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Shendi University

Faculty of Graduate Studies and Scientific Research

Title:-

**Nurse's awareness regarding criteria of rapid response team
for deteriorated patient - Omdurman military hospital –
Sudan 2018**

**Thesis submitted for fulfillment of M.Sc Degree in Critical
and Emergency Care Nursing**

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Nurse's awareness regarding criteria of rapid response
team for deteriorated patient - Omdurman military
hospital in 2018

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Examination committee:	Name	Position	Signature
1-Dr:
2-Dr:

Dedication

This work is dedicated

To

My father soul

And to all these candles that fired to lighten my Way

Mother

Beloved husband

Daughter

My brothers & sisters

Acknowledgement

First, I would like to thank the greatest Allah for affording me the time and the ability needed to stand in front of difficulty.

My thanks extended to Faculty of Applied Medical Sciences, University of Shendi for giving me this opportunity to continue my postgraduate education.

Highest and deep appreciation & thanks for my main supervisor:

Dr: Higazi Mohammed Ahmed for his helpful guidance, advice, and continuous encouragement, support and supervision throughout this effort.

Special acknowledgement extended to my colleagues in Karary University, nursing college, those who supported me throughout the writing of this research.

I express my thanks to Dr. Selah Hadad for his helping in data analysis.

And finally, I would be remiss if I did not mention the members of my family, for their understanding of me for "forever not having enough time for them.

ABSTRACT

Rapid response teams (RRTs), also known as a medical emergency teams or medical response teams, were developed to promote rapid assessment and treatment of patients whose clinical condition was deteriorating but who were not yet in shock or cardiac arrest. The descriptive study was conducted in Omdurman military hospital, Khartoum state, Sudan aimed at assessing Nurse's awareness regarding criteria of rapid response team for deteriorated patient in (2018). The data was collected by questionnaire. The sample size consisted of 52 nurses the age 21 and above. Data was analyzed using Statistical Package for Social Sciences (SPSS) programs. Results of the study revealed that most of participants (71.2%) BSC level of education, (84.6%) of participant said protocol of rapid response teams are available. (61.5) of them used situation(S) background(B) assessment(A) recommendation(R) tool to call rapid response teams (RRT) .study was concluded that targeted group needs more experience about rapid response team to improve their quality of nursing care. Researcher in this a study recommended that educational program should be designed and introduced to increase participant's knowledge about criteria and protocols of rapid response teams.

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List of Abbreviations

	ACLS	Advanced cardiac life support
	C1	Room in emergency
	C2	Room in emergency
	ICU	Intensive care units
	MET	Medical emergency team
	RRT	Rapid response team
	RRs	Rapid response system
	SBAR	Situation –Background –Assessment -Recommendation
	SCA	Sudden cardiac arrest

Chapter one

Introduction

Justification

Objectives

Introduction

The Rapid Response System (RRS) concept has matured substantially since its inception in the early 1990s when critical care physicians, primarily in Australia, Pittsburgh, PA, and the UK started asking some crucial questions regarding patients who deteriorated and often arrested on general hospital wards prior to their admission to the ICU. Specifically, they asked exactly what is happening to general hospital ward patients in the minutes and hours prior to their cardio-respiratory arrests and whether we can do something to intervene and halt these deteriorations before the patient arrests or Nearly arrests.(1) Rapid response teams (RRTs), also known as a medical emergency teams or medical response teams, were developed to promote rapid assessment and treatment of patients whose clinical condition was deteriorating but who were not yet in shock or cardiac arrest. In 2004, the Institute for Healthcare Improvement included RRTs in its influential 100,000 Lives Campaign, and by the next year over 1,400 American hospitals had implemented programs In 2008, RRTs became part of hospital accreditation by The Joint Commission By making it easy to escalate care earlier, RRTs are thought to reduce mortality and codes occurring outside of intensive care units (ICUs) (2) , healthcare cultures have evolved to recognize the nurses critical thinking skills and to promote independent functioning of nurses. Nurses, like all other healthcare professionals, focus on patient safety and deliver the right care at the right time ,the first signs of clinical deterioration in hospitalized patients to prevent serious adverse events (such as cardiac arrests) from occurring. Without nurses, METs / RRTs probably would not be successful in achieving this goal. To make frequent patient observations, they are often The first to recognize subtle changes that indicate that a patient is improving or getting worse.

