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Knowledge of Nurses regarding Cardiopulmonary Resuscitation in Health Care Sector

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Abstract:

Introduction: *Cardiac arrest is the sudden abrupt cessation of normal blood circulation due to unable of the heart to contract properly on systole. Cardiac arrest is the most common cause of death in all developing and developed countries. During management of cardiac arrest patient, cardiopulmonary resuscitation knowledge and its technique is of great concern. Purpose of the study is based on to assess the nurse's knowledge regarding the cardiopulmonary resuscitation.*

Methodology: *It was descriptive cross sectional study. All registered nurses of Shaikh Zayed hospital, who were working in critical care units and having work experience more than one years in these critical areas included. 150 nurses were selected to participate*

willingly in this study. Likert scale questioner were made to assess knowledge, each question had five answer. The tool which was prepared for study had been checked for its reliability.

Results: *Majority of the nurses have poor knowledge regarding the cardiopulmonary resuscitation and its technique. Response of the question When come across the cardiac arrest first check for responsiveness, only 50.7% nurses were agree about it that it Before starting artificial ventilation, opening airway is necessary, only 56.0% nurses agreed. Response of the question about Ratio of cardiac massage to respiration in all the ages for usual rescuer is 30:2 only 40.7% was agreed. In response of this question the recommended chest compression to be performed in each minute during CPR is 100 only 29.3% nurses were agreed.*

Conclusion: *It has been concluded that it is a challenge for nurses to work together with health care team. Nurses need to have solid knowledge about the use cardiopulmonary resuscitation in critical situation and saving the life of the patient efficiently. Nurses with this poor knowledge cannot serve well as they are expected to be.*

Key words: cardiopulmonary resuscitation, health care sector, knowledge of nurses

1. INTRODUCTION

Nurses are most important part in any health care setup and are appear to be knowledgeable in providing basic care to the patients (Andreka and Frenneaux 2006). Cardio-pulmonary Resuscitation (CPR) is an important medical procedure which is required for people who face sudden cardiac arrest. It is a combination of save breathing and chest compressions which is delivered to the individual who are thought to be in cardiac arrest (Marzooq and Lyneham 2009).

Cardiopulmonary resuscitation (CPR) is a life restoring skill which is useful in many cardiac emergencies. Cardiopulmonary resuscitation is important in cases of low blood supply, heart attacks, or any other situation in which a

person's breathing or heartbeat has stop (Avabratha et al.,2016). Cardiac arrest is the most common cause in which Cardiopulmonary resuscitation usually done. This study was based on to assess the nurse's knowledge regarding Cardiopulmonary resuscitation. These emergencies can be handled efficiently by proper knowing and skill of resuscitation skills. Resuscitation is the art of restoring life or consciousness of one who dying (Alanazi, Hotan et al. 2013).

Cardiopulmonary resuscitation (CPR) is a series of lifesaving actions that increase the chance of life following cardiac arrest. Life of patient can be saved by having knowledge about how to do CPR according to the need of the patient and giving treatment of the nurse (Rajeswaran and Ehlers 2014). In any emergency situation knowing is very important to deal with situation, because if CPR not properly done it leads to major complications like broken ribs, ineffective lung inflation and cardiac output cause brain damage or death (Mustafa 2014).

Cardiac arrest is the sudden abrupt and cessation of normal blood circulation due to unable of the heart to contract properly on contraction (Coons and Guy 2009).

Cardiac arrest is the most common cause of death in all developing and developed countries. During management of cardiac arrest and other emergencies, cardiopulmonary resuscitation knowledge and its use of technique is of great concern (Avabratha, Bhagyalakshmi et al. 2012). Heart failure is otherwise called cardio respiratory failure. It is the sudden stoppage of usually diffusion of the heart since disappointment of the heart to pump rightfully. At the point when there is sudden stoppage then blood flow stops to supply to the brain and when mind gets lack of spreading then it brought about irregular or stoppage of breathing and that can bring about sudden mind passing or mind tissues damage. Brain death can happen if there is heart failure over five minutes. When there is

sudden cardiac arrest it could leads to death within few minutes and called acute cardiac death (Coons and Guy 2009).

As time passed the number of cases increased such as myocardial infarction, Ventricular Fibrillation, accidents, suffocation and any other critical situation need to manage efficiently, quickly and timely. In hospital settings nurses are the backbone, they must be trained, knowledgeable and skilled for any emergency (Andreka & Frenneaux, 2016).

