A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON LEVEL OF KNOWLEDGE OF PEDIATRIC BASIC LIFE SUPPORT (BLS) AMONG HEALTH CARE PROVIDERS WORKING IN CARE HOSPITAL AT VARANASI, U.P.

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INTRODUCTION

Basic Life Support (BLS) is a level of medical care which is used for victims of life threatening illness or injuries. BLS is that particular phase of emergency cardiac care that either prevents circulatory or respiratory arrest or insufficiency through prompt recognition and intervention or extremely supports the circulation and ventilation of a victim of a cardiac or respiratory arrest through Cardio Pulmonary Resuscitation (CPR).

CPR is a technique of BLS for oxygenation to major organ like Brain and Heart. Immediate CPR can improve survival from cardiac arrest in children, but not enough children receive high-quality CPR. We must increase the number of persons who learn, remember, and perform CPR, and must improve the quality of CPR provided by rescuers and healthcare providers alike. Healthcare systems that deliver CPR should implement processes of performance improvement.

Prevention of Cardiopulmonary Arrest in Infants, the leading causes of death is congenital malformations, complications of prematurity, and Sudden Infant Death Syndrome. In children over 1 year of age, injury is the leading cause of death. Survival from traumatic cardiac arrest is rare, emphasizing the
importance of injury prevention in reducing deaths. Motor vehicle crashes are the most common cause of fatal childhood injuries; targeted interventions, such as the use of child passenger safety seats, can reduce the risk of death.

The recommended sequence of CPR has previously been known by the initials “ABC”: Airway, Breathing/ventilation, and Chest compressions (or Circulation). The 2010 American Heart Association Guidelines for CPR and ECG recommend a “CAB” sequence (chest compressions, airway, breathing/ventilations). During cardiac arrest high-quality CPR, particularly high-quality chest compressions are essential to generate blood flow to vital organs and to achieve ROSC. The arguments in favor of starting with chest compressions are as follows:

- The vast majority of victims who require CPR are adults with Ventricular Fibrillation (VF) cardiac arrest in whom compressions are more important than ventilations. They have a better outcome if chest compressions are started as early as possible with minimal interruptions. Beginning CPR with 30 compressions rather than 2 ventilations leads to a shorter delay to first compression in adult studies.
- All rescuers should be able to start chest compressions almost immediately. In contrast, positioning the head and attaining a seal for mouth-to-mouth or a bag-mask apparatus for rescue breathing take time and delays the initiation of chest compressions.

Asphyxia cardiac arrest is more common than VF cardiac arrest in infants and children, and ventilations are extremely important in pediatric resuscitation. Recent large pediatric study shows that resuscitation results for asphyxia arrest are better with a combination of ventilations and chest compressions. It is, however, unknown whether it makes a difference if the sequence begins with ventilations (ABC) or with chest compressions (CAB). Starting CPR with 30 compressions followed by 2 ventilations should theoretically delay ventilations by only about 18 seconds for the lone rescuer and by an even a shorter interval for 2 rescuers. The CAB sequence for infants and children is recommended in order to simplify training with the hope that more victims of sudden cardiac arrest will receive by stand CPR. It offers the advantage of consistency in teaching rescuers, whether their patients are infants, children, or adults. For the purposes of these guidelines

- Infant BLS guidelines apply to infants approximately 1 year of age.
- Child BLS guidelines apply to children approximately 1 year of age until puberty. For teaching purposes puberty is defined as breast development in females and the presence of auxiliary hair in males.
- Adult BLS guidelines apply at and beyond puberty.
BLS Sequence:

These guidelines delineate a series of skills as a sequence of distinct steps depicted in the Pediatric BLS Algorithm, but they should be performed simultaneously (eg, starting CPR and activating the emergency response system) when there is more than 1 rescuer.

Safety of Rescuer and Victim

Always make sure that the area is safe for you and the victim. Although provision of CPR carries a theoretical risk of transmitting infectious disease, the risk to the rescuer is very low.

