



Perception And Attitude Of Nurses Towards The Practice Of Cardio-Pulmonary Resuscitation In University Of Port Harcourt Teaching Hospital, Nigeria

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ABSTRACT

This study investigated the perception and attitude of nurses towards the practice of Cardio-Pulmonary Resuscitation in University of Port Harcourt Teaching Hospital. The study adopted a cross-sectional research design with a population which comprised of 150 nurses from which a sample size of 109 was determined using Taro Yamene's formula. A convenient non-probability sampling technique was used to select the respondents. Data was collected using self-structured questionnaire with a reliability index of 0.88. Data were presented and analyzed using percentage and statistical mean. Findings revealed that majority of nurses had positive attitude towards the practice of cardio-pulmonary resuscitation, majority of nurses had positive attitude towards the practice of cardio-pulmonary resuscitation, nurses' attitude is directly proportional to their knowledge as well as experience but indirectly proportional to their familiarity with the patient and majority of nurse also support that it requires continual professional training course to enhance their knowledge based on relevance. Based on the findings, recommendations were made that every nurse should embark on a continual training course on cardio-pulmonary resuscitation so as to update their knowledge and skill, a renewable license be provided for participants of the continual training course and this should be taken into cognizance in the employment of nurses in the clinical setting and each facility should develop a clearly defined hierarchy and order in the initiation of cardio-pulmonary resuscitation.

Keywords: Perception, Attitude, Nurse Practice, Cardio-Pulmonary Resuscitation

INTRODUCTION

Cardio-Pulmonary Resuscitation (CPR) is a technique that is made-up of airway maneuver, artificial ventilation, external chest compression and occasionally defibrillation designed to perfuse vital organs or to restore circulation in a cardiac arrest (Adoyi, 2013). Cardio-Pulmonary Resuscitation helps to maintain blood flow to vital organs to preserve their functions and viability. According to Smith and Nathalie (2003) as cited by Ugochukwu (2010) it was noted that the brain may sustain damage after blood flow ceases for about four (4) minutes and irreversible damage after about seven (7) minutes. However, Adoyi (2013) noted that deprivation of oxygen to brain cells for 3-5 minutes results in brain death. Cardio-Pulmonary Resuscitation is therefore aimed at preventing sudden and unexpected death in life threatening situations. It (CPR) is necessary for victims of cardiac arrest, respiratory arrest, pulse rate of less than 40 beats per minute and respiration rate less than 8 cycles per minute (Adoyi, 2013).

According to the Institute for Health Metrics & Evaluation (2010), approximately two-hundred thousand

(200000) cardiac arrests occur each year in hospitals, and 24 percent of those patients survive. In cities such as Seattle, where Cardio-Pulmonary Resuscitation training is widespread and defibrillation by Emergency Medical Services (EMS) personnel follows quickly, the survival rate is about 20 percent for all cases and as high as 57 percent if a witnessed “shockable” arrest (Ikechukwu, 2015). However, research generally suggests that about 40 percent of patients who receive Cardio-Pulmonary Resuscitation after experiencing cardiac arrest in a hospital survive immediately, and only 17 to 20 percent survive long enough to be discharged. Cardiac arrest survival rates are unacceptably low. Graham (2015) noted that cardiac arrest is the third leading cause of death in the United States behind cancer and heart diseases. Factors such as age, race, and present comorbidities influence the survival rate. Studies have also shown that immediate Cardio-Pulmonary Resuscitation after collapse due to ventricular fibrillation doubles or even triples the chances of survival. In contrast, survival chances decrease by 7 to 10 percent for every minute Cardio-Pulmonary Resuscitation is delayed (Mutlu, Bagecilar and Arastirma, 2016).

Oke (2014) described as alarming, the rate at which many Nigerians die as a result of heart-related diseases. The latest weekly poll results released by NOI POLL (Nigerian leading Opinion Pool and Research Organization Limited) revealed that 52 percent of the adult Nigerian population are unaware of cases of heart diseases in their locality, hence, they neglect medical checkups, resulting in incidents of heart diseases, including heart failure and sudden death (Ekweredu, 2013). Thus, in order to deliver high-quality Cardio-Pulmonary Resuscitation to those that suffer from cardiac arrest and other cases that might result to sudden death such as suffocation, drowning, fire victims, etc.; nurses in Nigeria just as obtained in other countries of the world, should be fully knowledgeable and skilled in life-saving measures of Cardio-Pulmonary Resuscitation.

