An evaluative study to assess the effectiveness of video assisted teaching programme on knowledge regarding CPR among the students of B.Sc (N) 2nd year and GNM 2nd year students of Maharaja Agrasen College of Nursing Agroha, Hisar

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Abstract

An evaluative study was conducted to assess the effectiveness of video assisted teaching programme on knowledge regarding CPR among the students of B.SC (N) 2nd year and GNM 2nd year students in Maharaja Agrasen College of Nursing Agroha, Hisar by using convenient random sampling technique. The findings of the study revealed that the mean post test scores were significantly higher than mean pre test scores.

Keywords: Video assisted teaching programme, CPR, Students.

Introduction

Cardiopulmonary resuscitation (CPR) is the foundational technique for the emergency treatment of cardiac arrest. The standardized training of CPR has been emphasized more than ever. Nurses of health services who have received professional education and training should be able to practice CPR accurately and offer advanced cardiac life support to the patient who suffered an attack of cardiac arrest.This is considered as the basic requirement and qualification of licensed nurses.

Aims and Objectives of the Study

1. To assess the pre test knowledge score regarding CPR among the students of B.Sc (N) 2nd year and GNM 2nd year students.
2. To assess the post test knowledge score regarding CPR among the students of B.Sc (N) 2nd year and GNM 2nd year students.
3. To assess the effectiveness of video assisted teaching on knowledge regarding CPR among B.Sc 2nd Year students and GNM 2nd year students.

Hypothesis

H1: The mean post test knowledge score of student nurses regarding CPR will be significantly higher than the pretest knowledge score at 0.05 level of significance.

Materials and Methods

The present study was conducted to assess the effectiveness of video assisted teaching programme on knowledge regarding CPR among the students of B.SC (N) 2nd year and GNM 2nd year students in Maharaja Agrasen College of Nursing Agroha, Hisar Pre Experimental (One Group Pretest Posttest) research design was used in the study using convenient sampling technique and sample size was 73. Data was collected by structured questionnaire regarding knowledge of CPR among students.

Table 1: Description of Demographical data: N=73

Characteristics		B.Sc. nursing		GNM	
		Frequency	Percent-age (%)	Frequency	Percent-age (%)
Age group (years)	10- 12yrs	0	0%	0	0%
	13-15yrs	0	0%	0	0%
	16-18yrs	2	6.6%	5	11.6%
	Above 18yrs	28	93.3%	38	88.2%
Gender	Male	0	0%	0	0%
	Female	30	100%	43	100%
Religion	Hindu	30	100%	39	90.6%
	Muslim	0	0%	0	0%
	Sikh	0	0%	4	9.3%
	Christian	0	0%	0	0%
	Others	0	0%	0	0%
Place of living	Rural area	14	46.6%	27	62.7%
	Urban area	13	43.3%	14	32.5%
	Semi-urban area	3	10%	2	4.6%

| Mass media exposure	Tv	14	46.6%	28	65.1%
	News paper	01	3.3%	2	4.6%
	Radio	0	0%	0	0%
	Internet	15	50%	13	32.3%

Major Findings of the study:

Percentage distribution of selected nursing students according to their age shows that, the highest 66 (90.4%) of selected nursing students were in age group of above 18 years. 7 (9.5%) Of selected students nursing student were between the age group 16-18 years considering religion, 69 (94.5%) of selected nursing students are from Hindu family and 4 (5.4%) from Sikh family. Percentage distribution of selected nursing students had previous source of knowledge from mass media exposure through TV 42 (57.5%) students, from internet 28 (38.3%) students, from News paper 3 (4.1%) students and from radio 0 (0%) students.

Study reveals that in PRE-TEST 40 (54.7%) students are having poor knowledge, 33 (45.2%) students are having average knowledge and no students got good knowledge regarding CPR. Whereas POST-TEST 5 (6.8%) students are having poor knowledge, 46 (63.0%) students got average knowledge and 22 (30.1%) students got good knowledge regarding CPR. The pretest mean score was 6.8 and post test mean score was 11.6 with a mean difference of 4.8 with SD of mean difference 0.5. The calculated Paired 't' test value is 46.1 which is higher than the tabulated 't' value 1.98 at 0.05 level of significance.