If the nurse has the power to act on this information at the right time, immediate help for a patient headed for trouble can be available. RRSs promote intervention by needed personnel not only by giving nurses the power to call whenever they are worried about the patient, but also providing expert critical care service when the call for assistance is made. To support (or sometimes validate) the nurses' activation of the MET/RRT, specific criteria have been identified that are either single-parameter (one value outside a predetermined range) or multi-parameter scoring systems developed to work within hospital specific environments. Most sets of criteria for RRS activation include any time a nurse is concerned about a patient's condition. "Nurse worried" as an activation criterion for the MET/RRT is both acceptable and desirable because it supports the ability of nurses to recognize impending instability even if other criteria are not met, and because it promotes patient safety.⁽¹⁾ Studies have shown, and clinicians are keenly aware, that subtle signs of deterioration can precede life-threatening events, and early identification and treatment of unstable patients may rescue them from progressing to serious instability or death. Many healthcare systems are now implementing Rapid Response Systems (RRSs) designed to provide for an immediate match between the needs of rapidly deteriorating patients with the knowledge, skills and resources to meet those needs. Whereas the detection of instability and placing the call for help represents the afferent (crisis detection) arm of the RRS,⁽¹⁾ studies in the United States, and other countries show that serious adverse events are relatively common and often iatrogenic and that they are associated with disability and death. Research also shows that such events occur after failure to rescue. Collectively, these studies present robust evidence that improvements are needed to overcome failure to deliver optimal care rapidly in hospital wards and that most serious adverse events due to such

failure are preceded by clinically observable warning signs.(3) It has been estimated that 15% to 20% of all hospitalized patients develop serious adverse events, including cardiopulmonary arrest (also called sudden cardiac arrest, or SCA). These adverse events are rarely unforeseen. In fact, they are usually preceded by at least one sign or symptom of physiological deterioration that occurs in the hours before the critical change in status. Many facilities have implemented a rapid response team (RRT) program to facilitate early detection and rapid treatment of unstable patients outside of the critical care unit The early intervention of RRTs has been shown to decrease the incidence of cardiac arrest and improve mortality rates.(4)

Rationale

Serious adverse events are common in hospitalized patients, and these events are usually preceded by warning signs that manifest as deteriorations of vital signs or a change in clinical condition up to 24 hours prior to an in-hospital death, cardiac arrest, or unplanned ICU admission. Early recognition of clinical deterioration, followed by prompt and effective action, can avert or minimize the probability of a poor clinical outcome for at-risk patients, and may mean that a lower level of intervention is required to stabilize a patient. The need for early identification of at-risk patients has resulted in the introduction of a Rapid Response System (RRS) in Australia and internationally. This approach involves activation of a specialized Rapid Response Team (RRT) to review patients within less than five minutes that fulfill pre-defined changes in vital signs above or below set criteria.

OBJECTIVES

GENERAL OBJECTIVE:-

To study nurses awareness regarding deterioration patient criteria OF rapid response team

SPECIFIC OBJECTIVES:-

1-To assess nurses level of knowledge about how to assess patient before call the Rapid Response Team.

2-To evaluate nurse knowledge about Criteria for Calling the Rapid Response Team.

3- To assess nurse's knowledge about mechanism for call Rapid Response Team.

4-To assess nurse's knowledge about the role of the Rapid Response Team.

Chapter two
Literature Review

2-Literature Review

Rapid response team

AUK term of art for a team of health professionals who provide emergency care at home and prevent unnecessary hospital admission, especially of older people.(5)

Segen's Medical Dictionary. © 2012 Farlex, Inc. All rights reserved

Rapid response team

A group of specially trained health care professionals who respond to emergencies or developing emergencies in health care institutions. A typical team consists of a critical care nurse, respiratory therapist, intensivist, hospitalist, and an emergency physician or physician assistant.(6)

Medical Dictionary, © 2009 Farlex and Partners

Definition of Terms For the purpose of Indicator Rapid response system (RRS) – refers to a system that provides emergency assistance to patients whose condition is deteriorating. It includes an afferent limb (the calling criteria and mechanism of activation) and an efferent limb (which may include a medical emergency team [MET], critical care outreach, or intensive xcare liaison nurses), that should be linked with governance and quality improvement arms³. The system will include the clinical team or Individual providing emergency assistance, and may include on-site and off-site personnel.

