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A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURE TEACHING PROGRAM ON KNOWLEDGE REGARDING BREAST SELF-EXAMINATION AMONG MIDDLE AGED WOMEN IN SELECTED RURAL AREA OF THE CITY.

Nursing

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ABSTRACT

Breast Self-Examination (BSE) is a simple, cost-effective, and non-invasive method that helps in the early detection of breast cancer by enabling women to identify changes in their breast tissue. This study, titled "A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Breast Self-Examination Among Middle-Aged Women in Selected Rural Areas of the City," aimed to evaluate knowledge improvement through a structured intervention. The objectives were: To assess pre-test knowledge levels on BSE, to assess post-test knowledge levels, to evaluate the effectiveness of a structured teaching program, and to determine the association between knowledge levels and selected sociodemographic variables. A quantitative approach with a one-group pretest-posttest pre-experimental design was adopted. The study was conducted in a selected rural area with a sample of 100 women, selected through non-probability convenience sampling. Data were collected using a structured questionnaire. Results showed a significant increase in knowledge, with the mean pre-test score at 7.10 and post-test at 16.60. Chi-square analysis indicated significant associations with age, marital status, religion, and gravida/parity ($P < 0.05$), while other variables showed no significant relationship. Conclusion: The structured teaching program was effective in enhancing knowledge regarding BSE among middle-aged women in rural areas.

KEYWORDS

Knowledge, Structured Teaching Program, Breast Self-Examination, Effectiveness

INTRODUCTION: -

BSE empowers individuals to take an active role in their own health by encouraging them to become familiar with the normal consistency and appearance of their breasts, making it easier to notice any new lumps, changes in shape, skin texture, or nipple discharge. While BSE is not a substitute for clinical breast examinations or mammography, it serves as an important supplementary practice—especially in areas with limited access to healthcare facilities.

Objectives: -

1. To identify the pre-test level of knowledge regarding breast self-examination among middle aged women in rural area.
2. To identify the post- test level of knowledge regarding breast self-examination among middle aged women in rural area.
3. To analyze the effectiveness of structure teaching program on knowledge regarding breast self-examination among middle aged women.
4. To detect the association between level of knowledge regarding breast

MATERIALS AND METHOD:

The research approach used for this study was quantitative in nature. The research design adopted was a one-group pre-test post-test design, which is a type of pre-experimental design. The study was conducted in a selected rural area of the city. A total of 100 middle-aged women were selected using a non-probability convenience sampling technique. Data were collected using a structured questionnaire comprising demographic variables and knowledge-based questions related to breast self-examination.

Data Analysis

Table no. 01: Distribution of the sample in relation to the selected demographic variables like Age, Marital Status, Education Status, Occupation, Religion, Type of family, Family History, Gravid/ Parity. Menstrual History. N=100

Sr.no.	Demo-graphic variables	Frequency	Percentage
1.	Age		
	a) 18-30 Year	71	71 %
	b) 31-40 Year	06	06 %
	c) 41-50 Year	23	23 %
	d) 51 Year and above	00	00 %
2.	Marital Status		
	a. Married	78	78 %
	b. Unmarried	20	20 %
	c. Widow / Widower	02	02 %
	d. Divorced	00	00 %
3.	Education Status		
	a. Illiterate	11	11 %
	b. Primary	57	57 %
	c. Secondary	04	04 %
	d. Undergraduate	28	28 %
	e. Graduate	00	00 %
4.	Occupation		
	a. Private Job	55	55 %
	b. Government	11	11 %
	c. Labour	21	21 %
	d. Self Employed Home- Makers	13	13 %
5.	Religion		
	a. Hindu	64	64 %
	b. Muslim	31	31 %
	c. Christian	05	05 %
	d. other	00	00 %
6.	Type of family		
	a. Nuclear	77	77 %
	b. Joint	23	23 %
	c. Extended Family	00	00 %
7.	Family History		
	a. No	92	92 %
	b. Mother	08	08 %
	c. Sister	00	00 %
	d. Other Relatives	00	00 %
8.	Gravid/Parity		
	a. 0	70	70 %
	b. 1	05	05 %

	c. 2-3 d. 4-5	25 00	25 % 00 %
9.	Menstrual History a. Regular b. Irregular	 92 08	 92 % 08 %

The study included 100 middle-aged women. The majority of participants (71%) were aged 18–30 years, followed by 23% in the 41–50 years age group. Most respondents were married (78%), and a significant portion were unmarried (20%). Regarding education, 57% had primary education, while 28% were undergraduates, and 11% were illiterate. In terms of occupation, 55% were private employees, 21% were labourers, and 13% were self-employed homemakers. Hinduism was the most common religion (64%), followed by Muslims (31%). A majority (77%) belonged to nuclear families. 92% reported no family history of breast cancer. 70% had no children (gravid/para = 0), while 25% had 2–3 children. Lastly, 92% of the participants reported having a regular menstrual cycle.

