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Effect of Planned Information Campaign Program on Knowledge Regarding Breast Cancer among Adolescent Girls at Selected Private School in Lucknow City of Northern India

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ABSTRACT

The current study used the quantitative research methodology and was conducted in Chetna Public Inter College in Lucknow. A single-group pre-test post-test paradigm was used as a pre-experimental design. The study was based on the Ludwig Bertalannffy Theory model as the conceptual framework. The convenience sample of fifty participants was chosen based on the purposive sampling strategy. All subjects were informed of the study through written consent before the study was commenced. Data were gathered as a baseline through structured knowledge-assessment questions. The intervention was the planned informational campaign introduced and a post-assessment was administered after the completion of the seven days of intervention to measure the level of knowledge retention. The gathered data are structured and examined using both descriptive and inferential statistical methods. The statistical analysis indicates that 31 (62%) possessed acceptable knowledge, 19 (38%) exhibited intermediate knowledge, and 0 (0%) showed knowledge deficiency. The mean pretest knowledge score was 7.5, and after giving Planed Information Campaign mean score increased to 14.14. The mean difference is 6.64.

KEYWORDS: *Adolescent girls, Breast cancer, Effect-planned Information Campaign program, Knowledge.*

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INTRODUCTION

According to the latest figures, cancer is a global killer of people, with two to 2.5 million people being hit by cancer at any time.[1] The World Health Organization revealed that the disease killed more than 685,000 women in the year 2020.[2] The rate of cervical cancer is 18.5% of all cancer cases in India, and the second most prevalent cancer identified in India is breast cancer.[3] The world statistics reveal that of all cases of cancer, breast cancer is the most prevalent, with it being the most widespread as well as the primary cause of cancer-related deaths among women.[4] It has been estimated that about 2.1 million women get the diagnosis annually, and the number is expected to hit 3.2 million in the year 2050.[5] In 2022, India reported 216,108 new cases, which represented 28.2% of total breast cancer cases among women.[6] Nearly every 12th woman (8.3%) will be diagnosed with breast cancer at some time in life.[7] The percentage of women below 50 years is on the rise, yet the disease is more prevalent above 50 years.[8] Asian women are found to be diagnosed at an earlier age compared to Western population where breast cancer normally occurs between 50 and 59 years.[9] Any sickness, most notably breast cancer, is a life-threatening disease because it affects an organ that is inextricably linked to self-image, reproductive and caring capabilities. Therefore, early detection and prevention of the disease are crucial for both saving lives and enhancing quality of life among the women. Promoting breast health awareness seems to be an effective approach to achieve this.[10]

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OBJECTIVES

1. To establish the level of information that teenage girls of selected private schools in Lucknow possess regarding breast cancer.
2. This study proposed to compare the effects of certain educational interventions on breast cancer awareness among teenage females.
3. To analyzing their correlation between the level of knowledge and certain demographic factors within the private schools of Lucknow .

RESEARCH HYPOTHESIS

H1- There is significant effect of planned information campaign regarding Breast Cancer among adolescent girls of selected private schools, Lucknow.

H3- There is a significant association of level of knowledge with selected demographic variables among adolescent girls of selected private schools, Lucknow.

ASSUMPTIONS

Awareness of breast cancer among the teenage girls in some of the private schools in Lucknow is greatly determined by the Planned Information Campaign Program.

The levels of knowledge among the adolescent females in these schools are strongly connected with some demographic factors.

METHODOLOGY

The research took place in Chetna Public Inter College in Lucknow using a quantitative research method. The initial study used one-group pretest and posttest research design. Purposive sampling brought about ultimate sample of fifty respondents. All the individuals notified of the informed consent were persuaded before the study and the school administration sanctioned the necessary permissions. Determination of the data was done through systematic, direct, knowledge questionnaire which also acted both as a data acquisition method and as a pre-and post-assessment tool. The intervention consisted of a scheduled and carried out information campaign program.

INCLUSION CRITERIA

- The research areas are the girls aged between 13 and 18.
- Teenage girls were also included in the period of data collecting.

EXCLUSION CRITERIA

- Teenage females who refused to take part.

RESULTS

We used the descriptive and inferential statistical methods to extract the data, and sorted them in tables. The result indicated that 19 individuals (38%) had moderate knowledge, none (0) had insufficient knowledge and 31 individuals (62%) had adequate knowledge. The average pretest knowledge score was 7.5, and following the implementation of the Planned Information Campaign, the mean score rose to 14.14. The mean difference is 6.64.

The table presented below shows the frequency and percentage of sociodemographic factors. We picked fifty respondents to determine their level of knowledge regarding breast cancer. Their sociodemographic information is presented in a table, 18% students are aged between 13-14 years, 52% are aged between 15 to 16 years, 24% are aged between 17 to 18 years and 6% were of more than 18 years, 28% students age of menarche less than 12 years, 32% students age of menarche is 13 years, 32% students age of menarche is 14 years, 8% students age of menarche more than 12 years, 38% students are area of residence while rural while 62% are from urban, It was found that half of the sample (56) did not know anything about breast cancer, and the remaining half (44) were aware of breast cancer. 18% students mentioned the source of knowledge regarding breast cancer is from teachers and friends, 34% students gain their knowledge from mass media, 36% students from parents, and 12% students from seminar\workshop.