Assess Need for CPR

To assess the need for CPR, the rescuer should assume that cardiac arrest is present if the victim is unresponsive and not breathing or only gasping.

Check for Response

Gently tap the victim and ask loudly, “Are you okay?” Call the child’s name if you know it. If the child is responsive, he or she will answer, move, or moan. Quickly check to see if the child has any injuries or needs medical assistance. If you are alone and the child is breathing, leave the child, phone the emergency response system, but return quickly and recheck the child’s condition frequently. Children with respiratory distress often assume a position that maintains airway patency and optimizes ventilation. Allow the child with respiratory distress to remain in a position that is most comfortable. If the child is unresponsive, shout for help.

Check for Breathing

If you see regular breathing, the victim does not need CPR. If there is no evidence of trauma, turn the child onto the side (recovery position), which helps maintain a patent airway and decreases risk of aspiration. If the victim is unresponsive and not breathing (or only gasping), begin CPR. Sometimes victims who require CPR will gasp, which may be misinterpreted as breathing. Treat the victim with gasps as though there is no breathing and begin CPR. Formal training as well as “just in time” training, such as that provided by an emergency response system dispatcher, should emphasize how to recognize the difference between gasping and normal breathing; rescuers should be instructed to provide CPR even when the unresponsive victim has occasional gasps. Start Chest Compressions During cardiac arrest, high-quality chest compressions generate blood flow to vital organs and increase the likelihood of ROSC. If the infant or child is unresponsive and not breathing, give 30 chest compressions.

High-quality of CPR:

- Chest compressions of appropriate rate and depth. “Push fast”: push at a rate of at least 100 compressions per minute. “Push hard”: push with sufficient force to depress at least one third the anterior-posterior (AP) diameter of the chest or approximately 1 1/2 inches (4 cm) in infants and 2 inches (5 cm) in children. Inadequate compression depth is common even by health care providers.
Allow complete chest recoil after each compression to allow the heart to refill with blood.

Minimize interruptions of chest compressions.

Avoid excessive ventilation. For best results, deliver chest compressions on a firm surface. For an infant, lone rescuers should compress the sternum with 2 fingers placed just below the intermammary line. Do not compress over the xiphoid or ribs. Rescuers should compress at least one third the depth of the chest, or about 4 cm (1.5 inches). For a child, lay rescuers and healthcare providers should compress the lower half of the sternum at least one third of the Antero- Posterior (AP) dimension of the chest or approximately 5 cm (2 inches) with the heel of 1 or 2 hands. Do not press on the xiphoid or the ribs. There are no data to determine if the 1- or 2-hand method produces better compressions and better outcome. In a child manikin study, higher chest compression pressures were obtained with less rescuer fatigue with the 2-hand technique. Because children and rescuers come in all sizes, rescuers may use either 1 or 2 hands to compress the child’s chest. Whichever you use, make sure to achieve an adequate compression depth with complete release after each compression. After each compression, allow the chest to recoil completely because complete chest re-expansion improves the flow of blood returning to the heart and thereby blood flow to the body during CPR. During pediatric CPR incomplete chest wall recoil is common, particularly when rescuers become fatigued. Incomplete recoil during CPR is associated with higher intra-thoracic pressures and significantly decreased venous return, coronary perfusion, blood flow, and cerebral perfusion. Manikin studies suggest that techniques to lift the heel of the hand slightly, but completely, off the chest can improve chest recoil, but this technique has not been studied in humans. Automated CPR feedback devices hold promise as monitors of CPR quality parameters, including chest recoil, by providing real-time, corrective feedback to the rescuer. However, there is currently insufficient evidence for or against their use in infants and children. Rescuer fatigue can lead to inadequate compression rate, depth, and recoil. The quality of chest compressions may deteriorate within minutes even when the rescuer denies feeling fatigued. Rescuers should therefore rotate the compressor role approximately every 2 minutes to prevent compressor fatigue and deterioration in quality and rate of chest compressions. Recent data suggest that when feedback devices are used and compressions are effective, some rescuers may be able to effectively continue past the 2-minute interval. The switch should be accomplished as quickly as possible (ideally in less than 5 seconds) to minimize interruptions in chest compressions. Resuscitation outcomes in infants and children are best if chest compressions are combined with ventilations, but if a rescuer is not trained in providing ventilations, or is unable to do so, the lay rescuer should continue with chest compressions (“Hands-Only” or compression-only CPR) until help arrives.
Open the Airway and Give Ventilations

