Effectiveness of Planned Teaching Programme on Selected Aspect of Predetermined Knowledge of Breast Self Examination among the Nursing Students of Droan College Of Nursing, Rudrapur, Uttarakhand, India.

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Abstract
Aim: *This study aimed to assess the effectiveness of planned teaching program on knowledge among nursing students regarding breast self-examination.* **Methods:** *A quasi experimental study was conducted at the Droan College of Nursing Rudrapur (Uttarakhand), India. 30 Nursing students were selected through simple random sampling technique. The data was collected by using a semi structured knowledge questionnaire. Data was analyzed by descriptive statistics (frequency, %, mean, median, mode & SD) and inferential statistics (paired t-test, chi square test, fisher's exact test); result was expressed as counts and percentages.* **Results:** *A total of 30 students were selected through simple random sampling method and 76.6 % samples average age was <20 years and 23.3 % participant's age were > 20 years. The mean pre test knowledge was 9.87, mode was 10 & 11, and median was 10 and SD 1.85. 23.3 % of the respondents having poor knowledge and 76.7% of the participants having average knowledge regarding breast self examination before intervention. However, the knowledge score had improved after teaching; post test knowledge mean was 18.9, mode 18 , median; 19 & SD was 1.42. After intervention 100% of the participants having good knowledge regarding the breast self examination. Pretest and post test knowledge score comparison was done with the help of paired T test and T value was -19.48 and P value 0.00 at 0.05 level of significance respectively. There was no association found in pre-test knowledge score with selected demographical variables (Age, Religion, Education, Source of information and Marital status).* **Conclusion:** *The study evidenced that, the level of knowledge was average before intervention. After the Planned Teaching Programme the knowledge of the respondents was increased.*
Key Words: *Breast Self Examination, Planned Teaching Programme, Nursing students*

I.   Introduction:

The breasts are mammary glands or accessory glands of the female reproductive system they exist also in the male but in only a rudimentary form. Breast cancer is uncontrolled growth of breast cells. The term breast cancer refers to a malignant tumor that has developed from cell in the breast.[1] Incidence rates vary high worldwide from 19.3/10000 women in Eastern Africa to 89.7 per 100000 women in Western Europe in most of developing regions the incidence rates are below 40 per 100,000 the lowest incidence rates are found in most African countries.[2] In India incidence rate is 19-34%.[3]

Breast self examination is an inexpensive risk free private and relatively simple examination to detect cancer or breast abnormalities. Breast self-examination includes inspection and palpation of breast in both standing and lying position. Breast examination is techniques which all women can assess their own breast as well as it help them to familiar with their own normal breast characteristics. Each and every girl should be aware of her own risk factor with regular breast self-examination.[4]

Breast cancer is a global health issue and a leading cause of death among women internationally. In India it accounts common cancer in women around 80000 cases are estimated to occur annually the age standardized incidence rate of breast cancer among India women is 22.9 and mortality rate is 11.19.[5]

Breast cancer is distinguished from other type of cancer by the fact that it occurs in a visible organ and can be detected and treated at an early stage the 5 year survival rate reached to 85% with early detection whereas later detection decrease the survival rate to 56%. Recommended preventive techniques to reduce breast cancer mortality and morbidity are breast self examination, clinical breast examination and mammography.

Clinical breast examination and mammography require hospital visit and specialized equipment and experts where as breast self examination is an inexpensive tool that can be carried by women themselves. Several reasons like lack of time, lack of self confidence in their ability to perform the technique correctly, fear of possible discovery of lump and embarrassment associated with manipulation of the breast have been cited as reasons for not practicing breast self examination.[5] Therefore education related to breast self examination must be given to increase the frequency and adherence to practice of it.

Objectives:
1.   To compare the pre test knowledge score with post test knowledge score of Breast Self Examination.
2.   To find out the association between pre-test knowledge of Breast Self Examination among GNM 1st year students with selected socio demographic variables.

Hypothesis:
$_1H^1$- There will be significant difference between pre-test and post test knowledge score.
$_1H^2$- There will be significant association between pre test knowledge score of Breast Self Examination with selected demographic variables.

II.   Methods:

Quantitative research approach, Quasi Experimental Research Design was used for this study that focuses on collect information regarding selected aspect of predetermined knowledge of Breast Self Examination. There were 30 samples selected by using simple random sampling technique from Droan School of Nursing, Rudrapur (Uttarakhand). The tool for data collection was self structured knowledge questionnaire and it was validated by expert. Informed consent has been taken before pretest.

Statistics:
Data was analyzed by descriptive statistics (frequency, %, mean, median, mode & SD) and inferential statistics (paired t-test, chi square test, fisher's exact test); result was expressed as counts and percentages.

III.   Results:
Table no1: Frequency, percentage distribution of socio-demographic variables (N=30)

S. No.	Demographic characteristics			F	%
1.	Age	a)	≤20 year	23	76.7
		b)	>20 year	07	23.3
2.	Religion	a)	Hindu	25	83.3
		b)	Muslim	02	6.7
		c)	Sikh	03	10
		d)	Christian	0	0
3.	Education	a)	12th	27	90
		b)	UG	01	3.3
		c)	PG	02	6.7
		d)	Any other	0	0
4.	Source of information	a)	Print media	16	53.3
		b)	Electronic media	10	33.3
		c)	Both	04	13.4
5.	Marital status	a)	Married	05	16.7
		b)	Unmarried	25	83.3

Distribution of respondents according to pre-test score
The pre-test mean score was 9.87 and median was 10. The pre-test knowledge data related to breast self examination was bimodal as the data was having two modes 10 & 11. The standard deviation was 1.82 before administration planned teaching programme.