Nurses ability to respond quickly and effectively any critical condition and safe life of peoples through cardiopulmonary resuscitation (Luciano et. al., 2015).

It has been notified that cardiopulmonary resuscitation is much necessary for survival of client. There is a great need of that critical care nurses must be fully trained and having skills to perform CPR because they are more close to the patient at that time inside the hospital settings(Silva, Steremberg et al. 2012). Studies show that cardiopulmonary resuscitation is much necessary for survival of client. It has been observed through research that early approach reduces the chances of death in both animals and humans because study first was done on animals and there are chances of survival more and may be more if cardiopulmonary resuscitation done on timely (Rea, Cook et al. 2008).

Studies shows that fibrillation of heart after consistently the chances of survival diminishes. It has been told that cardiopulmonary revival is much important for survival of client. There is an incredible need of that basic consideration medical care takers must be completely prepared and having abilities of cardiopulmonary revival and in the use of defibrillator since they are all the more near the patient around then inside the hospital facility settings (Dal and Sarpkaya 2013).

Researches show that there is need to perform efficient form of cardiopulmonary resuscitation and use of defibrillator. All the health care professional present at the time Patient

cardiac arrest especially nurses must start CPR without delay and with one minute after arrest and call to the code blue team (Kyller 2005). Nurses need to bring crash cart and defibrillator near the patient within three minutes. Nurses who are not fully trained about CPR they need to assist it with the code blue team or with critical care team more efficiently without increase the chances of survival of patients (Meaney, Nadkarni et al. 2010).

2. LITERATURE REVIEW

Most of the nurses have less and poor knowledge about CPR or cardiac arrest situation. Their understanding could be improved by the teaching. Also resuscitation skills need to be refreshed after sometime, and short courses can be offered for effective revision (Pourmirza Kalhori, Saboor et al. 2012). It has been noticed though research that for cardiopulmonary resuscitation, there was an in general development in performing cardiopulmonary resuscitation. Nurse's competencies can be enhanced by teaching them with skills. Studies shows that proper education and regular training about cardiopulmonary resuscitation enhance nurse's knowledge and their confidence level during cardiopulmonary resuscitation (Mohsenpour, Imani et al. 2010).

Mostly critical care nurses startCPR of patient with sudden cardiac arrest. In the general ward usually, CPR done by on duty nurses and then they announced for help. When code blue team arrives then they took the responsibility to resuscitate the patient and they also use advance cardiac life support to save life of patient (Cave, Gazmuri et al. 2010). Then they also use defibrillator in case of shock able rhythm as it is detected on the monitor. It is found in study that patients with heart failure during their stay inside the hospital setting, survival rate is disappointingly low. In these patients ventricular tachycardia or ventricular fibrillation and

heartbeat less electrical movement occur (Dal and Sarpkaya 2013).

There is need to perform efficient form of cardiopulmonary resuscitation and use of defibrillator. All the health care professional present at the time of Patient cardiac arrest especially nurses must start CPR without delay and with one minute after arrest and call to the code blue team (Passali, Pantazopoulos et al. 2011).Nurses who are not fully trained to perform CPR they need to assist it with the code blue team or with critical care team more efficiently without increase the chances of survival of patients (Chamberlain 2011).

Studies was demonstrating that medical attendants like nurses and doctors had poor learning as they ought to be expert in cardiopulmonary resuscitation in light of their normal routine team work. Nurses work inside hospital work as a team and perform CPR is also a team work in emergency situation as patient collapse with cardiac arrest and needs early detection and management (Falcon-Chevere and Cabanas 2012).

Early resuscitation is vital to the outcomes of adults in cardiac arrest. Cardiac arrest has a high mortality rate unless resuscitation occurs on time, frequently within time period of 10 minutes of the onset of cardiac arrest. Survival decreases seven percent to ten percent after every minute that passes therefore there is emergency need to resuscitate the patient (Kyller and Johnstone 2005).

There is need to have nurses knowledgeable about skillful performance of cardiopulmonary resuscitation and having knowledge about detection of shock able rhythm (Kyller 2005).

The use of automated external defibrillator (AEDs) in hospitals known to very helpful. Understanding the use of automated external defibrillator into current protocols essential to nurses to assist alone and within team. Nurses will continue on coming across automated external defibrillator both in their

communities and when they respond to sudden cardiac arrest in the hospital and operate it only by trained nurses who have Advance cardiac life support diploma (Kyller and Johnstone 2005).Any patient with sudden cardiac arrest would be treated by using the automated external defibrillator with pads, and the initial defibrillation would be delivering by critical care nurse with a team. In areas where nurses are not trained with ACLS then they need to have complete knowledge about defibrillator use to help out as a team (Roh and Issenberg 2014).