For the lone rescuer a compression-to-ventilation ratio of 30:2 is recommended. After the initial set of 30 compressions, open the airway and give 2 breaths. In an unresponsive infant or child, the tongue may obstruct the airway and interfere with ventilations. Open the airway using a head tilt–chin lift maneuver for both injured and non-injured victims. To give breaths to an infant, use a mouth-to-mouth-and-nose technique; to give breaths to a child, use a mouth-to-mouth technique. Make sure the breaths are effective (ie, the chest rises). Each breath should take about 1 second. If the chest does not rise, reposition the head, make a better seal, and try again. It may be necessary to move the child’s head through a range of positions to provide optimal airway patency and effective rescue breathing. In an infant, if you have difficulty making an effective seal over the mouth and nose, try either mouth-to-mouth or mouth-to-nose ventilation. If you use the mouth-to-mouth technique, pinch the nose closed. If you use the mouth-to-nose technique, close the mouth. In either case make sure the chest rises when you give a breath. If you are the only rescuer, provide 2 effective ventilations using as short a pause in chest compressions as possible after each set of 30 compressions.

Foreign-Body Airway Obstruction (Choking)

Epidemiology and Recognition

More than 90% of childhood deaths from foreign-body aspiration occur in children ≤ 5 years of age; 65% of the victims are infants. Liquids are the most common cause of choking in infants, where as balloons, small objects, and foods (eg, hot dogs, round candies, nuts, and grapes) are the most common causes of foreign-body airway obstruction (FBAO) in children. Signs of FBAO include a sudden onset of respiratory distress with coughing, gagging, stridor, or wheezing. Sudden onset of respiratory distress in the absence of fever or other respiratory symptoms (eg, antecedent cough, congestion) suggests FBAO rather than an infectious cause of respiratory distress, such as croup.

Relief of FBAO

FBAO may cause mild or severe airway obstruction. When the airway obstruction is mild, the child can cough and make some sounds. When the airway obstruction is severe, the victim cannot cough or make any sound.

- If FBAO is mild, do not interfere. Allow the victim to clear the airway by coughing while you observe for signs of severe FBAO.
- If the FBAO is severe (ie, the victim is unable to make a sound) you must act to relieve the obstruction. For a child perform sub-diaphragmatic abdominal thrusts (Heimlich maneuver) until the object is expelled or the victim becomes unresponsive. For an infant, deliver repeated cycles of 5 back blows (slaps) followed by 5 chest compressions until the object is expelled or the victim becomes unresponsive. Abdominal thrusts are not recommended for infants because they may damage the infant’s relatively large and unprotected liver. If the victim becomes unresponsive, start CPR with chest compressions (do not perform a pulse check). After 30 chest compressions,
open the airway. If you see a foreign body, remove it but do not perform blind finger sweeps because they may push obstructing objects farther into the pharynx and may damage the oropharynx. Attempt to give 2 breaths and continue with cycles of chest compressions and ventilations until the object is expelled. After 2 minutes, if no one has already done so, activate the emergency response system.

**Need for Study:-**

CPR basic and advanced life support poses major difficulties in children. Despite the use of CPR mortality rates for cardiac arrest are 70-90 % for premature and term newborn and 90-97 % for infants and children. The mortality rate is almost 50% for respiratory arrest alone. Neurological outcome is often severely compromised. About 50-60% of children requiring CPR are less than 1 year, of these most are less than 6 month, 6% of newborn require resuscitation at delivery itself, the incidence increasing significantly if birth weight is <15000 gm.

