

Research Article

A STUDY TO ASSESS THE KNOWLEDGE REGARDING RISK FACTORS OF BREAST CANCER AMONG WOMEN IN RURAL AREA PAPPAKOVIL AT NAGAPATTINAM.

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ABSTRACT

Background: Breast cancer is a type of cancer among women in the world and one of the most common causes of cancer deaths. Women awareness on risk factors and screening is largely important in early detection. The aim of this study was to measure the knowledge level of risk factors of breast cancer among the women aged between 25 and 45 years living in a rural region of Pappakovil, Nagapattinam district. **Methods:** The purposive sampling of 60 women was used and an evaluation research approach was chosen. The structured interview schedule was composed of demographic information and questions on breast cancer risk factors and was used to collect the data. **Findings:** The findings showed that 3 out of every 5 women had poor knowledge, 2 out of every 5 women had moderate knowledge and only 3 of every 100 were aware of the risk factors associated with breast cancer having adequate knowledge. Statistical analysis revealed a significant relationship between the level of knowledge and marital status ($p < 0.05$) but no significant relationship between knowledge and the other variables that were selected. **Conclusion:** The research shows that the general awareness of breast cancer risk variables among women in the area of study was low. These results lead to the conclusion that effective health education programs and community-based awareness activities are necessary to enhance knowledge, early detection, and the burden of breast cancer reduction.

Keywords: Breast cancer, women, risk factors

INTRODUCTION:

Breast cancer arises when the cells in the breast increase beyond control and give rise to a tumor which may be detected through a scan or felt as a lump. A tumor is considered to be malignant when it extends into the surrounding tissues or extends to the other parts of the body. Despite the fact that it is seen among women mostly, men are also not spared. The most prevalent cancer in women and the cause of cancer deaths is breast cancer. It mostly affects the upper outer quadrant of the breast and its prevalence is more among the elderly

and after the menopause. Male breast cancer is infrequent and is most of the time detected at an advanced stage. Excessive exposure to oestrogen and delay in the onset of child bearing is regarded as key risk factors.

Breast cancer has become a significant global health issue that has contributed to a significant percentage of female cancer and cancer related deaths in the world, especially in the developing nations. Ignorance, late identification, and low utilisation of screening services have had a negative impact on the outcomes. Increasing awareness on risk factors, warning signs, and screening procedures among women particularly breast self-examination and mammography will help to detect and treat the disease early and minimise mortality.

Community health workers and nurses have a crucial role in health education, screening, and use of healthcare services promptly. Thus, the proposed study will determine the level of knowledge, awareness, and use of screening procedures among women and the effectiveness of educational activities in enhancing knowledge and behavior in breast cancer prevention and early detection.

AIM OF THE STUDY:

The aim of the study to assess the knowledge regarding risk factors of breast cancer among women in rural area of Pappakovil at Nagapattinam.

MATERIALS AND METHODS

Settings and Participants

This study was done using an evaluation research approach. It was done in the rural region of Pappakovil, Nagapattinam district amongst the women aged 25-45 years. The study population targeted was women living in this region and through purposive sampling, 60 individuals were identified. The women who were between 25 years and 45 years old and willing to participate and understand Tamil or English were included and those who were too unwell or had cognitive impairment were excluded.

Tools and data collection

The structured interview schedule was used to collect data and was divided into two parts. Part I contained demographic information comprising age, education, marital status, menstrual history, the number of children, age at first childbirth, and family history of cancer. Part II measured the information on the risk factors of breast cancer. Correct answers were given a 1 and incorrect responses were given a 0.

The total scores were encompassed as being inadequate (0-3), adequate (4-7) and well knowledge (7-10). Prior to the collection of data, formal consent was secured with the village president and all of the participants were given consent.

RESULTS:

Table 1: Demographic variables among women.