3. PROBLEM STATEMENT

In hospital setting all health care facilitators are main to provide care to patients. Nurses play a vital role in in patient care. All time in their duty hours they are involved in patient care in different ways. They are most trustable and closest health care provider for the patients so, that's why it is most important that they know about the importance of resuscitation and implement proper techniques before and after attending the patient. It must be reduce the risk of patient mortality (Challenge 2009).

It is a challenge for nurses to work together with health care team. Nurses need to have solid knowledge about the use cardiopulmonary resuscitation in critical situation and saving the life of the patient efficiently. Nurses with this poor knowledge cannot serve well as they are expected to be.

4. SIGNIFICANCE

It is a challenge for nurses to work together with health care team. Nurses need to have solid knowledge about the use cardiopulmonary resuscitation in critical situation and saving the life of the patient efficiently. Nurses with this poor knowledge cannot serve well as they are expected to be.

This study will help to learn to assess the knowledge regarding cardiopulmonary resuscitation among staff nurses in critical care units. We will learn more about having proper skills of cardiopulmonary resuscitation. The data gather from nurses help to show it to the organization leaders and tell them about the knowledge that nurses have about the cardiopulmonary resuscitation. If there will be any lacking in the knowledge then BLS (Basic life support) and ACLS (Advanced cardiac life support) programs could be held on monthly basis inside the organization for the improvement of the knowledge of nurses about the cardiopulmonary resuscitation. When nurses will have accurate knowledge about the cardiopulmonary resuscitation then they will be more confident and more skillful in assisting with the team of resuscitation.

5. OBJECTIVE

The objective of the study is:

1. To assess knowledge of nurses regarding cardiopulmonary resuscitation in health care sector

6. RESEARCH QUESTION

What is the Knowledge of nurses regarding cardiopulmonary resuscitation in health care sector?

7. OPERATIONAL DEFINITION

Knowledge:

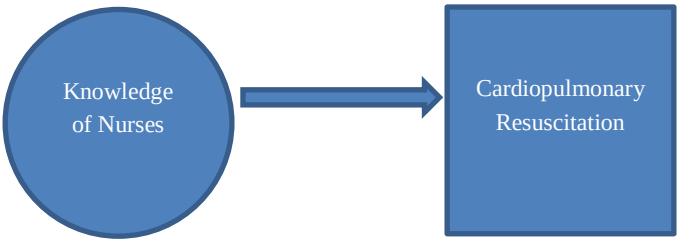
Knowledge is term used for information or awareness about any object, individual or thing. This is gain with the help of literature or life experiences. This information is implementing in life in the form of skills or theory for achieving or improving the goals.

Cardiopulmonary Resuscitation:

Cardiopulmonary resuscitation (CPR) is a series of lifesaving actions that increase the chance of life following cardiac arrest. Nurses, ability to respond quickly and effectively any critical

condition and safe life of peoples through cardiopulmonary resuscitation

8. THEORITICAL FRAMEWORK



(Theory of planned behavior, 1980)

The Theory of Planned Behavior (TPB) started as the Theory of Reasoned Action in 1980 to predict an individual's intention to engage in a behavior at a specific time and place. The theory was intended to explain all behaviors over which people have the ability to exert self-control. The key component to this model is behavioral intent; behavioral intentions are influenced by the knowledge and practices about the likelihood that the behavior will have the expected outcome.

9. MATERIAL AND METHOD

Study Design

A cross-sectional study design was used.

Study Setting

The setting for this research wasSheikh Zayed Hospital Lahore.

Duration of the Study:

This study was completed approximately 4 months (September 2018, to December 2018).

Study Population:

The study population for this research wasall nurses working in Sheikh Zayed Hospital Lahore.

Sampling Technique:

The Convenient sampling techniques was used to collect data from selected population.

Sample Size:

Sample size is determined by using this formula

$$n= N/ 1+ (N) (E)^2$$

Desired sample size= n=?