Newborn resuscitation is the life saving measure to receive the newborn who are unable to breath on their own at birth. Intra-partum related death is the 5th commonest cause of neonatal death. Although the vast majority of neonates do not require intervention to make the transition from intra-uterine to extra-uterine life, a sizable number will require some degree of resuscitation. 90 % of the newborn make physiological transition without difficulty while 10% require some assistance and 1% needs extensive resuscitation to survive.

Approximately 3.5 million births occurs each year throughout the United States in about 5000 hospitals of which only about 15% have well organized intensive care facilities for high risk newborn. Expected resuscitate an infant once in out of every 15 deliveries. About 8% of the 35000 infant born weighing less than 1500 gm requires resuscitation and about 6% of all infants require special life supportive action in the delivery room or nursery.

To safe guard the pediatric population Basic Life Support will be help full. So keeping this in mind we are improving the level of knowledge through structured teaching programme on pediatric basic life support.

Pediatric Basic Life Support (Resuscitation) offers a challenge to the pediatric critical care nurse. Participating in resuscitation attempts requires specialized knowledge and skill.

**Statement of the Problem:-**

“A Pre Experimental Study to assess the effectiveness of Structured Teaching Program on Level of Knowledge of Pediatric Basic Life Support (BLS) among Health Care Providers working in Care Hospital at Varanasi, U.P.”
Objectives:

- To assess the level of knowledge among Health Care Providers before and after planned structured teaching program on BLS.
- To evaluate the effectiveness of Structured Teaching Program.
- To find out the association between the level of knowledge and selected demographic variables.

Hypothesis:

- There will be significant improvement in the level of knowledge in post test score than the pre-test score.
- There will be significant association between the level of knowledge and selected demographic variables.

Review of Literature is done under following sections:

- Part I: Literature related to level of Knowledge on pediatric Basic Life Support among Health Care Professionals.
- Part II: Literature related to effectiveness of structured teaching program on Pediatric Basic Life Support.

RESEARCH METHODOLOGY

Research approach:

The quantitative research approach method was adapted in present study to assess the effectiveness of STP regarding pediatric basic life support.

Research design:

The research design selected for the present study is Pre – Experimental research with one group pre-test and post test design in which pre test was conducted followed by structured teaching programme and then post test was conducted for the same group after teaching programme. It includes manipulation of experimental group and there is no control group in this study.

Setting of study:

The study was conducted in the Care Hospital, DLW, Varanasi. The area selection is based on the feasibility in terms of Support, Co-Operation and Accessibility in selecting the samples those were required for study. The hospital is located nearly 500 meters away from the Apex College of Nursing. It is urban based hospital. All the treatment facilities are available related to pediatric illnesses at this center.
Population:-

The population required for this study Health Care Providers was both male and female.

Sample:-

Samples were Health Care Providers who were working in the Care hospital.

Sample size:-

15 samples were selected for this study who fulfills the inclusion criteria .

Sampling technique:

Purposive sampling technique was used.

Criteria for selection of sample:-

Inclusion criteria:-

- Staff nurse who are working in the Care Hospital, DLW, Varanasi.
- Staff nurse who are present during the time of data collection.
- Staff nurse who were willing to participate in the study.
- Staff nurse who can understand English.
- Who are qualified in GNM, B.Sc Nursing, M.B.B.S, B.A.M.S/B.H.M.S.
- Both male female are included.

Exclusion criteria:-

- Staff Nurse who are not able to understand the method of teaching (English).
- Not willing to participate.
- Not having specified qualification.
- Absent during data collection procedure.
- Staff nurse who working in other than Care Hospital, DLW, Varanasi.

Description of tool:-

After a thorough review of literature related to the topic and considering the suggestions of experts, a self structured knowledge assessment questionnaire was developed.

The self structured questionnaire comprised of two parts
Part 1:- It consist of demographic characteristics of respondents seeking information such as age, gender, educational qualification, type of family, place of residence, years of experience in pediatric, and monthly income.

