in a far more favorable

Breast cancer develops in the tissues, with the majority (70-

manner, with a better prognosis and even lower mortality. Furthermore, there is abundant scientific information that suggests that 30% of cancers are curable if diagnosed previously and early treatment is offered, 40% are preventive, and the remaining 30% of advanced cancers are cared after with palliative care because of the requirement for effective pain management techniques.¹¹

Problem Statement

"Assessment Of Knowledge Regarding Breast Tumor Among Women Residing In Selected Rural And Urban Areas: A Comparative Study."

OBJECTIVE OF THE STUDY

- 1) To assess the knowledge regarding breast Tumor among women residing in selected rural area.
- 2) To assess the knowledge regarding breast Tumor among women residing in selected urban area.
- 3) To compare the knowledge regarding breast Tumor among women residing in selected rural and urban area.
- 4) To find out associate between the knowledge score with their selected demographic variables.

Conceptual Framework

This study was based on Modified Roy's Adaptation Theory.

Methodology

Research Approach- Quantitative approach

Research Design- Descriptive design

Sample – Women (20-60 years)

Sample Size – 100 Women

Sampling Technique - Non-probability convenient sampling technique.

Tool

- Section A - semi structured questionnaire on demographic variables
- Section B- Structured questionnaire on knowledge regarding breast Tumor

RESULTS AND DISCUSSION

Section I: Showing percentage wise distribution of women residing in rural and urban area according to their selected demographic variables.

Table 1: Table Showing The Frequency And Percentage Wise Distribution Of Women Residing In Selected Rural And Urban Area According To Their Selected Demographic Characteristics. N = 100 (rural=50, Urban=50)

Demographic Variables	Rural Area		Urban Area	
	Frequency	Percentage	Frequency	Percentage
Age(yrs)				
20-30 yrs	12	24%	17	34%
31-40 yrs	20	40%	14	28%
41-50 yrs	14	28%	10	20%
51-60 yrs	4	8%	9	18%
Education				
Primary	12	24%	5	10%
Secondary	14	28%	6	12%
Higher Secondary	24	48%	13	26%
Graduate	0	0%	23	46%
Postgraduate	0	0%	3	6%
Other	0	0%	0	0%
Occupation				
Govt Service	0	0%	5	10%
Private Service	0	0%	8	16%
Homemaker	16	32%	21	42%
Laborer	23	46%	0	0%
Students	1	2%	6	12%
Others	10	20%	10	20%

Monthly family income (Rs)				
Below 10000 Rs	34	68%	7	14%
10001-15000 Rs	12	24%	18	36%
15001-20000 Rs	4	8%	15	30%
≥ 20001 Rs	0	0%	10	20%
Religion				
Hindu	24	48%	17	34%
Muslim	6	12%	5	10%
Christian	5	10%	8	16%
Buddhist	15	30%	12	24%
Others	0	0%	8	16%
Area of residence				
Rural area	50	100%	0	0%
Urban area	0	0%	50	100%
Knowledge regarding breast tumor				
Yes	11	22%	25	50%
No	39	78%	25	50%
Source of knowledge				
Mass media	3	27.3%	13	52%
Health worker	0	0%	0	0%
Relatives	5	45.5%	5	20%
Friends	3	27.3%	7	28%
Others	0	0%	0	0%

Section II- Assessment of level of knowledge regarding breast tumor among women residing in selected rural and urban area

Table 2: Assessment With Level Of Knowledge Score Among Women Residing In Selected Rural And Urban Areas N = 100

Level of knowledge score	Score range	Level of knowledge score		Level of knowledge score	
		Rural		Urban	
		Frequ-ency	Percen-tage	Frequ-ency	Percen-tage
Poor	0-5(0-20%)	2	4%	0	0%
Average	6-10(21-40%)	29	58%	11	22%
good	11-15(41-60%)	19	38%	26	52%
Very good	16-20(61-80%)	0	0%	12	24%
Excellent	21-25(81-100%)	0	0%	1	2%
Minimum score		5		8	
Maximum score		14		21	
Mean knowledge score		9.72 ± 2.09		13.38 ± 3.46	
Mean % Knowledge Score		38.88 ± 8.36		53.52 ± 13.87	

The study shows that, with regards to rural area 4% of women had poor level of knowledge score, 58% had average and 38% of women had good level of knowledge score. Minimum knowledge score was 5 and maximum knowledge score was 14. Mean knowledge score was 9.72±2.09 and mean percentage of knowledge score was 38.88 ± 8.36.