Target Population= N =250

Margin of error =E=0.05 at 95% confidence interval

$n= 250/1+250(0.05)^2$

n= 250/1+1

n=250/2

n=150

The sample size is 150

Sample Selection for Nurses:

Inclusion criteria:

The subject included in the study was:

- All staff nurses working in ICU CCU, Hemodialysis Unit, and emergency department
- Both male and female
- Those patients who were interested to participate in the study

Exclusion criteria:

The subjects who are excluded from the study was:

- Head nurses and nursing assistant working in ICU CCU, Hemodialysis Unit, and emergency department
- Student nurses, head nurses and staff nurses working in other than ICU, CCU, HDU, and emergency department were excluded.
- Those who are not willing to participate

10. ETHICAL CONCEDRATION

The rules and regulations set by the ethical committee of Lahore School of Nursing were followed while conducting the

research and the rights of the research participants was respected.

- Written informed consent attached was taken from all the participants.
- All information and data collection was kept confidential.
- Participants remained anonymous throughout the study.
- The subjects were informed that there are no disadvantages or risk on the procedure of the study.
- They were also informed that they will be free to withdraw at any time during the process of the study.
- Data was kept in under key and lock while keeping keys in hand. In laptop it will be kept under password.

11. DATA COLLECTION PLAN

- After taking informed consent, data was collected by the help of collection tool questionnaire adopted (Michelle Lange et.al, 2008). .
- Data was collected from 150 staff nurses.

12. DATA ANALYSIS:

Data was analyzed by using SPSS version 22.0 statistical software for data analysis.

- Demographic variables like age, gender, marital status, education etc. was analyzed by using descriptive statistics like frequency, percentage, mean and standard deviation. Percentages were calculated for categorical data while continuous data was analyzed through mean and standard deviation.

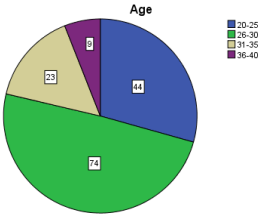
RESULT

First analysis was demographic analysis. It gives us details of 3 demographic questions that is age, experience and education. Data gather only female nurses in critical care unit. More details are clear from given table and graph.

TABLE 1: AGE

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-25	44	29.3	29.3	29.3
	26-30	74	49.3	49.3	78.7
	31-35	23	15.3	15.3	94.0
	36-40	9	6.0	6.0	100.0
	Total	150	100.0	100.0	

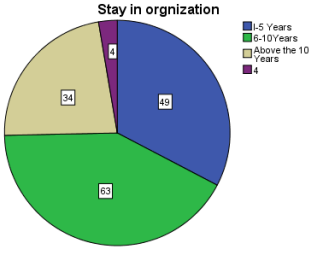


This table Statistics shows that 44(29.3%) respondents belong to 20-25 age group. 74 (49.3%) respondents belong to 26-30 age group. 23(15.3 %) of respondents belong to 31-35 age group. 9 (6.0%) respondents belongs to 36-40 year age group.

TABLE 2: EXPERIENCE

Stay in organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	l-5 Years	49	32.7	32.7	32.7
	6-10Years	63	42.0	42.0	74.7
	Above the 10 Years	34	22.7	22.7	97.3
	4	4	2.7	2.7	100.0
	Total	150	100.0	100.0	

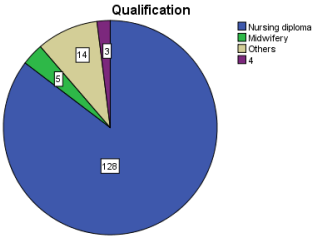


This table shows that 49 (32.0%) respondents experience 1-5year age group. 63(41.3%) respondents experience to 6-10year age group. 34(21.3%) respondents present in this organization above 10 year. More details are clear from given table and graph.

TABLE 3: QUALIFICATION

Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nursing diploma	128	85.3	85.3	85.3
	Midwifery	5	3.3	3.3	88.7
	Others	14	9.3	9.3	98.0
	4	3	2.0	2.0	100.0
	Total	150	100.0	100.0	



The qualification of the respondents was recorded as; 128(84.7%) respondents was diploma in nursing, 5 (5.3 %) respondents are midwifery diploma and5 (10.o %) respondents are graduate. More details are given in above table and graph.