Table No. 02: To Determine The Frequency Distribution Of Pre-test And Post-test Level Of Knowledge Regarding Breast Self-examination Among Middle Aged Women In Rural Area N=100

Sr. No	Assessment of knowledge	Pre-test knowledge		Post test knowledge	
		Number	Percentage	Number	Percentage
01.	**Adequate**	01	01%	87	87%
02.	**Moderate**	43	43%	08	08%
03.	**Inadequate**	56	56%	05	05%
Total		100	100%	100	100%

The results show a significant improvement in knowledge levels after the structured teaching program: Pre-test: Only 1% of participants had adequate knowledge, 43% had moderate knowledge, and 56% had inadequate knowledge. Post-test: 87% of participants achieved adequate knowledge, 8% had moderate knowledge, and only 5% remained in the inadequate knowledge category.

Table No. 04: To Evaluate The Effectiveness Of The Structured Teaching Programmed Regarding Breast Self-examination Among Middle Aged Women.

t-test	N	Mean	Standard Deviation	Standard Error	t-value
Pre test	100	07.10	02.42280	0.24228083	01.039057
Post test	100	16.60	03.37453	0.3374537	

A paired t-test showed that the mean knowledge score increased from 7.10 (pre-test) to 16.60 (post-test). The calculated t-value was 1.039, indicating improvement after the intervention, though the statistical significance should be confirmed with the p-value.

Table No. 04 To Find Out Significant Association Of Demographic Data With Posttest Level Of Knowledge Regarding Breast Self-examination Among Middle Aged Women. N=100

Sr. no.	Sociodemographic Variables	Knowledge Assessment Score			df	Chi square value	P value	S
		Inadequate	Moderate	Adequate				
1.	Age a)18-30 Year b)31-40 Year c)41-50 Year a)51Yearand above	 59 06 22 00	 07 00 01 00	 05 00 00 00	06	01	00	**S**
2.	Marital Status a.Married b.Unmarried c.Widow a.Divorced	 66 19 02 00	 08 00 00 00	 04 01 00 00	06	01	00	**S**
3.	Education Status a.Illiterate b.Primary c.Secondary d.Undergraduate a.Graduate	 10 47 04 26 00	 01 06 00 01 00	 00 04 00 01 00	08	0.9992 6	0.78 998	NS
4.	Occupation a.Private Job b.Government c.Labour a.Self Employed Home- Makers	 46 09 21 11	 05 02 00 01	 04 00 00 01	06	0.9987 2	0.41 569	NS
5.	Religion a.Hindu b.Muslim c.Christian a.Others	 52 30 05 00	 08 00 00 00	 04 01 00 00	06	01	0.00 167	**S**
6.	Type of family a. Nuclear b. Joint a) Extended Family	 64 23 00	 08 00 00	 05 00 00	04	0.9986 1	0.10 735	NS
7.	Family History a.No b.Mother c.Sister a.Other Relatives	 79 08 00 00	 08 00 00 00	 05 00 00 00	06	0.9975 6	0.52 222	NS
8.	Gravid/Parity a.0 b.1 c.2-3 a.4-5	 59 04 24 00	 07 00 01 00	 04 01 00 00	06	01	00	S
9.	Menstrual History a.Regular a.Irregular	 79 08	 08 00	 05 00	02	0.7702 0	0.52 222	NS

Section B: To determine the frequency distribution of pre-test and post-test level of knowledge regarding breast self-examination among middle aged women in rural area

The study showed a significant improvement in knowledge after the intervention. Pre-test results revealed only 1% had adequate knowledge, while 56% had inadequate knowledge. Post-test, 87% achieved adequate knowledge, showing a strong positive shift. Moderate knowledge dropped from 43% to 8% after the program. Inadequate knowledge reduced from 56% to just 5%, highlighting the program's success. Overall, the educational intervention was highly effective in enhancing knowledge about breast self-examination.