Part 2:- Multiple choice questions containing 20 questionnaire was used to assess the level of knowledge regarding pediatric basic life support. Each question as 4 options.

Scoring Procedure:-

Part I which contains demographic characteristics of the samples so it is not scored, used as inferential analysis.

Part II is self structured Knowledge assessment questionnaire, which contain a total of 20 questions regarding Pediatric Basic Life Support. In which each question is having 4 options, each correct answer to question is given 1 mark, total of 20 marks and same as maximum score and minimum score is 0. There is no negative marking. The knowledge of health care providers is graded into inadequate, adequate and over adequate depending on the total score.

ORGANIZATION OF THE STUDY FINDINGS:-

Section I : Distribution of samples according to Demographic variables.

Section II : Distribution of samples according to level of knowledge before and after intervention.

Section III : Effectiveness of Structured teaching Programme on Pediatric Basic Life Support.

Section IV : Association between level of knowledge and selected demographic variables.
Section-II

Table 2: Distribution of samples according to level of Knowledge before and after intervention.

\[ N = 15 \]

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Level of knowledge</th>
<th>Pre-test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>frequency</td>
<td>percentage</td>
</tr>
<tr>
<td>1.</td>
<td>Inadequate</td>
<td>8</td>
<td>53.33%</td>
</tr>
<tr>
<td>2.</td>
<td>Adequate</td>
<td>7</td>
<td>46.67%</td>
</tr>
<tr>
<td>3.</td>
<td>Over adequate</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The above table shows that level of knowledge of samples, in that score between 0 to 6 is inadequate level of knowledge, score of 7-14 indicates that adequate level of knowledge and score of 15-20 indicates that over adequate level of knowledge. After the pre-test, 8 (53.34%) were having inadequate level of knowledge, 7 (46.67%) were having adequate level of knowledge and non of the samples having over adequate level of knowledge.

After post-test the subjects/samples, 1 (6.67%) were having inadequate level of knowledge, 10 (66.67%) were having adequate level of knowledge and 4 (26.67%) were having over adequate knowledge.
Section III

Table 3: Effectiveness of structured teaching program on pediatric BLS.  

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Level of knowledge</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t-value</th>
<th>Table value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pre-test</td>
<td>6.68</td>
<td>2.7481</td>
<td>2.2163*</td>
<td>2.145</td>
</tr>
<tr>
<td>2.</td>
<td>Post-test</td>
<td>14</td>
<td>1.8322</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

The above table represent mean post test score on the level of knowledge was 14 which significantly higher than the pre test score of 6.86, the standard deviation of the pre test score was 2.7481 which is higher than the post test score of 1.8322 and computed value of ‘t’ was 2,2163 is more than the table value (2.145) at df (14) which was statistically significant at 0.05 levels. The data shows that structure teaching program was effective in improving the level of knowledge.
### Table 4: Association between level of knowledge and demographic variables. N=15

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Demographic variable</th>
<th>Level of knowledge</th>
<th>Table value</th>
<th>Chi square value($x^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inadequate</td>
<td>Adequate</td>
<td>Over adequate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>1.</td>
<td>Age:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) 21-32 years</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>b) 24-26 years</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>c) 27-30 years</td>
<td>1</td>
<td>6.66</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>d) 30 &amp; above</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Gender:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Male</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>b) Female</td>
<td>1</td>
<td>6.66</td>
<td>3</td>
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<tr>
<td>3.</td>
<td>Educational qualification:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) GNM</td>
<td>1</td>
<td>6.66</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>b) B.Sc. Nursing</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>c) M.B.B.S</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>d) B.A.M.S/B.H.M.S</td>
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<td>0</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Types of family:</td>
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<td></td>
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<tr>
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<td>a) Nuclear</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>b) Joint</td>
<td>1</td>
<td>6.66</td>
<td>9</td>
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<tr>
<td>5.</td>
<td>Place of residence</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>a) Rural</td>
<td>1</td>
<td>6.66</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>b) Urban</td>
<td>0</td>
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6. **Years of experience in pediatric:**