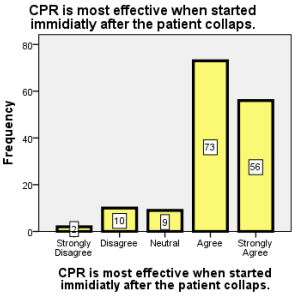
DESCRIPTIVE ANALYSIS:

Independent Variable:

Table 4

If the patient needs CPR we must wait for the coming of doctor as the leader of resuscitation team.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	59	39.3	39.3	39.3
	Disagree	45	30.0	30.0	69.3
	Neutral	5	3.3	3.3	72.7
	Agree	30	20.0	20.0	92.7
	Strongly agree	11	7.3	7.3	100.0
	Total	150	100.0	100.0	

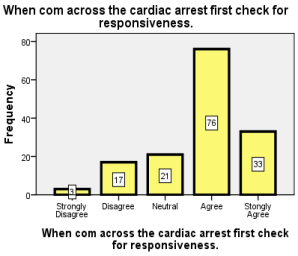


The first question in this study if the patient needs CPR we must wait for the coming of doctor as the leader of resuscitation team. Respondent response this question 59(39.3%) strongly disagree, 45 (30.0%) disagree, 30(20.0%) respond neutral, 30(7.3%) agreed and 11(7.3%) strongly agree.

Table 5

When com across the cardiac arrest first check for responsiveness.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	2.0	2.0	2.0
	Disagree	17	11.3	11.3	13.3
	Neutral	21	14.0	14.0	27.3
	Agree	76	50.7	50.7	78.0
	Stongly Agree	33	22.0	22.0	100.0
	Total	150	100.0	100.0	

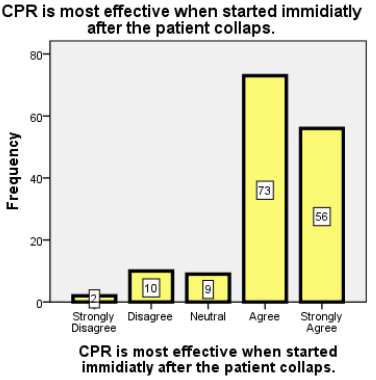


In response of this question when come across a cardiac arrest first check for responsiveness3(2.0%) strongly disagree, 17 (11.3%) agree, 21(14.1%) neutral, 76 (50.0%) agree and 33 (22.0%) strongly disagree.

Table 6

CPR is most effective when immediately started after the patient collapse.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.3	1.3	1.3
	Disagree	10	6.7	6.7	8.0
	Neutral	9	6.0	6.0	14.0
	Agree	73	48.7	48.7	62.7
	Strongly Agree	56	37.3	37.3	100.0
	Total	150	100.0	100.0	

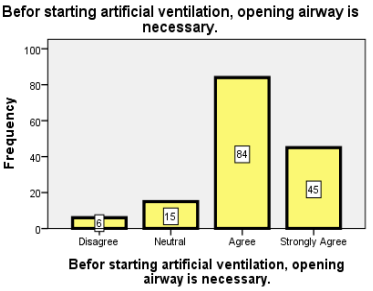


CPR is most effective when started immediately after the patient collapse 10(1.3%) respond strongly disagree, 10(6.7%)

disagree, 9 (6.0%) neutral, 73(48.7%) agree and 56(37.3%) strongly agree.

Before starting artificial ventilation, opening airway is necessary.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	6	4.0	4.0	4.0
	Neutral	15	10.0	10.0	14.0
	Agree	84	56.0	56.0	70.0
	Strongly Agree	45	30.0	30.0	100.0
	Total	150	100.0	100.0	

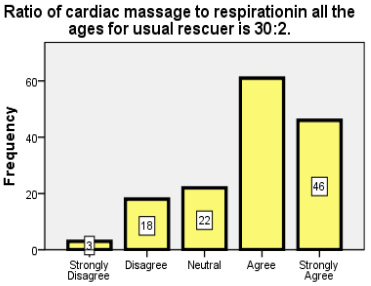


In response of forth question before starting artificial ventilation, opening airway is necessary 6(4.0%) strongly disagree, 84(56.0%) agree, 15(10.0%) neutral and 45 (30.0%) respondent strongly agree.

Table 8

Ratio of cardiac massage to respiration in all the ages for usual rescuer is 30:2.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	2.0	2.0	2.0
	Disagree	18	12.0	12.0	14.0
	Neutral	22	14.7	14.7	28.7
	Agree	61	40.7	40.7	69.3
	Strongly Agree	46	30.7	30.7	100.0
	Total	150	100.0	100.0	

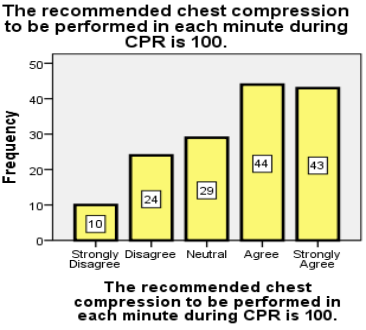


In response of fifth question Ratio of cardiac massage to respiration in all the ages for usual rescuers is 30 to 3 (2. 2.0%) strongly disagree,18(12.0%) agree,22(14.0) neutral, 61(40.0%) agree and 46(30.0%) strongly agree.

