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Effectiveness of Video Assisted Teaching on Knowledge Regarding Skin Grafting Among Students in Selected Nursing Schools, Bengaluru

Mohan Kumar S P[1], Mamatha G C[2]

[1]Department of Medical Surgical Nursing, Government College of Nursing, Bangalore, Karnataka, India
Email: *mohan1909kumar[at]gmail.com*

[2]Professor & HOD, Department of Medical Surgical Nursing, Government College of Nursing, Bangalore, Karnataka, India

Abstract: ***Objectives of the study: a) To assess the existing knowledge regarding skin grafting among students in selected nursing schools, Bengaluru. b) To implement video assisted teaching regarding skin grafting among students in selected nursing schools, Bengaluru. c) To evaluate the effectiveness of video assisted teaching regarding skin grafting among students in selected nursing schools, Bengaluru. d) To find an association between pre - test knowledge scores with their selected demographic variables regarding skin grafting among students in selected nursing schools, Bengaluru. Methods: The study implemented Evaluative approach, with pre - experimental one group pre - test post - test design. The conceptual frame work used was King's Goal Attainment theory. The samples of 100 Students were selected at Government School of Nursing, Victoria Hospital, Fort, Bengaluru by Simple Random Sampling technique. The data was collected by using structured knowledge questionnaire on knowledge before and after administration of Video Assisted Teaching. Results: The overall mean percentage score in the pre - test is 37.7% and in post - test is 81.73%. Enhancement in mean percentage score were found to be 44%. The statistical paired 't' test indicates that enhancement in the mean percentage knowledge score was found to be significant at 0.05 level for all the aspects under the study. The association is found to be significant between the pre - test knowledge score and selected socio - demographic variables at 0.05 level (p<0.05).***

Keywords: Effectiveness, Video Assisted Teaching, Knowledge, Skin Grafting

1. Introduction

Tissue damage caused by burns and other types of injury on the human skin poses a major health problem, which has affected millions of people in the world throughout human history.1 Burns and road traffic accidents (RTA) the major and most common causes of tissue and organ damage involving the skin. Currently, several options are available to treat tissue damage resulting from major burns. For instance, surgical repair, drug therapy, Skin Grafting (transplantation), mechanical devices, and prostheses are available for application.2 Among these varieties of modalities Skin Grafting is one of the efficient ways of treating tissue damage both in integrity and function.3

2. Materials and Methods

The study was conducted in government School of Nursing, Victoria Hospital Campus, Bengaluru with permission from concerned departments.

Inclusion criteria:

1) Nursing Students who are willing to participate.
2) Nursing Students who are available at the time of data collection.

Exclusion criteria:

1) Nursing Students who had been exposed to similar teaching previously.
2) Nursing Students who are sick.
3) Nursing Students who are absent during date of collection.

Data was collected by using Structed Knowledge Questionnaire, Sociodemographic data and knowledge scores were measured (Pre - test) along with administration of video assisted teaching on Skin Grafting on initial visit. Later randomization was done according to inclusion and exclusion criteria to select samples. After 7 days of administration of video assisted teaching on Skin Grafting using same Structed Knowledge Questionnaire knowledge scores were measured (Post - test).

3. Results

The findings of the study are presented under following headings:

1) Description of demographic variables of study participants.
2) Description of over - all Pre - test and Post - test mean knowledge scores of participants regarding Skin Grafting.
3) Effectiveness of Video Assisted Teaching regarding Skin Grafting among students.
4) Association Between Pre - Test Knowledge Scores of the Participants and their Selected Demographic Variables

Table 1: Description of demographic variables of study participants (N=100)

S. No.	Characteristics	Category	Respondents	
			Number	Percentage
1	Age	18 Years	24	24%
		19 Years	24	24%
		20 Years	26	26%
		21 Years	26	26%
2	Religion	Hindu	83	83%
		Muslim	9	9%
		Christian	8	8%
3	Gender	Male	04	04%
		Female	96	96%
4	Types of family	Nuclear family	77	77%
		Joint family	23	23%
5	Occupation of the parents	Govt Employee	10	10%
		Pvt Employee	11	115
		Business	3	3%
		Self Employed	23	23%
		Others	53	53%
6	Educational status of the parents	No formal education	22	22%
		Primary Education	27	27%
		Secondary Education	18	18%
		P U C	22	22%
		Graduation and above	10	10%
7	Residential Area	Urban	21	21%
		Rural	79	79%
8	Income of the family per month in Rupees	5, 000 to 10, 000	45	45%
		10, 001to15, 000	27	27%
		15, 001to20, 000	8	8%
		20, 001 and above	20	20%
9	Source of information	Hospitals	79	79%
		Radio/TV/Mass media	14	14%
		Books/Magazines	5	5%
		Health personnel	2	2%
10	Any history of plastic surgery among family members	Yes	12	12%
		No	88	88%
11	Have you come across similar study	Yes	0	0%
		No	100	100%