Distribution of respondents according to post-test score
The post-test mean score was 18.9 and median was 19. The post-test knowledge data related to breast self examination was uni-modal as the data was having single mode which was 18. The standard deviation was 1.42 after administration planned teaching programme.

Comparison of pre-test and post-test level of knowledge score regarding selected aspect of predetermined knowledge of Breast Self Examination

Figure no.1 depicted comparison between prê-test and post test knowledge grading related to breast self examination
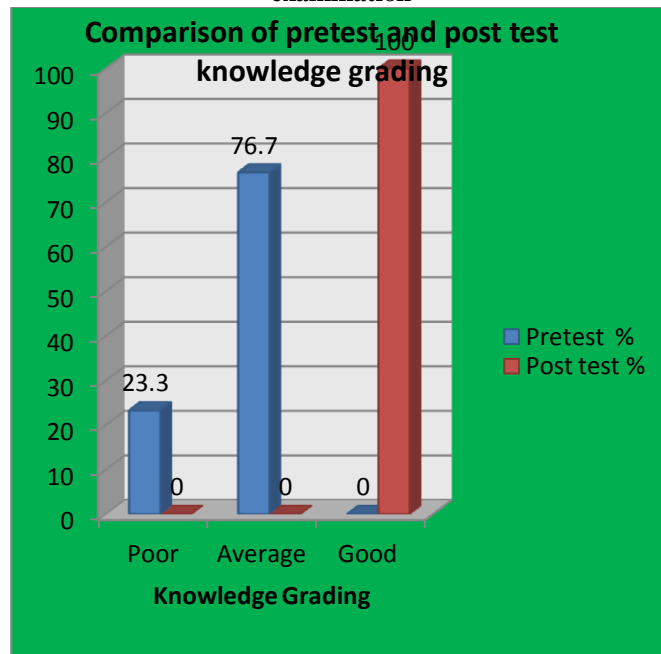

Table No. 2 depicted significant difference between pre-test and post-test knowledge score of breast self examination

	Mean	SD	T value	P value	Inference
Pre test	9.87	1.85	-19.48	0.00	HS
Post test	18.90	1.44			

<0.05 level of significance

Table no 3 Association of pre-test knowledge of breast self examination with the selected demographical variables.

S. No.	Demographic characteristics		Knowledge of Breast Self Examination		Chi Square	df	P value	Inference
			Poor	Average				
1	Age	≤20 years	7	16	Fisher's Exact test		0.15	NS
		>20 years	0	7				
2	Religion	Hindu	5	20	1.11	2	0.57	NS
		Muslim	1	1				
		Sikh	1	2				
		Christen	0	0				

3	Education	12th	7	20	1.01	2	0.60	NS
		UG	0	1				
		PG	0	2				
4	Source of information	Print media	6	12	2.60	2	0.27	NS
		Electronic media	1	9				
		Both	0	2				
5	Marital status	Married	0	5	Fisher's Exact test		0.30	NS
		Unmarried	7	18				

Note: Fisher's exact probabilities are computed where ever in a 2 x 2 contingency tables the expected cell frequencies are less than or equal to 5. **NS: Not significant (P>0.05); S: significant (P≤ 0.05);**

IV. Discussion:

The finding of the present study showed that 23.3 % (7) students were having poor knowledge and majority of the students 76.7 % (23) were having average knowledge about breast self examination before intervention.

The assessment of post-test knowledge regarding breast self examination showed that all the students 100 % (30) were having good knowledge about breast self examination. The pre-test mean score was 9.87 and median was 10. The pre-test knowledge data related to breast self examination was bimodal as the data was having two modes 10 & 11 and standard deviation was 1.82. The post-test mean score was 18.9 and median was 19. The post-test knowledge data related to breast self examination was unimodal as the data was having single mode which was 18 and the standard deviation was 1.42.

The result showed that there was significant difference between the mean pre-test and post-test which was calculated by paired t test and it was highly significant 0.00 at ≤ 0.05 level of significance. So we concluded that planned teaching program was effective in improving the knowledge regarding breast self examination among nursing students. Hence the H_1 hypothesis was accepted. This data proved that general nursing students knowledge has been increased after planned teaching programme regarding breast self examination.

This result was supported by a descriptive study done by Dolar doshi, B Srikanth Reddey, Suhas Kulkarny, P Karunakar to assess the knowledge, attitude and practice among female dental students in Hyderabad city, India. Result showed that the total mean knowledge score was (14.22±8.04) with fourth year students having the maximum mean score (19.98±3.68) and the knowledge of breast self-examination was good in 13.6% respondents and 86.4% respondents were having poor knowledge related to breast self-examination.[5]

Another similar study also supported findings which was done by Shalini, Divya, Varghese and Malathi Nayak on awareness and impact of education on breast self examination among college girls. The description of knowledge scores showed that 72.5% of students had average knowledge on breast self examination in pre-test and 85% of students had good knowledge score in post test. The paired t-test computed to test the effectiveness of planned teaching programme on breast self examination (t=12.46). It revealed that the awareness program on breast self examination was very effective.[6]

No Association found at 0.05 level of significance between pre-tests knowledge score regarding breast self examination with selected demographic variables like age, marital status, religion, education and source of information. Hence the H_2 hypothesis was rejected. This was calculated by chi square test and fisher's exact test.

V. Conclusion

This study assessed the knowledge of breast self examination among the G.N.M 1st year students and it revealed that almost half of respondents have less information about breast self examination; only few were found to be knowledgeable before intervention. Knowledge has been significantly improved after planned teaching programme. Breast self examination teaching is very effective preventive health behaviors for the early detection of breast cancer.

Acknowledgment:

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