Table 1: Frequency and percentage distribution of demographic characteristics of subjects

Variables	Options	Percentage	Frequency
Age	13 to 14 years	18%	9
	15 to 16 years	52%	26
	17 to 18 years	24%	12
	More than 18	6%	3
Age of Menarche	Less than 12 years	28%	14
	13 years	32%	16
	14 years	32%	16
	More than 14 years	8%	4
Area of Residence	Urban	38%	19
	Rural	62%	31
Previous Knowledge	Yes	44%	22
	No	56%	28
Source	Teachers& friends	18%	9
	Mass media	34%	17
	Parents	36%	18
	Seminar\Workshop	12%	6

Table 2: Frequency and Percentage distribution of post-test level of knowledge among adolescent girls of age group 13-18yr

n = 50

Sr. no.	Knowledge level	Frequency (n)	Percentage (%)	Mean	Standard Deviation
1.	Inadequate (0-6)	0	0%	14.14	2.69
2.	Moderate (7-13)	19	38%		
3.	Adequate (14-20)	31	62%		

MAXIMUM SCORE= 20 **MINIMUM SCORE=00**

Table 3: Comparison of frequency & percentage distribution of pre-test and post-test

n = 50

S. No.	Knowledge level	Mean	Standard Deviation (SD)	Mean Difference	Degree of Freedom (df)	Paired t-value	p-Value	Table value at 0.05
1.	Pre-test Knowledge	7.5	2.42	6.64	49	65.05	0.001*	2.00
2.	Post-test Knowledge	14.14	2.69					

**Significant at 0.05 level*

Table 4: Association of level knowledge with selected demographic variables among adolescent girls of selected private schools, Lucknow

Demographic Data Variables		Levels (N=50)						Association with knowledge score			
		Adequate		Moderate		Inadequate		Chi square	Degree of freedom	P–value	Results
		Frequency (n)	Percentage (%)	Frequency(n)	Percentage (%)	Frequency (n)	Percentage (%)				
Age	13-14years	0	0	4	8	5	10	137.224	6	12.59	Not significant
	15-16years	2	4	15	30	9	18				
	17-18years	0	0	9	18	3	6				
	More than 18	0	0	1	2	2	4				
Age of Menarche	Less than 12 years	2	4	8	16	4	8	138.44	6	12.59	Not significant
	13 years	0	0	11	22	5	10				
	14 year	0	0	7	14	9	18				
	More than 14 year	0	0	4	8	0	0				
Area of Residence	Urban	2	4	19	38	10	20	115.13	2	5.99	Not significant
	Rural	0	0	11	22	8	16				
Previous Knowledge	Yes	2	4	13	26	7	14	157.62	2	5.99	Not significant
	No	0	0	17	34	11	12				
Source	Teachers& friends	0	0	5	10	4	8	70.07	6	12.59	Not significant
	Mass media	0	0	11	22	6	12				
	Parents	2	4	11	12	5	10				
	Seminar\Workshop	0	0	3	6	3	6				

The table gives the frequency and percentage distribution of the level of knowledge about breast cancer after the post-test among teenage girls. None of the students (0%) possess inadequate knowledge about breast cancer, while approximately 38% demonstrate moderate understanding, and the remaining 62% exhibit adequate knowledge following the implementation of the planned campaign program.

In the case of the pre-test mean knowledge score, it was 7.5 (SD 2.42). The average of the post-test was 14.14 (SD = 2.69), after the Planned Information Campaign Program. To observe the change, a paired samples t-test was conducted. Having 6.67 degrees of freedom and $p < 0.05$, the t-value obtained was 65.05, which is very significant. This finding demonstrates that PICP was able to enhance the knowledge of adolescent girls.

As far as the level of knowledge of the subjects that included adolescent female participants is concerned before the test, the table that is accompanying lists demographic variables such as age, age on menarche, domicile, pre-knowledge, and source of information. These variables were analyzed by means of the Chi-square test and the analysis showed that no statistically significant associations between variables were approached.

DISCUSSION

Prior to the intervention, 36% of respondents were not very aware, 60% of the respondents were moderately aware and 4% of respondents were well informed. After conducting the proposed information campaign, post-test results indicated the participants with acceptable knowledge were 62%, moderate knowledge attributed to 38% of the respondents and no deficient knowledge was observed. The mean pre-test score regarding knowledge of breast cancer was 7.5 and standard deviation was 2.42. Following the execution of the planned information campaign program, the mean score rose to 14.14, accompanied by a standard deviation of 2.69. The significance of planned information campaign programme regarding breast cancer was assessed using the paired t-test. They were analyzed statistically and found that the knowledge in breast-cancer was significantly increased, with a p-value of 0.001, and an estimated t-value of 65.05, which is greater than the critical value at the level of significance of 0.05. The tabulated t-value at 49 degrees of freedom was lower than the calculated t-value. There were no significant correlations among pre-test scores and demographic factors like age, age at menarche, residential area, previous knowledge or source of information.

CONCLUSION

The findings prove that a designed informational campaign is effective in increasing breast cancer awareness in the teenage girls. The researchers have found that there is a significant lack of knowledge of breast cancer among this demographic.

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