

PLANNED TEACHING PROGRAMME ON THE LEVEL OF KNOWLEDGE AND SKILL REGARDING BASIC LIFE SUPPORT FOR ADULTS AMONG NURSING STUDENTS.

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Abstract

World Health Organization statistics shows mortality due to cardiac arrest as over taken mortality due to all cancers. American Heart Association recognized Basic Life Support (BLS) course designed by the Health Care Organizations as essential for all health care professionals; hence researcher selected this study to impart the knowledge & skill on BLS among the nursing students. Objective is to determine the effectiveness of planned teaching programme on knowledge & skill. First year nursing students from selected nursing college in Chennai were selected. Quantitative approach was used with one group pre test and post test design. 47 samples were selected by non probability convenient sampling technique. Planned teaching program on BLS for adult was given. Study results reveal that knowledge and skill were enhanced after the teaching program. Planned teaching was effective in imparting knowledge among novice nursing students.

Keywords: Basic Life Support, planned teaching program, knowledge, skills, adults.

Introduction

Early and effective Cardio Pulmonary Resuscitation (CPR) improves the chances of survival in cardiac arrest victim. CPR skills and knowledge vary among health care professionals. Basic Life Support (BLS) is the level of medical care which is used for victims of life threatening illness or injuries until they can be given full medical care at hospital. It can be preceded by trained medical personnel, emergency medical technicians, paramedics & lay persons who have received BLS training. BLS promotes adequate blood circulation in addition to breathing through a clear airway.

Business standard in 2009 states that approximately 4280 out of every one lakh people die every year from sudden cardiac arrest in India. WHO census statistics shows mortality due to cardiac arrest as overtaken mortality due to all cancers put together. Dr. Balbar Singh interventional cardiologist in Apollo Hospitals highlighted that “after a cardiac arrest there are 4 to 6 mins. Before brain death & death occur. Chances of survival reduced by 7 to 10 % in every passing minute. It is a silent epidemic & the Indian population should beware. BLS will be effective in rescuing the clients with the sudden cardiac arrest.

CPR has continued to advance, with recent developments including an emphasis on constant, rapid heart stimulation, without respiration. Studies have shown that people who had rapid, constant hands only chest compression survive 22% more than those who received conventional CPR that included breathing. Because people tend to be reluctant to do mouth to mouth respiration, chest only CPR nearly doubles the chances of survival by increasing the odds of receiving CPR in the first place.

The investigator observed that in the clinical setting there was a lack of knowledge & skill among the novice nurses regarding BLS. It may be due to lack of reinforcement of education. As BLS is the life saving measure & it is mandatory for nursing students to be knowledgeable & skillful in this aspect. Hence, the investigator selected this study to enhance the knowledge & skill on BLS for B.Sc. Nursing first year students.

Objectives

- To assess the pre test level of knowledge & skill regarding BLS for adults among B.Sc. Nursing first year students.

- To determine the effectiveness of planned teaching programme on level of knowledge & skill regarding BLS for adults among B.Sc. Nursing first year students.
- To correlate the level of knowledge & skill regarding BLS for adults among B.Sc. Nursing first year students.
- To associate the post- test level of knowledge regarding BLS for adults with their demographic variables
- To associate the post-test level of skill regarding Basic Life Support for adult with their demographic variables

Methodology

Setting & Samples

The study subjects were selected based on the inclusion criteria [B.Sc. Nursing first year students studying in selected college of nursing], who are willing to participate & who gave consent. About 47 students were selected through non – probability convenient sampling technique.

Tools & Techniques

Demographic variable proforma [Gender, Religion, Family income, Medium of instruction, Family history, Previous knowledge and Source of information], structured knowledge questionnaire which had 20 multiple choice questions in the area of knowledge on Basic Life Support and observational check list dealt with the level of skill with 10 items with yes/no type. Score of one was given for each correct response & Zero for incorrect response. Thus, the maximum obtainable score was 20 for level of knowledge. The level of knowledge was classified as

below 50% - inadequate knowledge, 51%-75% - moderately adequate knowledge, above 76% - 100% adequate knowledge. The maximum obtainable score for level of skill was 10. The level of skill was classified as below 50% - inadequate skill, 51% - 75% moderately adequate skill, 76% - 100% is adequate skill.

Description of the intervention

One to one interview schedule was used to collect the data. Students were grouped into five and each group 10 students were allowed to participate in the teaching programme. Each day one group was given lecture cum demonstration on CPR with the help of CPR Manikin for a time period of 45 minutes to one hour. 5 days 5 groups were demonstrated on CPR and teaching was given with the help of PPT to impart knowledge on BLS. After teaching programme post test was conducted on 15th day using the same tools.

Ethical consideration

Permission was obtained from selected nursing college Principals. Purpose of the study was explained and informed consent was obtained from the participants. Confidentiality was maintained throughout the study.

Results and Discussion

Regarding demographic distribution of the study participants, majority of them 41(86%) were females and most of the respondents belong to Hindu religion (57%) and only 33% of the study participants had previous knowledge on BLS. Most of the students had source of information from Television (48%).