Table 9

The recommended chest compression to be performed in each minute during CPR is 100.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	6.7	6.7	6.7
	Disagree	24	16.0	16.0	22.7
	Neutral	29	19.3	19.3	42.0
	Agree	44	29.3	29.3	71.3
	Strongly Agree	43	28.7	28.7	100.0
	Total	150	100.0	100.0	



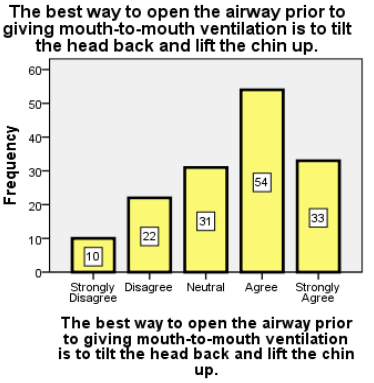
In response of this question the recommended chest compression to be performed in each minute during CPR is 100.

10(6.7%) respondent strongly disagree,24(16.0%) disagree,29(19.3%) neutral, 44 (29.3%) agree and 43(28.7%) strongly agree.

Table 10

The best way to open the airway prior to giving mouth-to-mouth ventilation is to tilt the head back and lift the chin up.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	6.7	6.7	6.7
	Disagree	22	14.7	14.7	21.3
	Neutral	31	20.7	20.7	42.0
	Agree	54	36.0	36.0	78.0
	Strongly Agree	33	22.0	22.0	100.0
	Total	150	100.0	100.0	

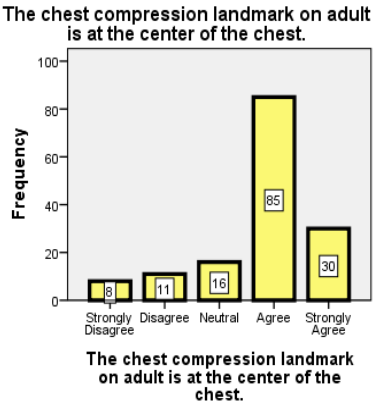


The best way to open the airway prior to giving mouth-to-mouth ventilation is to tilt the head back and lift the chin up in response of this question10 (6.7%) strongly disagree,22(14.7%) agree, 32 (21.3%) neutral, 61 (40.7%) response agreed and 24(16.0%) strongly agree.

Table 11

The chest compression landmark on adult is at the center of the chest.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	5.3	5.3	5.3
	Disagree	11	7.3	7.3	12.7
	Neutral	16	10.7	10.7	23.3
	Agree	85	56.7	56.7	80.0
	Strongly Agree	30	20.0	20.0	100.0
	Total	150	100.0	100.0	

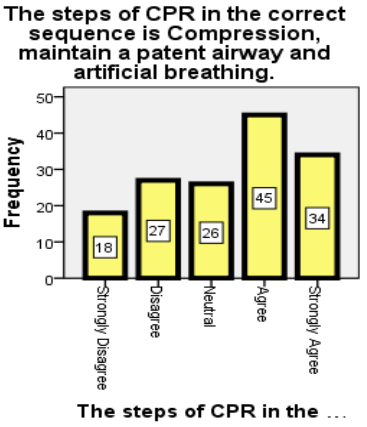


In response of this question the chest compression landmark on adult is at the center of the chest. 8 (5.3%) strongly disagree, 11(7.3%) disagree, 16 (10.7%) neutral, 85(56.7%) agreed and 30 (20.05 %) strongly agree.

Table 12

The steps of CPR in the correct sequence is Compression, maintain a patent airway and artificial breathing.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	18	12.0	12.0	12.0
	Disagree	27	18.0	18.0	30.0
	Neutral	26	17.3	17.3	47.3
	Agree	45	30.0	30.0	77.3
	Strongly Agree	34	22.7	22.7	100.0
	Total	150	100.0	100.0	

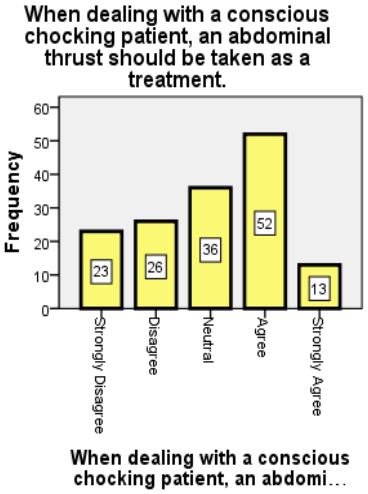


In response of this question the steps of CPR in the correct sequence is Compression, maintain a patent airway and artificial breathing. 18 (12.0%) strongly disagree, 27 (18.0%) disagree, 26 (17.3%) neutral, 45 (30.0%) agree and 34(22.7%) strongly agree.

