Effectiveness of planned teaching programme regarding Basic Life Support (BLS)

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Introduction

Birth and death are the two natural phenomena that all of us have to accept. When a child is born we are happy because a new person is added to our company, whereas, when someone dies, we grieve because he/she is no more with us. Death can occur at any time due to any cause. However death in certain instances can be prevented.

Recent statistics suggest that sudden cardiac arrest is rapidly becoming the leading cause of death. Once the heart ceases to function, a healthy human brain may survive without oxygen for up to 4 minutes without any permanent damage. Unfortunately, a typical emergency medical service response may take 6, 8 or even 10 minutes.

According to World Health Organization (WHO), cardiovascular diseases (CVD) are the number one cause of death globally: more people die annually from CVDs than from any other cause. An estimated 17.1 million people died from CVDs in 2004, representing 29% of all global deaths. Of these deaths, an estimated 7.2 million were due to coronary heart disease and 5.7 million were due to stroke. Low- and middle-income countries are disproportionately affected: 82% of CVD deaths take place in low- and middle-income countries and occur almost equally in men and women. By 2030, almost 23.6 million people will die from CVDs, mainly from heart disease and stroke. These are projected to remain the single leading causes of death.

The deaths due to CVD in India were 32% of all deaths in 2007 and are expected to rise from 1.17 million in 1990 and 1.59 million in 2000 to 2.03 million in 2010.

Cardiopulmonary resuscitation (CPR) is a technique of basic life support for the purpose of oxygenating the brain and heart until appropriate, definitive medical treatment can restore normal heart and ventilatory action.

Modern concept of Basic Life Support:

The concept of “chain of survival” emphasis the optimum results can be achieved only with four elements of:

- Early access to emergency help
- Rapid cardiopulmonary resuscitation
- Rapid defibrillation
- Early advanced care

Basic Life Support training is highly essential for all health care staff members; especially to those who are working in Emergency and Critical care units because protocol based management avoids confusion, wastage of time which in turn can save many lives. Nurses play an important role in emergency management. In order to have efficient, qualified and skilled nurses we should mainly focus on nursing educational system and the process of Basic Life Support training should start from the student nurses because they are future back bone of the hospital who will render services during the emergency.

So the researcher had thought to take research based on Basic Life Support that will contribute to provide knowledge to student nurses who are professionally qualified for tomorrow’s need and they are
always in the patients unit observes first when patient collapses which in turn can save lives of many by appropriate interventions

Hence the study was conducted, ‘A study to assess the effectiveness of planned teaching programme on knowledge regarding Basic Life Support among student nurses of first year Post Basic B. Sc. Nursing in selected Nursing colleges of Pune city’

### Objectives of the study:

1. To assess the existing level of knowledge regarding Basic Life Support among student nurses.

2. To assess the effectiveness of planned teaching programme regarding Basic Life Support among student nurses.

3. To associate the post test knowledge score with selected demographic variables.

### Hypothesis:

**Null hypothesis (h0):**
There will not be significant changes in the knowledge score of Student Nurses after giving planned teaching programme on Basic Life Support.

**Alternative hypothesis (h1):**
There will be significant change in the knowledge score of Student Nurses after giving planned teaching programme on Basic Life Support.

### Methodology

**Research approach:** Quantitative approach

**Research design**

A single group pre test and post test (quasi-experimental) design was chosen for the study.

In the present study a pre test was administered by means of semi structured questionnaire depicted as O₁ and then planned teaching was given depicted as X, a post test was conducted using the same semi structured questionnaire depicted O₂.

### Key:

O₁ = Pretest knowledge of Student Nurses regarding Basic Life Support

X = Planned Teaching on Basic Life Support

O₂ = Post-test knowledge of Student Nurses regarding Basic Life Support

**Sampling:** Non Probability Convenience Sampling

**Sampling size:** 60

**Criteria for sampling**

**Inclusion criteria**

- Male and female student nurses
- Those who can read and understand English
- Student nurses who are enrolled to first year Post Basic B.Sc. Nursing

**Exclusion criteria**

- Those who have attended the certified course of B.L.S, A.C.L.S.
- Those who have more than one year experience in Cardiac Intensive Care Unit.