It is however, unfortunate that in spite of all the advantages and benefits of Cardio-Pulmonary Resuscitation (CPR), its knowledge and practice by nurses in many health care settings in developing countries like Nigeria have been poor (Agumoah, 2010). This is also confirmed by study reports that many nurses particularly in developing worlds rarely know or use the lifesaving process (Basavanthappa, 2013). In other words, the practice of Cardio-Pulmonary Resuscitation to save life in Nigeria is at low ebb, and it is worrisome that majority of nurses do not know that most of the sudden death arising from cardiac arrest could have been prevented with timely and appropriate intervention.

Studies have revealed that over seven (7) million people are estimated to die suddenly annually, representing 40 percent of the annual global death. Without appropriate intervention, this rate is expected to double by 2020 with 83 percent of sudden death cases occurring in developing countries. According to World Health Organization, WHO (2017) death occurring from heart-related diseases in Nigeria reaches 76,410 people or 3.76 percent of total deaths. This implies that the age-adjusted death rate is 117.12 per 100,000 of population, making Nigeria number Ninety (90) in the world (Adewole, 2018). Statistics have also revealed that 150,000 Nigerians die annually as a result of heart-related disease and alarmingly, the number is expected to increase to 23 million by the year 2030, if Cardio-Pulmonary Resuscitation and other measures are not taken (Kuni, 2018).

It is observed that while some health professions see the need to acquire knowledge and skill in Cardio-Pulmonary Resuscitation that can save life, but many others do not recognize the need for it. Based on the researcher's interaction with nurses in the setting, it is obvious that many nurses are ignorant of the Cardio-Pulmonary Resuscitation strategies. The researcher observed in the course of his clinical experience in the University of Port Harcourt Hospital (UPTH), that the lag in time of commencement of Cardio-Pulmonary Resuscitation resulted in the death of patients. Sometimes even when Cardio-Pulmonary Resuscitation is promptly done, it is not done properly, hence proved abortive. He also observed that nurses, who are closest to the patient despite their certification, do not carry out Cardio-Pulmonary Resuscitation and even when it is done, chest compressions given are not firm enough, are done on soft beds and never completes 100 to 120 compressions per minutes. Against this background, the researcher is inspired to evaluate the perception and attitude of Nurses towards the practice of Cardio-Pulmonary Resuscitation (CPR) in University of Port Harcourt, Rivers State.

Objective of the Study

This study achieved the following objectives:

1. To determine the perception of nurses on Cardio-Pulmonary Resuscitation
2. To ascertain nurses' attitude towards Cardio-Pulmonary Resuscitation practice.

Research Questions

The study provided answers to the following research question

1. What is the perception of nurses towards Cardio-Pulmonary resuscitation?
2. What is the attitude of nurses towards Cardio-Pulmonary Resuscitation?

METHODOLOGY

The study adopted the cross-sectional survey design. The target population for this study comprised of 150 nurses across male surgical ward (16), female surgical ward (15), male medical ward 1 & 2 (30), female medical ward 1 & 2 (28), Accident and Emergency Unit (33) and Intensive Care Unit (28). The convenient non-probability sampling technique was used to select a sample size of 109. The number of respondents from each ward was determined using percentage (72% of the total number of nurses in the ward) for equal representation in the study. For male surgical - 12, female surgical ward - 11, male medical ward - 22, accident and emergency - 24, female medical ward 1 & 2 - 20, intensive care unit – 20.

The instrument used for this study is a self-administered questionnaire developed by the researcher. The questionnaire consists of two parts, section A and section B. Section A was designed to elicit personal information from respondent and section B contained twenty (20) items that focused on the perception and attitude of nurses towards the practice of Cardio-Pulmonary Resuscitation. The data obtained were analyzed using a descriptive statistical mean such as frequency, percentage and statistical mean.