Fig 1. Percentage Distribution of Pretest and Post Test Level of Knowledge among Study Participants. (N = 47)

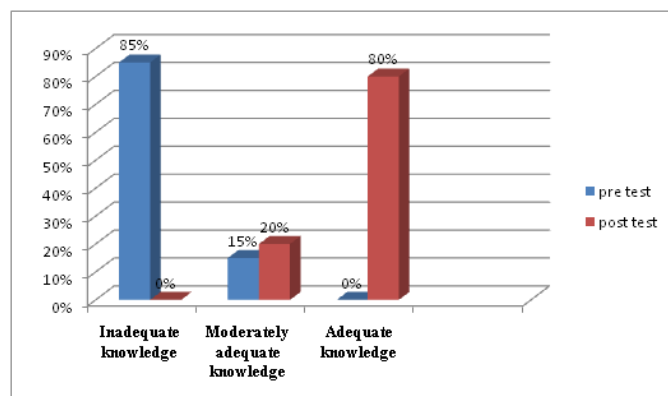


Figure 1 reveals that overall pretest knowledge was inadequate (85%), and only 15% of them were having moderately adequate knowledge on BLS.

The overall knowledge in post test showed that 80% of them were having adequate knowledge, and 20% were had moderately adequate knowledge

Fig 2. Pre test and post test level of skill on BLS among study participants. (N = 47)

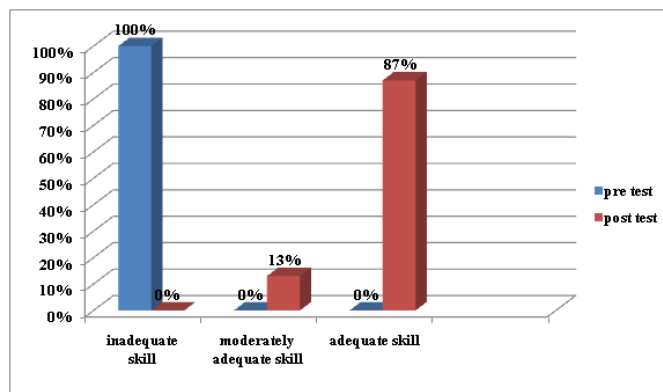


Figure 2 shows that in the pre test majority had inadequate (100%) skill, in the post test 87% of them were having adequate skill, only 13% had moderately adequate skill and none of them had inadequate skill.

Table 1
Pre test and Post test Level of Knowledge and Skill Mean Score on BLS among First Year B.Sc. Nursing Students. (N = 85)

| Variables | Pre test | | Post test | | 't' value |
|--------------------|----------|------|-----------|------|-----------|
| | Mean | SD | Mean | SD | |
| Level of Knowledge | 13.4 | 2.17 | 16.8 | 1.68 | 10.38* |
| Level of Skill | 1.93 | 1.23 | 8.4 | 0.92 | 2.36* |

*p<0.05 level

Table 1 shows that in the pre test, the mean score was 13.14 with the SD of 2.17 and in the post test, the mean score was 16.8 with SD of 1.68 which was significant at P< 0.05 level.

Similarly in the level of skill, the pre test mean score was 1.3 and post test mean score was 8.40, the calculated 't' value was 2.36 which was significant at p<0.05 level. The present study confirms that there was a significant positive correlation between knowledge and skill of respondents, r = 0.7. It was significant at p< 0.05 level.

Regarding association with the selected demographic variables none of the variables were associated with the level of knowledge and practice on BLS among B.Sc. nursing first year students.

Discussion

The second objective of the study was to determine the effectiveness of teaching programme on the level of knowledge and skill on BLS among first year B.Sc. nursing students. In the pre test the overall mean for the level of knowledge was 13.14 with SD of .17, and the level of skill was 1.93 with the

SD of 1.23. In the post test the overall mean knowledge score was 16.8 with the SD of 1.68 and the level of skill was 8.40 with the SD of 0.92. The paired't' value for the level of knowledge and skill was 10.3, 2.36 respectively, which was significant at p< 0.05 level. This was supported by Nelson, A. M. (2012) who conducted a study to assess the

effectiveness of self instruction on BLS course. 55 lay persons were assessed which showed that after training programme with the self instruction module their skill and knowledge on BLS was increased.

Third objective of the study was to correlate post level of knowledge and skill on BLS. The post test mean & SD of knowledge was 16.89 & 1.68 respectively and the mean & SD of level of skill was 8.40 & 0.9 respectively. The r value was 0.7 which was significant at $p < 0.05$ level. This was supported by Emma, P. Swan who conducted a study to assess the effectiveness of simulation technique over knowledge and skill in CPR among industrial first aid workers. The result showed that when the knowledge increases the level of skill also increases. So the positive correlation between knowledge and skill was seen.

The fourth objective of the study was to associate the post test level of knowledge and skill with the selected demographic variables. In this study there is no significant association between knowledge and skill with the selected demographic variables.

Conclusion

The study concluded that there was significant improvement in the level of knowledge and skill after the teaching programme on BLS. This reveals that adequate knowledge and skill will help the nursing

students to practice the BLS in the management of Cardiac Arrest which will turn will improve the quality of life.

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LIFESTYLE CHANGES CAN WARD OFF HEART DISEASE IN PREMENOPAUSAL WOMEN.



Midlife women transitioning to menopause may be able to lower their risk of developing heart disease and type 2 diabetes, if they exercise more or eat a lower calorie diet, according to a new study published in the *Endocrine Society's Journal of Clinical Endocrinology & Metabolism*.

(eMediNexus, 27 October 2018.)