Table 14

When dealing with a conscious chocking patient, an abdominal thrust should be taken as a treatment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	23	15.3	15.3	15.3
	Disagree	26	17.3	17.3	32.7
	Neutral	36	24.0	24.0	56.7
	Agree	52	34.7	34.7	91.3
	Strongly Agree	13	8.7	8.7	100.0
	Total	150	100.0	100.0	

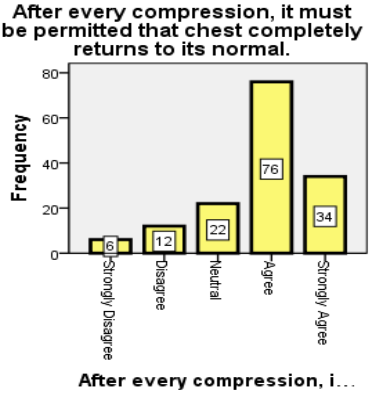


In response of tenth question when dealing with a conscious chocking patient, an abdominal thrust should be taken as a treatment. 23 (15.3%) strongly disagree, 26 (17.3%) disagree,36(24.0%) neutral,52(34.7%) agree and13(8.7%) strongly agree.

Table 15

After every compression, it must be permitted that chest completely returns to its normal.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	4.0	4.0	4.0
	Disagree	12	8.0	8.0	12.0
	Neutral	22	14.7	14.7	26.7
	Agree	76	50.7	50.7	77.3
	Strongly Agree	34	22.7	22.7	100.0
	Total	150	100.0	100.0	

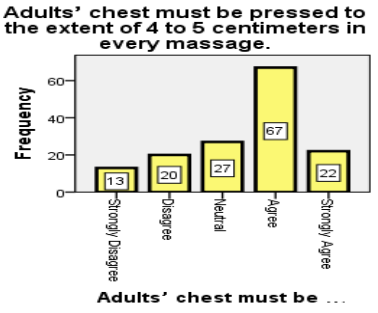


In response of this question after every compression, it must be permitted that chest completely returns to its normal.6(4.0%) strongly disagree, 12(8.0%) disagree, 22 (14.7%) neutral, 76 (50.0%) agree and 34(22.7%) strongly agree.

Table 16

Adults' chest must be pressed to the extent of 4 to 5 centimeters in every massage.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	8.7	8.7	8.7
	Disagree	20	13.3	13.4	22.1
	Neutral	27	18.0	18.1	40.3
	Agree	67	44.7	45.0	85.2
	Strongly Agree	22	14.7	14.8	100.0
	Total	149	99.3	100.0	
Missing	System	1	.7		
Total		150	100.0		

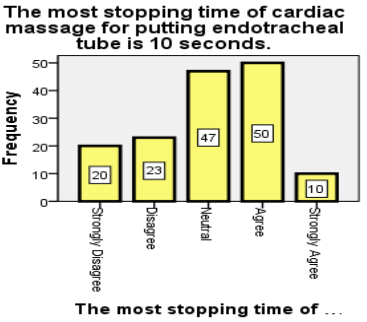


In twelfth question Adults' chest must be pressed to the extent of 4 to 5 centimeters in every massage13 (8.7%) strongly disagree, 20(13.3%) disagree, 27(18.0) neutral, 66 (44.7%) agree and 22 (14.8%) strongly agree.

Table 17

The most stopping time of cardiac massage for putting endotracheal tube is 10 seconds.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	13.3	13.3	13.3
	Disagree	23	15.3	15.3	28.7
	Neutral	47	31.3	31.3	60.0
	Agree	50	33.3	33.3	93.3
	Strongly Agree	10	6.7	6.7	100.0
	Total	150	100.0	100.0	

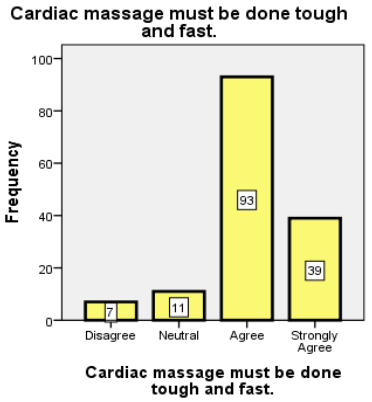


In response of this question the most stopping time of cardiac massage for putting endotracheal tube is 10 seconds. 20 (13.3%) strongly disagree, 23 (15.3%) disagree, 47 (31.3%) neutral, 50(33.3%) agree and 10(6.7%) strongly agree.