With regards to urban area shows that 22% of women had average level of knowledge score, 52% had good, 24% had very good and 2% of them had excellent level of knowledge score. Minimum knowledge score was 8 and maximum knowledge score was 21. Mean knowledge score was 13.38±3.46 and mean percentage of knowledge score was 53.52 ± 13.87.

Section III – Comparison of knowledge score regarding breast tumor among women residing in selected rural and urban areas.

Table 3: Table Showing Comparison Of Knowledge Score Regarding Breast Tumor Among Women From Rural And Urban Areas. N = 100

Area	Mean	SD	Mean Difference	t-value	p-value
Rural Area	9.72	2.09	3.66±0.57	6.39	0.0001 S, p<0.05
Urban Area	13.38	3.46			

This table shows the comparison of knowledge score regarding breast tumor among women residing in selected rural area and urban area. Mean, standard deviation and mean difference values are compared and student's unpaired 't' test is applied at 5% level of significance. The tabulated value for $n=50+50-2$ i.e. 98 degrees of freedom was 1.98. The calculated 't' value i.e. 6.39 are much higher than the tabulated value at 5% level of significance for overall knowledge score of women in selected rural and urban area which is statistically acceptable level of significance. Hence it is statistically interpreted that knowledge regarding breast tumor among women in selected rural and urban area was effective.

Section IV - Association of level of knowledge score regarding breast tumor among women in rural area in relation to demographic variables

Table 4: Table Showing Association Of Knowledge Score Regarding Breast Tumor Among Women Residing In Rural Area With Relation To Its Demographic Variables N=50

Demographic variables	Calculated value			df	Table Value	Level of significance	significance
	T-value	F-value	P-value				
Age	-	5.20	0.004	3,46	2.76	<0.05	S
Education	-	3.57	0.036	2,47	3.15	<0.05	S
Occupation	-	1.24	0.20	3,46	2.76	>0.05	NS
Monthly income	-	0.52	0.59	2,47	3.15	p>0.05	NS
religion	-	-	1.59	3,46	2.76	p>0.05	NS
Knowledge regarding breast tumor	1.67	-	0.10	4,8	2.00	p>0.05	NS
Source of knowledge	-	0.72	0.51	2,8	4.46	p>0.05	NS

Table 5: Table Showing Association Of Knowledge Score Of Women Residing In Urban Area With Relation To Its Demographic Variables N=50

Demographic variables	Calculated value			Df	Table Value	Level of significance	significance
	T-value	F-value	P-value				
Age	-	17.99	0.0001	3,46	2.76	<0.05	S
education	-	10.18	0.0001	4,45	2.52	<0.05	S
Occupation	-	21.32	0.0001	4,45	2.52	<0.05	S
Monthly income	-	5.37	0.0003	3,46	2.76	<0.05	S
religion	-	0.88	0.48	4,45	2.52	p>0.05	NS
Knowledge regarding breast tumor	6.65	-	0.0001	48	2.00	<0.05	S
Source of knowledge	-	0.51	0.60	2,22	3.44	p>0.05	NS

The study shows that, in rural area shows that 4% of women had poor level of knowledge score, 58% had average and 38% of women had good level of knowledge score. Minimum knowledge score was 5 and maximum knowledge score was 14. Mean knowledge score was 9.72 ± 2.09 and mean percentage of knowledge score was 38.88 ± 8.36 .

Similarly, In urban area shows that 22% of women had average level of knowledge score, 52% had good, 24% had very good and 2% of them had excellent level of knowledge score. Minimum knowledge score was 8 and maximum knowledge score was 21. Mean knowledge score was 13.38 ± 3.46 and mean percentage of knowledge score was 53.52 ± 13.87 .

CONCLUSION

The study concludes that after a thorough analysis, in rural area reveals that there is an association of knowledge score with age and education. In urban areas reveals that there is an association of knowledge score with age, education, occupation, monthly family income, and knowledge

regarding breast tumor.

Recommendation

On the basis of the study, the following recommendation has been made

- A similar study can be conducted on larger population for wider generalization
- A similar study can be conducted by using structured teaching program on Breast Tumor
- A similar study can be conducted to evaluate the efficacy of various teaching strategies like information booklet, leaflets, pamphlets and computer assisted instruction in Breast Tumor.
- A similar study can be conducted in married and unmarried women to know their knowledge regarding Breast Tumor
- Mass media and educational programmes should be arranged to educate women regarding Breast Tumor.

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