RESULTS

The results of the study are presented below:

Table 1: Perception of Nurses towards cardio- pulmonary resuscitation

SN	Items	S.A	A	D	S.D	Total Score	Mean
1	I know what cardio-pulmonary resuscitation is all about	50 (200)	44 (132)	9 (18)		350	2.5
2	I have had training on cardio- pulmonary resuscitation.	25 (100)	51 (153)	16 (32)	10 (10)	295	2.9
3	I am aware of the new resuscitation technique C-A-B (Circulation, Airway and Breathing).	42 (168)	39 (117)	20 (40)	2 (2)	327	3.2
4	Cardio- pulmonary resuscitation is perceived to be an invasive procedure hence should be carried out by the doctors.	6 (24)	16 (48)	26 (52)	55 (55)	179	1.7
5	Cardio- pulmonary resuscitation ' involves skills and technique that are special.	34 (136)	61 (183)	8 (16)		335	3.3
6	My facility has the policy of a Do not Resuscitate (DNR) order, hence cardiopulmonary resuscitation is usually delayed.	2 (8)	14 (42)	26 (52)	61 (61)	163	1.6
7	Successful performance of cardio- pulmonary resuscitation depends on continuous professional training.	59 (236)	36 (108)	2 (4)	6 (6)	354	3.4
8	The working environment interferes with the effective performance of cardiopulmonary resuscitation.	27 (108)	46 (138)	22 (44)	8 (8)	298	2.9
9	Cardio- pulmonary resuscitation involves essential materials and equipment which are not always available in the ward.	18 (72)	38 (114)	41 (82)	6 (6)	274	2.7
Grand mean							2.69

Table 1 showed the perception of Nurses towards cardio- pulmonary resuscitation. The result showed that, the grand mean of 2.69 is greater than the criterion mean of 2.50 indicating a positive perception. Thus, the respondents had positive perception towards cardio-pulmonary resuscitation.

Table 2: Attitude of Nurses towards cardio- pulmonary resuscitation

SN	Items	S.A	A	D	S.D	Total	Mean Score
1	I have experienced and performed cardio-pulmonary resuscitation.	18 (72)	69 (207)	6 (12)	10 (10)	301	2.5
2	I always hesitate to perform cardiopulmonary resuscitation because I do not have sufficient knowledge on the technique involved.	12 (48)	18 (54)	57 (114)	16 (16)	232	2.3
3	My familiarity with the patient influenced my attitude to doing cardio- pulmonary resuscitation.	00	8 (24)	63 (126)	32 (32)	182	1.8
4	There are cardiopulmonary resuscitation devices and instruments in my ward or unit.	2 (8)	67 (201)	20 (40)	14 (14)	263	2.6
5	Continuing course on cardio- pulmonary resuscitation and up-to-date knowledge on the technique gives me a positive attitude towards the practice of cardio- pulmonary resuscitation.	67 (268)	30 (90)	6 (12)	00	370	3.6
6	I have a positive attitude towards the practice of cardiopulmonary resuscitation.	62 (248)	39 (117)	2 (4)	00	369	3.6
Grand mean							2.73

Table 2 showed the attitude of Nurses towards cardio- pulmonary resuscitation. The result showed that, the grand mean of 2.73 is greater than the criterion mean of 2.50 indicating a positive attitude. Thus, the respondents had positive attitude towards cardio-pulmonary resuscitation.

Table 3: Distribution of respondents by age

Age in years	No. of respondents	Percentage (%)
20-35	68	66.02
35 and above	55	53.40
Total	103	100

Table 3 shows that 68 (66.02%) respondents were within the ages of 20 -35; while 55 (53.40%) respondents were within the ages of 35 years and above.

Table 4: Distribution of respondents by religion

Religion	No. of respondents	Percentage (%)
Christianity	101	98.1
Others	2	1.9
Total	103	100

Table 4 shows that 101 (98.1%) of respondents are Christian; while 2 (1.9%) belong to other religions.