Demographic variables		F	%
1. AGE	a)Below 20 years	2	3.3%
	b) 20 – 30 years	14	23.3%
	c) 31 – 40 years	20	33.3%
	d)Above 40 years	24	40.0%
2. EDUCATION	a) BELOW 1–10th	24	40.0%
	b) 10th – 12th	20	33.3%
	c) Any degree	6	10.0%
	d) Nil	10	16.7%
3. AREA	a) Urban	3	5.0%
	b) Rural	19	31.7%
	c) Semi-urban	17	28.3%
	d) Semi rural	21	35.0%
4. MARITAL STATUS	a) Married	55	91.7%
	b) Unmarried	5	8.3%
5. NO OF CHILDREN	a) One	15	25.0%
	b) Two	28	46.7%
	c) Above two	11	18.3%
	d) Nil	6	10.0%
6. AGE AT MENARCHE	a) 7- 10 years	6	10.0%
	b) 11- 13 years	30	50.0%
	c) 14 – 16 years	19	31.7%
	d) Above 16 years	5	8.3%
7. WHEN YOU HAD FIRST CHILD	a) 18 – 20 years	18	30.0%
	b) 21 – 25 years	26	43.3%
	c) 25 – 29 years	9	15.0%
	d) Nulliparity	7	11.7%
8. HAVE YOUR RELATIVE AFFECTED IN CANCER	a) One	11	18.3%
	b) Two	1	1.7%
	c) More than two	48	80.0%

Table 2: Level of knowledge regarding risk factors of breast cancer among women

Level of knowledge	Frequency	Percentage (%)
Inadequate knowledge	31	51.7%
Moderate knowledge	27	45%
Adequate knowledge	2	3.3%
Total	60	100%

Table 3: Association between knowledge regarding risk factors of breast cancer and selected demographic variables (N = 60)

S. No	Demographic Variables	χ^2 Value	Df	p-value	Significance
1	Age	3.089	6	0.798	NS
2	Education	6.347	6	0.385	NS
3	Area	7.395	6	0.286	NS
4	Marital Status	25.592	4	0.000	S
5	Number of Children	7.589	6	0.270	NS
6	Age at Menarche	5.664	6	0.462	NS
7	Age at First Childbirth	3.985	6	0.679	NS
8	Family History of Cancer	3.576	4	0.466	NS

Table 1: The distribution of demographic characteristics shows that most women were above 40 years (40.0%), followed by 31–40 years (33.3%) and 20–30 years (23.3%), while only 3.3% were below 20 years. Regarding education, 40.0% had studied up to 1–10th standard, 33.3% up to 10th–12th, 16.7% had no formal education, and 10.0% held a degree. The majority lived in semi-rural (35.0%) and rural (31.7%) areas, with fewer from semi-urban (28.3%) and urban (5.0%) locations. Most participants were married (91.7%). Nearly half had two children (46.7%), followed by one child (25.0%), more than two children (18.3%), and none (10.0%). Half of the women attained menarche between 11–13 years (50.0%). Most had their first child at 21–25 years (43.3%), and 80.0% reported that more than two relatives were affected by cancer. Table 2: The level of knowledge regarding risk factors of breast cancer indicates that over half of the women (51.7%) had inadequate knowledge, 45.0% had moderate knowledge, and only 3.3% demonstrated adequate knowledge. Table 3: The association between knowledge level and demographic variables shows that marital status had a statistically significant association with knowledge ($\chi^2 = 25.592, p < 0.05$). All other variables—including age, education, area of residence, number of children, age at menarche, age at first childbirth, and family history of cancer—did not show a significant association with knowledge levels ($p > 0.05$).

DISCUSSION:

The results showed that the majority of women had poor knowledge about the risk factors of breast cancer. More than half (51.7%) demonstrated inadequate knowledge, 45.0% had a moderate level of knowledge, and only a small proportion (3.3%) had adequate knowledge. This reflects generally low awareness among the participants. Statistical analysis indicated a significant association between marital status and knowledge level ($\chi^2 = 25.592$, $p < 0.05$), whereas no significant relationship was observed with the other variables studied.

CONCLUSION:

The study concludes that women had insufficient knowledge regarding the risk factors of breast cancer, with the majority demonstrating inadequate awareness. Only a very small proportion possessed adequate knowledge, indicating a need for improved health education. The significant association with marital status suggests that personal and social factors may influence awareness levels. Overall, the findings emphasize the importance of targeted educational programs and awareness initiatives to promote early detection and prevention of breast cancer.

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