<table>
<thead>
<tr>
<th></th>
<th>a) 0-1 years</th>
<th>b) 1-2 years</th>
<th>c) 2-3 years</th>
<th>d) Above 3 years</th>
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</thead>
<tbody>
<tr>
<td>Count</td>
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<td>3</td>
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<td>1</td>
</tr>
<tr>
<td>Mean</td>
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<td>0</td>
<td>2</td>
<td>3.33</td>
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<tr>
<td>Std. Dev</td>
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<td>0.66</td>
</tr>
<tr>
<td>Significance</td>
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<td>13.33</td>
<td>0.001</td>
<td>6.66</td>
</tr>
<tr>
<td>p-value</td>
<td>2.59</td>
<td>5.8628*</td>
<td>1.00</td>
<td>6.66</td>
</tr>
</tbody>
</table>

6. **Monthly income**

<table>
<thead>
<tr>
<th></th>
<th>a) 5000-7000/-</th>
<th>b) 7000-10,000/-</th>
<th>c) 10,000-13,000/-</th>
<th>d) 13,000 &amp; above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
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<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Mean</td>
<td>26.6</td>
<td>13.33</td>
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<tr>
<td>Std. Dev</td>
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<td>2.00</td>
<td>0.66</td>
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<tr>
<td>Significance</td>
<td>5.8628*</td>
<td>8.6571*</td>
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<td>0.001</td>
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<td>2.59</td>
<td>2.59</td>
<td>1.00</td>
<td>0.001</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level.

# not significant

The hypothesis states that there will be a significant association between level of knowledge and the demographic variable. The same result is statistically proved. Demographic variables like Educational qualification, Years of experience in pediatric, and Monthly income is highly significant association at 0.05 level and the demographic variables such as Age, Gender, Type of family, place of residence is not having association with level of knowledge.

**Summary for this study:**

The purpose of the study is to evaluate the effectiveness of structured teaching program in the improvement of level of knowledge among health care providers of care hospital, Varanasi.

The experimental study is design by the researcher to evaluate the level of knowledge. Purposive sampling technique is use to select 15 samples. The tool is develop and adopt after reviewing the relevant literature. Modified knowledge assessment tool is use to assess the level of knowledge. The collected data is calculated and analyzed using both descriptive and inferential statistics based on the objectives of the study. The study is test and accepts the hypothesis. The data collection is statistically analyze and represents as tables and graphs in the previous chapter.
Recommendations:

- A similar study can be replicated with larger sample size and in various other setting.
- The study can be conducted with other teaching method.
- A similar study can be conducted to compare the effects of structured teaching program and any other teaching technique.
- A similar study can be conducted with different modified knowledge assessment tool.

Conclusion:

The following conclusion is made based on the above finding. Most of the sample is inadequate and inadequate level of knowledge after the intervention, so the structured teaching program is effective in improving the level of knowledge. The study is encouraging to all the health care providers to improve their knowledge. This is free of cost and done easily. It can be integrated into clinical practice and health education in order to increase and improve the knowledge and experience of health care providers. The structured teaching program should focus on improving the knowledge and practice related to pediatric basic life support.

ABSTRACT

An Pre Experimental Study to assess the effectiveness of Structured Teaching Program on Level of Knowledge of Pediatric Basic Life Support (BLS) among Health Care Providers working in Care Hospital at Varanasi, U.P. was conducted has a departmental study during working period at Apex College of Nursing, Varanasi under King George Medical University, Lucknow in 2016.

Introduction

Basic Life Support (BLS) is a level of medical care which is used for victims of life threatening illness or injuries. BLS is that particular phase of emergency cardiac care that either prevents circulatory or respiratory arrest or insufficiency through prompt recognition and intervention or extremely supports the circulation and ventilation of a victim of a cardiac or respiratory arrest through Cardio Pulmonary Resuscitation (CPR).