Rapid response system (RRS) calls – refers to the presence of either a RRS call record form in the patient's health record or documented evidence by the RRS leader who coordinated the RRS consultation. Documentation should at least address:-

- Patient identification details;
- Time and date of RRS call;
- Primary reason for RRS call;
- Observations at time of RRS team arrival;
- Interventions implemented by RRS team;
- RRS team details; and
- RRS call outcomes, including implementation of limitations of medical treatment.(7)

**INTENSIVE CARE INDICATORS CLINICAL INDICATOR USERS'
MANUAL
VERSION 4 FOR USE IN 2011 PAGE (14)**

Understanding the rapid response team

2004, the Institute for Health-care Improvement (IHI) encouraged hospitals to implement rapid response teams (RRTs). The use of RRTs was identified as an evidence-based, lifesaving strategy that would improve patient outcomes by preventing avoidable patient deaths outside the critical care areas.

Research has shown that a patient's condition can start to deteriorate about 6.5 hours before an unexpected critical event or actual cardiac arrest and that 70% of these events are preventable. Early recognition of warning signs of clinical deterioration and interventions by an RRT helps provide better outcomes for general medical-surgical patients and may also decrease the number of unnecessary transfers to a critical care unit. Part of the team An RRT can be called to a patient's bedside 24 hours a day, 7 days a week. Most RRTs consist of a structured group and usually include a critical care nurse, a respiratory therapist and, possibly, a doctor who collaborate with the patient's nurse and intervene appropriately. The RRT may be called upon at any time that a staff member becomes

concerned about a patient's condition. Criteria for activating the RRT vary but most facilities have established evidence-based criteria to facilitate early identification of physiological deterioration in adults and children. These guidelines help novice staff members determine if an RRT should be called for a bedside consultation. Criteria for RRTs

Criteria may include:-

- Difficulty breathing, increased use of accessory muscles to breathe
- Changes in respiratory rate—respiratory rate sustained at less than 10 beats/minute or greater than 30 beats/minute
- pulse oximetry readings less than 85% for more than 5 minutes not responding to oxygen therapy or escalating oxygen requirements
- New onset chest pain or chest pain not relieved with nitroglycerin
- Hypotension with systolic less than 90 mm Hg, not responding to I.V. fluid orders
- Hypertension with systolic greater than 200 mm Hg or diastolic greater than 120 mm Hg
- Bradycardia, sustained, less than 50 beats per minute
- Tachycardia, sustained, greater than 130 beats per minute
- Mottling or cyanosis of an extremity
- Change in level of consciousness
- Seizure
- Stroke symptoms—changes in vision, loss of speech, weakness of an extremity
- Sepsis or systemic inflammatory response syndrome (SIRS)

- bleeding into the airway
 - Uncontrolled bleeding from the surgical site or lower GI tract(8).
- . Critical care nursing made incredibly easy! 3rd ed. 2012-page(16-17)

Communicating effectively using SBAR

Because communication failures in health care can lead to errors and serious adverse events, health care professionals must pay close attention to communicating effectively.

Consistent use of a structured communication tool, such as SBAR, improves the effectiveness of communications, provides a safer environment for patients, and promotes collegial relationships among health care team members.

SBAR is a communication tool for ensuring that the right information gets to the right person in the most clear, concise, and effective way. Each component of the tool seeks to answer a question:

Situation: - What is going on at the present time?

This first step calls for a concise description of the current situation.

Background: - What has happened in the past and is relevant to this situation?

In this step, you need to put the situation into context for the listener. Don't assume that the listener remembers the patient by giving only superficial information, such as a room number or any other brief information. However, limit the background information to only what is pertinent to the situation at hand.

Assessment-: What do you think is happening?

This step summarizes your analysis of the situation after considering the data gathered in the background step. In the assessment step, your communication includes your concise assessment of the situation in a couple of sentences at most; the interventions you have started and the results so far; and your estimate of how serious the situation is and how quickly the receiver needs to act.

Recommendation: - What do you think needs to be done?