Table 18

Cardiac massage must be done tough and fast.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	7	4.7	4.7	4.7
	Neutral	11	7.3	7.3	12.0
	Agree	93	62.0	62.0	74.0
	Strongly Agree	39	26.0	26.0	100.0
	Total	150	100.0	100.0	



In last question Cardiac massage must be done tough and fast responded response is 7(4.7%) disagree, 11 (7.3%) neutral, 93 (62%) agree and 39 (20.0%) strongly agree.

Reliability Assessment:

This table presents Cronbach's alpha for four scales used in the study. Cronbach alpha is the most commonly used measure of scale reliability (Cortina, 1993). Cronbach alpha above 0.70 is considered to be the acceptable indicator of internal consistency reliability (Santos, 1999; Bryman & Cramer, 2005; Pallant, 2007; Hair et al., 2006).

The alpha values of Knowledge regarding cardiopulmonary resuscitation were above 0.7 which were acceptable. It means that internal reliability of the scale was accurate.

TABLE 08: RELIABILITY OF CONSTRUCTS

S.NO	Variable of study	**No. of items**	**Cronbach's alpha**
01	Knowledge	15	.839

Discussion

In this research nurses selected who were working in critical care unit and having one or more working experience. Data

that was based on statistics shows that most of the nurses working in critical care units having experience between six to ten years.

The most current advancement in the 2010 American heart association (AHA) rules for CPR is an adjustment in the basic Life Support (BLS) arrangement actions from ABC (Airway, Breathing, Chest compressions) to CAB (Compression, Breathing, Circulation). Because purpose behind this activity was majority of CPR done due to, heart failure is because of VF (Ventricular fibrillation) or pulseless VT (Ventricular Tachycardia) and also some critical situations. Just 30.0% nurses know about the changing sequence American heart association (AHA)and 29.3% know about exact ratio of chest compression.According to Parajulee & Selvaraj nurses don't have knowledge about CPR sequence and exact ratio of chest compression in one minute (Field, Hazinski et al. 2010).

The answer to this question in this study that tell about the Ratio of cardiac massage to respiration in all the ages for usual rescuer is 30:2, 40.7% nurses know about and give correct answer other 52% nurse gave the wrong answer to the question. Responses to this question in my study supports that nurses have don't enough knowledge about CPR. Study shows that most of the nurses 75% were aware about when come across the cardiac arrest first check for responsiveness, But 110% nurses know that they have to resuscitate if the patient needs CPR no need to wait for doctor.(Chandrasekaran, Kumar et al. 2010).

CONCLUSION:

There is a great need to improve the patient safe and effective care. Educational programs and strategies played an important role in providing safe and effective health care to the patient. Over the next decade, they will continue to contribute to the improvement of health outcomes. Educational based programs are most likely to succeed in improving health and wellness

when they address influences at all levels and in a variety of environments/settings. Most of the nurses were aware about resuscitation but not able to independently done. Most of the nurses have no sense of cardiopulmonary resuscitation and thought it's only done by the doctors. It has been concluded that nurses have poor knowledge regarding the cardiopulmonary resuscitation. Nurses do not have knowledge about resuscitation, when they do not have sense about resuscitation then they do not understand the importance of resuscitation. Most of the nurses don't know even the meaning of resuscitation and they are working in critical care unit even though most of them know that resuscitation most important for saving life.

LIMITATIONS:

Short time, Limited area of getting sample and sample size will not be adequate large to apply all over this research.

The study is limited to staff nurses who are working in selected Intensive Care Units.

The study did not use any control group.

The study did not assess the attitude of staff nurses regarding resuscitation.

RECOMMENDATIONS:

- The study can be conducted on the large scale sample to validate and for better generalization of the findings.
- Involve nursing superintend of the hospital to enhance nurse's knowledge about the use of resuscitation.
- Arrange monthly ACLS and BLS health education programs in the hospital to increase awareness regarding the resuscitation among nurses.
- This type of study can be done in different setting.

- Comparative study can be done between two hospitals on staff nurses working in intensive care unit

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