Objectives:-

- To assess the level of knowledge among Health Care Providers before and after planned structured teaching program on BLS.
- To evaluate the effectiveness of Structured Teaching Program.
- To find out the association between the level of knowledge and selected demographic variables.
Hypothesis:-

- There will be significant improvement in the level of knowledge in post test score than the pre-test score.
- There will be significant association between the level of knowledge and selected demographic variables.

Major findings of the study

- The majority of the age group of the samples 8 (53.33%) is between 21-23 years.
- Regarding gender majority of the samples 10 (66.66%) is male.
- Regarding the educational qualification majority of samples 7 (46.66%) is GNM.
- Regarding the type of family, majority of the samples, 14 (93.33%) belongs to joint family.
- With regard to place of residence, majority of the samples 15 (100%) belongs to rural area.
- Regarding the year of experience in pediatric, majority of the samples 7 (46.66%) is 0-1 years.
- With regard to the monthly income of the samples, the majority of the samples 5 (33.33%) between 5000-7000/-as same as 7000-10,000/-. Level of knowledge shows that in the pretest among the samples, 8 (53.34%) are having inadequate knowledge, 7 (46.67%) are having adequate knowledge and there is none of any samples having over adequate knowledge. In posttest among samples, 10 (66.67%) are having adequate knowledge and 4 (26.67%) having over adequate knowledge.
- In the effectiveness of structured teaching program, mean post test score on the level of knowledge is 14 which is significantly higher than the mean pretest score 6.86 and the computed value of ‘t’ is 2.2163 which is more than the table value 2.145 at df (14) which is statistically significant at 0.05 level. This data shows that structured teaching program is effective in improving the level of knowledge.
- The demographic variable such as educational qualification, years of experience in pediatric and monthly income is significant at 0.05 level and the demographic variables such as age, gender, type of family, and place of residence is not having an association with level of knowledge and there is no significance. The research hypothesis is accepted.

Summary for this study:-

The purpose of the study is to evaluate the effectiveness of structured teaching program in the improvement of level of knowledge among health care providers of care hospital, Varanasi.

The experimental study is design by the researcher to evaluate the level of knowledge. Purposive sampling technique is use to select 15 samples. The tool is develop and adopt after reviewing the relevant literature. Modified knowledge assessment tool is use to assess the level of knowledge. The collected data
is calculated and analyzed using both descriptive and inferential statistics based on the objectives of the study. The study is test and accepts the hypothesis. The data collection is statistically analyze and represents as tables and graphs in the previous chapter.

Conclusion:

The following conclusion is made based on the above finding. Most of the sample is in adequate and inadequate level of knowledge after the intervention, so the structured teaching program is effective in improving the level of knowledge. The study is encouraging to all the health care providers to improve their knowledge. This is free of cost and done easily. It can be integrated into clinical practice and health education in order to increase and improve the knowledge and experience of health care providers. The structured teaching program should focus on improving the knowledge and practice related to pediatric basic life support.

Key words

Operational definition:-

Effectiveness:-

The degree to which objectives are achieved and the extent to which targeted problems are solved.

Structure teaching program:-

It is a planned and organized teaching program in the hospital setup to educate the nurses who are already working in pediatric setup.

Knowledge:-

It refers to the facts, information and skills acquired through or gained by experience or education.

Pediatric:-

Pediatric is the branch of medical science that deals with from birth to 18 years of age.

Basic Life Support (BLS):-

It is a level of medical care which is used for victims of life threatening illness until they receive full medical care at hospital.
Cardiopulmonary resuscitation is a technique of basic life support for oxygenating the brain and heart until appropriate or definite medical treatment can arrive to restore normal heart and ventilator action.

**Health Care Providers:-**

People who are qualified in GNM, B.Sc Nursing, Post Basic Nursing and M.Sc Nursing, M.B.B.S, B.H.M.S/ B.A.M.S working in hospital and taking care of all ill and injured patients.