Before ending the conversation, both parties must have an opportunity to clarify information and ask questions. To ensure that all information has been sent and received correctly, both parties should repeat the decisions made to resolve the problem. If they disagree about how to resolve the situation, they should use the SBAR tool again to make sure that all information about the situation has been sent and received. Always remember to stay calm and focused during the conversation to ensure that the information is received and sent accurately. Lastly, both parties should agree on the follow-up plan(9)

Lippincott Williams & Wilkins. Critical care nursing made incredibly easy! 3rd ed. 2012—page (14)

Considerations When Implementing a Rapid Response Team (RRT) System

Gaining leadership support. The support of senior leadership is essential for the success of the proposed RRT system. Advantages of an RRT system include:-

- Marketing advantage in a competitive healthcare environment
- Greater medico legal protection and decreased liability
- Decreased patient and family complaints

- Avoidance of unnecessary critical care unit admissions
- Decreased number of in-hospital arrests

Determining team structure:- The structure of the RRT varies according to facility size, level of patient acuity, availability of resources, and the frequency of adverse events and cardiac arrest. Examples of different models include:-

- Critical care nurse and respiratory therapist
 - Critical care nurse, respiratory therapist, and nurse practitioner or physician assistant
 - Critical care nurse, respiratory therapist, and intensives or hospitalist
- Establishing communication tools and protocols.

Communication tools provide the RRT leader with a template for gathering pertinent information, facilitating communication with the physician, and facilitating triage decision making.

Training for responders:- Members of the RRT must receive the proper training. Areas to be reviewed include:-

- The benefits of early rescue
- Teamwork with non-critical care staff
- Protocols available to guide RRT therapy
- Triage skills and advanced cardiac life support (ACLS) certification
- What is expected of RRT members when responding to a call
- The use of communication tools
- The chain of command for nurse-led teams

Training for staff. Staff members must be made aware that the RRT exists, educated about the role of the RRT, and taught how to activate the RRT system. Methods of raising staff awareness include the following:

- Formal teaching and in-service training
- Newsletters
- Posters with the RRT calling criteria
- Pocket cards and badge holders with calling criteria
- Brochures with RRT concepts and calling criteria
- Inclusion of RRT education in employee orientation sessions

Calling criteria and the mechanism for activating the RRT system .When considering the RRT calling criteria that will be used, evidence-based data should considered. The mechanism for activating the RRT system should be clear, quick, and easy so that the staff will use it and the team will respond rapidly.

Evaluation of effectiveness. A means by which to measure the success of the RRT system is imperative.

Three key measures that are used include

- Codes per 1000 discharges
- Codes outside the critical care unit
- Utilization of the RRT system(10)

Patricia Gonce Morton, Dorrie K. Fontaine ____ Essentials of critical care nursing : a holistic approach – 9th ed. 2013 page 136

What General Ward Staff Need to Know

Although the exact competencies required by individual members of ward staff in relation to managing the acutely ill patient will vary, for most they will include:-

Correct observation of patients, including vital signs • measurement and recording;

- Interpretation of observed signs;
- Recognition of the signs of deterioration;
- The use of a track-and-trigger system (e.g., early warning score or MET calling criteria);
- Appreciating clinical urgency;
- When and how to utilize simple interventions (airway opening, oxygen therapy, intravenous fluid administration, etc);
- Successful team-work;
- Organization;
- Knowing how to seek help from other staff;
- Knowing how to use a systematic approach to information delivery, e.g. SBAR; and
- End-of-life care(11)

Michael A. DeVita .Ken Hillman Rinaldo Bellomo Editors

.Textbook of Rapid Response

Systems Concept and Implementation .(Springer Science+Business Media, LLC 2011)page 384

Rapid-response teams have been introduced to intervene in the care of patients with unexpected clinical deterioration. These teams are key components of rapid-response systems, which have been put in place because of evidence of “failure to rescue” with available clinical services, leading to serious adverse events.¹ A serious adverse event may be defined as an unintended injury that is due in part to delayed or incorrect

medical management and that exposes the patient to an increased risk of death and results in measurable disability.