DISCUSSION OF FINDINGS

This result shows that majority of nurses in University of Port Harcourt Teaching Hospital had positive perception towards cardio-pulmonary resuscitation. More so, the result revealed that 55(53.40%) respondents strongly disagreed that cardiopulmonary resuscitation is perceived to be an invasive procedure hence should be carried out by the doctors, 61 (59.22%) respondents agreed that cardio-pulmonary resuscitation involves skills and techniques that are special and 59 (57.28%) respondents strongly agreed that successful performance of cardio-pulmonary resuscitation depends on continuous professional training. Hence, nurses in University of Port Harcourt Teaching Hospital have positive opinion and level of knowledge about the practice and techniques of Cardio-Pulmonary Resuscitation and therefore sees it as a necessity in Basic Life Support that requires continual professional training course. Furthermore, the result reveals that respondents 61(59.22%) respondents strongly disagreed that their facility has the policy of a Do Not Resuscitate (DNR) order, hence cardio- pulmonary resuscitation is usually delayed, 46 (44.66%) respondents agreed that their working environment interferes with the effective performance of cardio- pulmonary resuscitation, 41 (39.81%) respondents disagreed that cardio-pulmonary resuscitation involves essential materials and equipments which are not always available in the wards. This is in line with the study carried out by Mustlu, Mustafa, Orhan, Faith, Serdar and Hasan (2017) on “Cardio-Pulmonary Resuscitation Knowledge among Nurses in Istanbul, Turkey. The findings revealed that nurses had good knowledge about the importance of cardio-pulmonary resuscitation in clinical practice and stood average in knowing its indication and effectiveness (mean score of 64.62± 17.84 out of 100 points).

It was concluded that although the perception towards cardio-pulmonary resuscitation is good among nurses, skills of cardio-pulmonary resuscitation have to be improved by current training programs at regular intervals. However, it is in contrast with the study conducted by Dorothy, Alberta and Affiong (2017), on the “Knowledge and Practice of Cardio-Pulmonary Resuscitation among Public Health Nurse Practitioners in Calabar Metropolis of Cross Rivers State, Nigeria. The major findings of the study were that majority of the respondents had never heard about cardio-pulmonary resuscitation (57%), there was also a marked low knowledge of when exactly cardio-pulmonary resuscitation should be carried out on patient (84.2%) and majority of them lacked knowledge of the critical lifesaving steps (43.8%). The result in items 18 and 19 reveals that out of 103 respondents 67 (65.05%) respondents agreed that there are cardio- pulmonary resuscitation devices or instruments in my ward or unit and 67 (65.05%) respondents strongly agreed that continuous course on cardio- pulmonary resuscitation and up- to-date knowledge on the technique gives them a positive attitude towards the practice of cardio- pulmonary resuscitation This is in line with the research conducted by Makinen, Niemi-murala, Kaila and Carten (2015) on “Nurses Attitude towards Resuscitation and National Resuscitation Guidelines, Finland.

Findings however revealed that education increases positive attitude towards cardio-pulmonary resuscitation (95%). Never the less, 27% of nurses hesitated to perform defibrillation because of fear of injuring patient and 64% was because of anxiety. More so, in another study conducted by Anastasia, Theodoras and Olga (2017) on the “Factors that influence Nursing Staff Attitude towards initiating cardio-pulmonary resuscitation and the use of automatic defibrillator when outside of a hospital, the findings revealed that lack of systematic training was a main factor affecting nurses’ attitude in initiating cardio-pulmonary resuscitation. In contrast, personal experience of nurses has a positive outcome since it enhanced their capacity of initiating cardio-pulmonary resuscitation.

CONCLUSION

The study revealed continual training course on cardio-pulmonary resuscitation is necessary to keep nurses updated on the life-saving technique - Cardio-pulmonary Resuscitation. More so, positive perception of nurses on the what, when, why and how of cardio-pulmonary resuscitation will equivocally enhance positive attitude towards its practice.

RECOMMENDATIONS

In view of the findings obtained from the study, the following recommendations were hereby made:

1. Every nurse should embark on a continual training course on cardio-pulmonary resuscitation so as to update their knowledge and skill; and to do this at minimum interval of three (3) years.
2. A renewable license be provided for participants of the continual training course and this should be taken into cognizance in the employment of nurses in the clinical setting.
3. Each facility should develop a clearly defined hierarchy and order in the initiation of cardio-pulmonary resuscitation.

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