**Description of the tool**

The self administered semi-structure questionnaire was used to assess the effectiveness of planned teaching programme on knowledge regarding Basic Life Support among student nurses of first year Post Basic B.Sc. Nursing in selected Nursing colleges of Pune city.

Tool was divided into two, section I & section II

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<tr>
<th>Section I – Demographic data related to student Nurses</th>
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<td>Section II - Self administered semi structured questionnaire related to Basic Life Support</td>
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Organization of study findings

The collected data is tabulated, analyzed, organized and presented under the following sections:

Section I: Distribution of sample in relation to demographic data.

Section II: Effectiveness of planned teaching programme regarding Basic Life Support among student nurses.

Section III: To associate the post test knowledge score with selected demographic variables

Major Findings:

- Majority (71.70%) of sample were females and only 28.30% were males.
- Majority (83.3%) of sample belongs to age group 21-25 years whereas 16.7% belongs to age group 26 years and above.
- Majority (61.7%) of the sample has 0-1 year of experience whereas (21.7%), (10.0%), (6.7%) of the sample has 2-3 years, 4-5 years, 6 years and above of experience respectively.
- Majority (35.00%), (31.7%), (21.7%) of the sample had their area of clinical experience in ICU, General wards and other departments respectively and only (5.0) % of the sample had in Casualty whereas (3.3%), (1.7%), (1.7%) had their clinical experience in more than one area including ICU & General wards, ICU & Casualty, Casualty & General Wards respectively.
- Overall Mean pretest score was 18.4 which was increased in post test to 26.8 and t-value was 20.04 which is more than table value at 0.05 L.o.s. So Ho was rejected. Thus it was concluded that the planned teaching was effective.
- No significant association is found in between percentage improvement in scores and among both genders (p-value=0.992), age (p-value=0.662), duration of clinical experience (p-value=0.564) and area of clinical experience (p-value=0.070).

The line graph given above shows the comparison between pre test and post test knowledge scores regarding Basic Life Support. Code Number of samples (1-60) under this study is represented in X-axis and scoring from (0 – 30) is represented in Y-axis of this line graph. From this graph it is evident that almost all samples shows significant improvement in post test scores when compared to pre test scores.

Over all post test knowledge mean score is greater than over all pre test knowledge mean score. Blue print objective wise (knowledge, comprehension, application) comparison shows that post test knowledge mean score is higher than all three pre test scores. Thus it is concluded that the planned teaching was effective.
Conclusion

Present study supports that planned teaching was effective based on enhanced knowledge score of student nurses after planned teaching programme. There was significant difference found between post test knowledge score and pre test knowledge score. No significant association was found in post test knowledge score of student nurses with selected demographic variable, hence it can be concluded that the demographic variables did not influence knowledge gain in this study.

Bibliography:

books

Journals
1. Anil Kumar, “Effectiveness of planned teaching programme on knowledge and practice of Basic Life Support among students in Manglore”, The nursing Journal of India, (2010); 2: 40-41
5. Broomfield R, "A quasi experimental research to investigate the retention of basic cardiopulmonary resuscitation skills and Knowledge by qualified nurses following a course in professional development” Advances in Nursing (2006); 23: 1016-1023.

From the desk of editorial board member

Landslide of Malin Gaon
On 30 July 2014, a landslide occurred in the village of Malin in the Ambegaon taluka of the Pune district in Maharashtra, India. The landslide, which hit early in the morning while residents were asleep, was believed to have been caused by a burst of heavy rainfall, and killed at least 134 people. The landslide was first noticed by a bus driver who drove by the area and saw that the village had been overrun with mud and earth. In addition to those dead, more than 160 people, and possibly up to 200, were believed to have been buried in the landslide in 44 separate houses.

Let's pray the God to take care of the victims of this disaster.

Mrs. Jyoti Vishal Naikare
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