1) Majority 26 (26%) of the participants were 20 and 21 years of age followed by 24 (24%) who were 18 and 19 years of age.
2) Majority 96 (96.0%) of participants are Females and remaining 04 (4.0%) of the participants are Males.
3) Majority 83 (83%) of the participants are Hindu followed by 9 (9%) of the participants are Muslim and remaining 8 (8%) of the participants are Christian.
4) 77 (77%) of the participants belongs to the Nuclear Family and 23 (23%) belongs to the Joint Family.
5) 53 (53%) of parents of the participants involved in other occupations such as daily wage worker, 23 (23%) are self - employed, 11 (11%) are Private Employee, 10 (10%) are Government Employee, and 3 (3%) are indulged in Business.
6) 28 (28%) of the participants parents has Primary education, 22 (22%) of the participants parents has No Formal education, 22 (22%) of the participants parents completed PUC, 18 (18%) of the participants parents has Secondary education and only 10 (10%) are Graduates.
7) 79 (79%) of the participants are living in Rural area, and remaining 21 (21%) are living in Urban area.
8) 45 (45%) of the study participants Family has monthly income of Rs.5, 000–Rs.10, 000 followed by 27 (27%) of the study participants has monthly income between Rs.10, 001 - Rs.15, 000, 20 (20%) of the study participants has monthly income Rs.20, 001 & above and only 8 (8%) of the study participants has monthly income Rs.15, 001 - Rs20, 000.
9) 79 (79%) of the participants heard from Hospitals, 14 (14%) through Radio/TV/Mass media, 5 (5%) Books/Magazines and only 2 (2%) from Health personnel.
10) Majority 88 (88%) of the participants has no history of plastic surgery among family and friends and only 12 (12%) participants has History of Plastic Surgery.
11) 100 (100%) of the participants has not exposure to the similar study and 0 (0%) of the participants has exposure to the similar study.

Table 2: Description of over - all Pre - test and Post - test mean knowledge scores of participants regarding Skin Grafting.

Aspects	Mean & SD	Mean%
Pre - Test	11.31±3.03	37.75%
Post - Test	24.52±2.35	81.73%
Enhancement	13.21±3.82	44.03%

Pre - test mean percentage was 37.75% and SD was 3.03. In post - test mean percentage is 81.73% and SD is 2.35 with the enhancement of mean percentage 44.03% and SD of 3.82.

Table 3: Effectiveness of Video Assisted Teaching regarding Skin Grafting among students.

Paired Differences			t	df	Sig. (2 - tailed)
Mean	Std. Deviation	SE Mean			
13.21	3.825	0.383	34.53	99	<0.0001 (S)

Mean paired difference in knowledge score was 13.21 with t - value= 34.53 with p - value less than 0.0001 indicates that Video Assisted Teaching regarding Skin Grafting among the GNM students was effective in enhancing their knowledge

Table 4: Association Between Pre - Test Knowledge Scores of the Participants and their Selected Demographic Variables

S. No.	Demographic Variables	Pre - test knowledge		Chi - square	DF	p - value	Result
		Above & Median	Below Median				
1	**Age**						
	18 Years	10	14	2.61	3	0.4557	NS
	19 Years	12	12				
	20 Years	9	17				
	20 Years	8	18				
2	**Gender**						
	Male	1	3	0.4	1	0.5271	NS
	Female	38	58				
3	**Religion**						
	Hindu	35	48	6.35	2	0.0418	**S**
	Muslim	0	9				
	Christian	4	4				
4	**Types of family**						
	Nuclear	33	44	2.09	1	0.1483	NS
	Joint	6	17				
5	**Occupation of the parents**						
	Govt. Employee	4	6	4.35	4	0.3607	NS
	Pvt. Employee	6	5				
	Business	2	1				
	Self employed	6	17				
	Others	21	32				
6	**Education of the parents**						
	No formal education	6	16	5.5	4	0.2397	NS
	Primary	8	19				
	Secondary	8	10				
	PUC	13	10				
	Graduation	4	6				
7	**Residence**						
	Urban	8	13	0.09	1	0.7642	NS
	Rural	31	48				
8	**Income of the parents**						
	Rs.5, 000–Rs.10, 000	19	26	1.66	3	0.6459	NS
	Rs.10, 001 - Rs.15, 000	9	18				
	Rs.15, 001 - Rs20, 000	4	4				
	Rs.20, 001 & above	7	13				
9	**Source of information**						
	Hospitals	27	52	6.73	3	0.0810	NS
	Radio/TV/Mass media	9	5				
	Books/Magazines	3	2				
	Health personnel	0	2				
10	**Previous History of Plastic Surgery among Family & Friends**						
	Yes	0	12	8.71	1	0.0032	**S**
	No	39	49				
11	**Previous Exposure to Similar Study**						
	Yes	0	0	0	1	1.000	NS
	No	39	61				

There is association between Pre - Test knowledge scores of the participants and their selected demographic variables such as religion with chi - square p - value = 0.0418 and previous history of plastic surgery among family and friends with chi - square p - value =0.0032

4. Conclusion

The findings of the study revealed that there is a significant difference in the mean pre - test and post - test knowledge scores of Students. The mean post - test knowledge score was higher than mean pre - test scores. There was significant improvement in the knowledge after the intervention among the Students. It can be concluded that the Video Assisted

Teaching was effective in improving the knowledge of Nursing Officers. Hence, H_1 is accepted and there was significant association between the pre - test knowledge score and selected demographic variables such as Religion, History of Plastic Surgery among Family and Friends. Therefore, in the research H_2 is accepted.

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