Rapid response systems aim to improve the safety of hospital-ward patients whose condition is deteriorating. These systems are based on identification of patients at risk, early notification of an identified set of responders, rapid intervention by the response team, and ongoing evaluation of the system's performance and hospital-wide processes of care.¹ Rapid-response systems have been implemented in many countries and across the United States. Rapid-response teams differ from traditional code teams in a number of ways. They assess a greater number of hospitalized patients at an earlier stage of clinical deterioration, with the aim of preventing serious adverse events such as cardiac arrests and unexpected deaths. Thus, rapid-response teams assess patients in whom respiratory, neurologic, or cardiac deterioration develops rather than patients who have already had a respiratory or cardiac arrest.

Whether rapid-response systems are effective is controversial. Their introduction was prompted by five before-and-after comparisons that were single-center studies.

These studies showed a reduction in the rate of cardiac arrests and a greater effect with a greater "dose" of care from the rapid-response team (i.e., a larger number of assessments per 1000 admissions).¹² However, a major multicenter, cluster-randomized, controlled trial called the Medical Early Response Intervention and Therapy (MERIT) study failed to demonstrate a benefit. Moreover, the results of meta-analyses have questioned whether there are benefits and have suggested that further research is required.

This article explores the prevalence and consequences of sudden critical illness outside the intensive care unit (ICU) and reviews the concept of a

rapid-response system and the controversies surrounding the increasing use of such systems.

Failure to Rescue In patients with sudden, critical abnormalities in vital signs, a failure to react promptly or commensurately escalate care constitutes a “failure to rescue” and may result in a serious adverse event.¹ There are many reasons for sudden critical illness and for failure to rescue, and they help to explain why serious adverse events are surprisingly frequent.

Comparison between a Traditional Code Team and a Rapid-Response Team.

Feature	Traditional Code Team	Rapid Response Team
Typical criteria for calling the team	No recordable pulse, no recordable blood pressure, absence of respiratory effort, unresponsive	Low blood pressure, rapid heart rate, respiratory distress, altered consciousness
Typical conditions that the team assess and treats	Cardiac arrest, respiratory arrest, airway obstruction	Sepsis, pulmonary edema, arrhythmias, respiratory failure
Typical team composition	Anesthesia fellow, ICU fellow, internal medicine house staff, ICU nurse	ICU fellow, ICU nurse, respiratory therapist, internal –medicine house staff
Typical call rate (no./1000 admissions)	0.5-5	20-40

Typical in-hospital mortality (%)	70-90	0-20

(12)

Daryl A. Jones, M.D., M.B., B.S., Michael A. DeVita, M.D., and Rinaldo Bellomo, M.D., M.B., B.S. – Rapid Response Teams --The New England Journal of Medicine Downloaded from nejm.org at ALBERT SCHWEITZER ZIEKENHULS on January 20, 2015. For personal use only. Copyright © 2011 Massachusetts Medical Society..

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Chapter three

Materials and methods

3-Materials and methods

Methodology

3-1: Study design:

This was descriptive cross sectional; Hospital based study, aimed at nurse's awareness regarding criteria of rabid response team for deteriorated patient at Omdurman military hospital in 2018

3-2: Study area:

This study was conducted in Khartoum state in (Omdurman city).Khartoum state it's one of the eighteen state of the Sudan although it is the smallest state by area (22.142) km².itis the most population (5,274,321) in 2008census).

Emergency department composed of 90 bed, triage, room (A- B- C) recitation, trauma and specially room.

3-3: Study population:

The targeted populations of this study was all qualified nurses working in trauma, room (A-B) , C1 and C2 in emergency department in Omdurman military Hospital.

3-4: Inclusion and exclusion criteria

Inclusion criteria:

- All qualified nurses working in trauma, room (A-B) ,C1 and C2 in emergency department in Omdurman military Hospital.

3-5: Sampling and Sample size:

Sampling:

Total coverage of all qualified nurses working in emergency department in Omdurman. (Select randomize sampling)

Sample size: (52) nurse.

3-6: Tools of data collection:

A designed structured, self administered questionnaire was used to collect the data from study subject's .the Questionnaire consists of:-

-Demographic data

-knowledge regarding RRT

3-7: Technique of data collection:

The collection of data from subjects under study was collected by filling questionnaire during four weeks, at their rest time.

3-8: Data analysis:

The collected data was analysed using statistical (SPSS) ,results were presented in frequencies and percentage table and figures.

3-9: Ethical considerations:

Letter from Shendi University- Faculty of Nursing Science was taken to Omdurman Military Hospital.