Table 2

Level of knowledge score	Pre Test		Post Test	
	No of students	Percentage	No of student	Percentage
Poor (0-7 marks)	40	54.7%	5	6.8%
Average (8-13marks)	33	45.2%	46	63.0%
Good (14-20 marks)	0	00%	22	30.1%
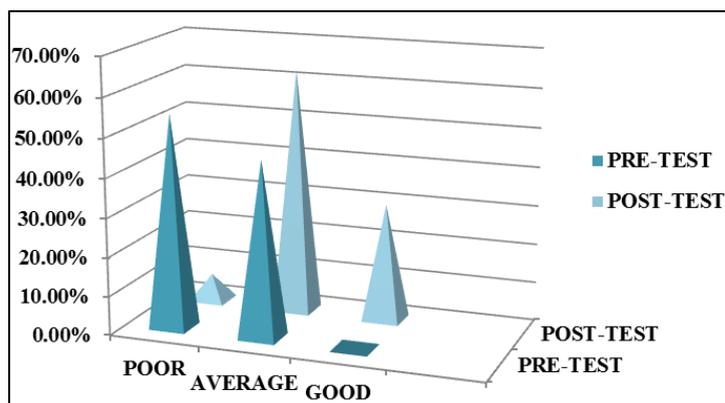
Fig. 1

This result reveals that the video assisted teaching programme was effective in increasing the knowledge of the students regarding CPR.

Findings in the present study revealed that the video assisted teaching programme was effective in increasing the knowledge of the students regarding CPR. The result of the study are supported by King et al. (2011) conducted a study to compare the effectiveness of static simulation to high-fidelity simulation when teaching a advanced cardiac life support guidelines. Using quasi-experimental design, 49 BSC (N) students were randomly assigned to 2 groups of either static or high fidelity simulation. There were no significant differences between the static and high fidelity simulation groups on the written examination.

The high-fidelity simulation group outperformed the static simulation group on mega codes performance.

Patricia Josipovic, Michael Webb & Ian Mc Grath; (2009) conducted a study on Basic Life Support knowledge of undergraduate nursing students and chiropractic students. The aim of this study was to examine retention of cardiopulmonary resuscitation and basic life-support (CPR/BLS) knowledge of third year nursing and fourth year chiropractic students following instruction and assessment of CPR/BLS skills and knowledge as part of their undergraduate degree program. Non-experimental exploratory survey to determine perceived ability and knowledge of CPR/BLS following completion of CPR/BLS instruction. Eighty-seven third year undergraduate nursing and forty-three fourth year undergraduate

chiropractice students. A visual analogue scale was used for the students to score their self-rated perceived knowledge and skill. The majority of students (78%) felt they were well prepared to perform CPR/BLS, however there were deficiencies in both groups about knowledge of current guidelines. Chiropractic students were less likely to identify the correct compression rate compared to the nursing group (Spearman's rho 0.669, p-001) with 95% of the chiropractic students not able to identify the correct rate. Thirty four percent of the students were unable to identify the correct ventilation compression ratio with nursing students again more likely to respond correctly (Spearman's rho 0.508, p-.001). Nursing students scored themselves highly for self rated knowledge and ability to perform CPR. Chiropractic students tended to score themselves at a lower rating in these areas than the nursing students. Although students from both disciplines had significant gaps in knowledge of CPR/BLS, nursing students outperformed chiropractic students in all aspects of CPR/BLS knowledge.

Catherine Madden:

(2006) conducted a study to investigate the retention of cognitive knowledge and psychomotor skills following CPR training among nursing students. A quasi-experimental time series design was used. CPR knowledge was assessed by a multiple-choice assessment and psychomotor skills were assessed by observing CPR performance on a Resusci-Anne skill-meter manikin. The findings showed an acquisition in nurses' CPR knowledge and psychomotor performance following a 4 h CPR training programme. Deterioration in both CPR knowledge and skills was found 10 weeks following CPR training. However, students' knowledge and skills were improved over their pre-training scores, which clearly indicated a positive retention in CPR cognitive knowledge and psychomotor skills. The study findings present strong evidence to support the critical role of CPR training in ensuring that nursing student's progress to competent and confident responders in the event of a cardiac related emergency.

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