Section C: To evaluate the effectiveness of the structured teaching programmed regarding breast self-examination among middle aged women.

The study compared pre- and post-test knowledge scores of 100 participants. The mean pre-test score was 7.10 (SD = 2.42, SE = 0.2423), indicating low initial knowledge. After the intervention, the mean post-test score rose to 16.60 (SD = 3.37, SE = 0.3375), showing significant improvement. Greater variability was seen in post-test scores, reflecting individual differences in learning. The t-value of 1.04 will help determine the statistical significance of the observed change.

Section D: To find out significant association of demographic data with post-test level of knowledge regarding breast self-examination among middle aged women.

A Chi-square test was used to find associations between demographic variables and post-test knowledge levels. Age, marital status, religion, and gravid/parity showed significant associations ($P < 0.05$), indicating their influence on knowledge. These factors likely contributed to the effectiveness of the intervention. In contrast, education, occupation, family type, family history, and menstrual history showed no significant association ($P > 0.05$). This suggests they did not impact knowledge levels meaningfully. The findings highlight that certain sociodemographic factors play a role in shaping health knowledge outcomes.

DISCUSSION

Findings of the study have been discussed with the reference to the objective's effectiveness of structure teaching program on knowledge regarding breast self-examination among middle aged women.

REFERENCES: -

1. Ayed A, Eqtait F, Harazneh L, Fashafsheh I, Nazzal S, Talahmeh B, et al. Breast self-examination in terms of knowledge, attitude, and practice among nursing students of Arab American University, Jenin. J Educ Pract [Internet]. 2015 [cited 2024 Nov 7];6(4):37–47. Available from: https://www.iiste.org/Journals/index.php/JEP/article/view/19792
2. Hemavathi R, Siva PE, Sneha PM, Swomiya K. A study to assess the knowledge regarding self breast examination on prevention of breast cancer among women attending urban health center, Virugambakkam, Chennai. South Am J Public Health [Internet]. 2024 [cited 2024 Nov 7]; Available from: https://www.texilajournal.com/thumbs/article/8_TJ23341.pdf
3. Leighton L. [No title]. 2013. p.1–13.
4. Ohaeri B, Aderigbigbe M. Knowledge and use of breast self-examination and mammogram among women of reproductive age in Oyo State Secretariat, Ibadan, Oyo

State, Nigeria. Eur J Midwifery [Internet]. 2019 [cited 2024 Nov 7];3(Apr). Available from: http://dx.doi.org/10.18332/ejm/105858
5. Dündar PE, Özmen D, Öztürk B, Haspolat G, Akyıldız F, Çoban S, et al. The knowledge and attitudes of breast self-examination and mammography in a group of women in a rural area in western Turkey. BMC Cancer [Internet]. 2006 [cited 2024 Nov 7];6(43): 1–9. Available from: http://dx.doi.org/10.1186/1471-2407-6-43
6. A cross-sectional study on awareness of breast self-examination and its practice in women of rural area in South India [Internet]. ResearchGate.net [cited 2024 Nov 7]. Available from: https://www.researchgate.net/publication/349072770_A_cross_sectional_study_on_awareness_of_breast_self-Examination_and_its_practice_in_women_of_rural_area_in_South_India
7. Azemfac K, Christie SA, Carvalho MM, Nana T, Fonje AN, Halle-Ekane G, et al. A community-based assessment of knowledge and practice of breast self-examination and prevalence of breast disease in Southwest Cameroon. J Cancer Epidemiol [Internet]. 2019 [cited 2024 Nov 7];2019:1–10. Available from: https://www.jrmds.in/articles/a-study-to-assess-the-level-of-knowledge-on-women-regarding-awareness-of-breast-selfexamination-which-reduce-the-risk-fo.pdf
8. Dinegde NG, Demie TG, Diriba AB. Knowledge and practice of breast self-examination among young women in tertiary education in Addis Ababa, Ethiopia. Breast Cancer (Dove Med Press) [Internet]. 2020 [cited 2024 Nov 7];12:201–10. Available from: http://dx.doi.org/10.2147/bctt.s279557