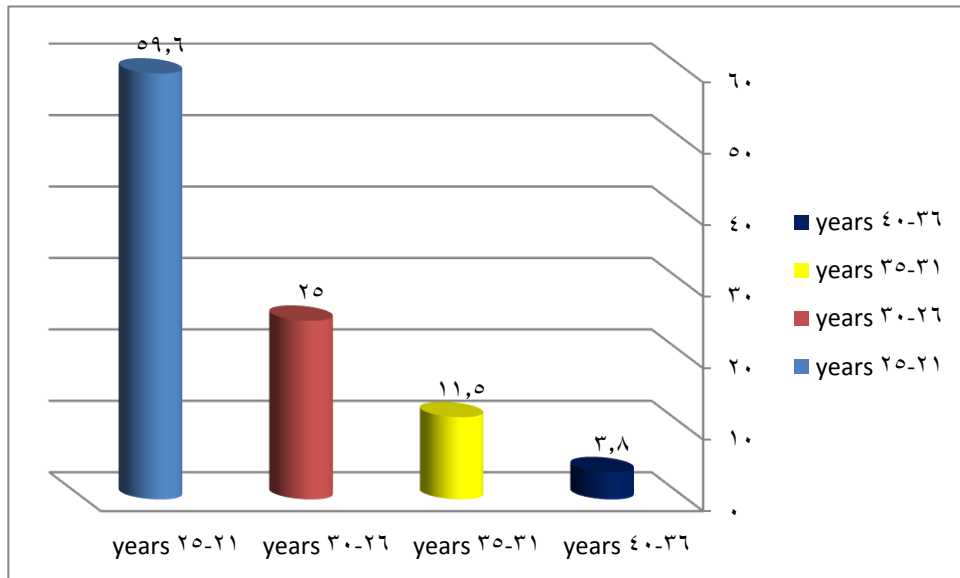
- Explanation of purpose of questionnaire to respondents before administration of data ,and were told that it is voluntary
- Verbal consent was taken.

Chapter four

Results

4-Results

(NO =52)



4-1-figure (1) distribution of participants according to their age

(NO =52)

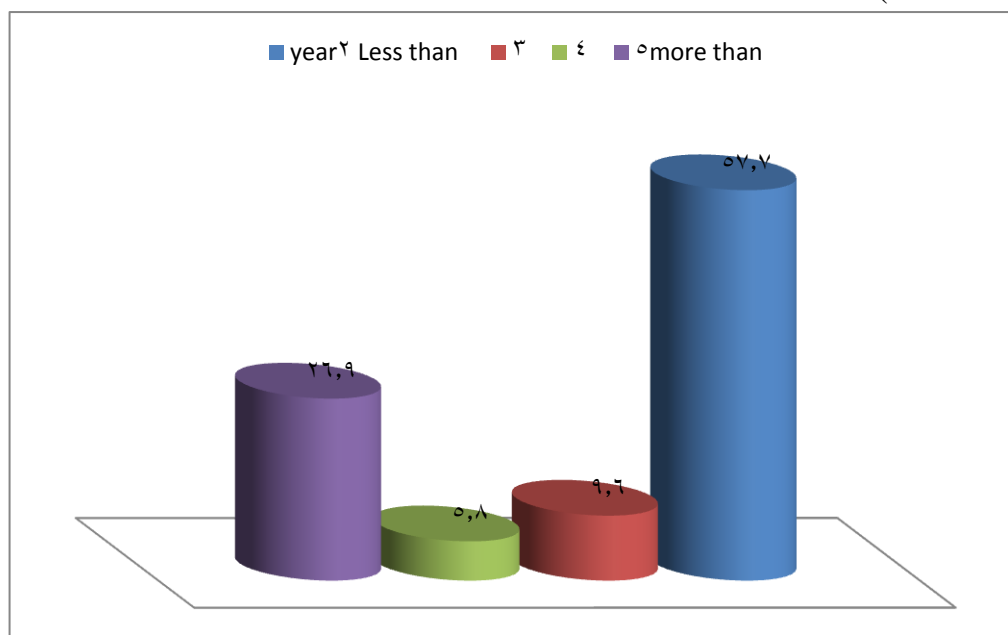


Figure (2) distribution of participants according to years of clinical experience

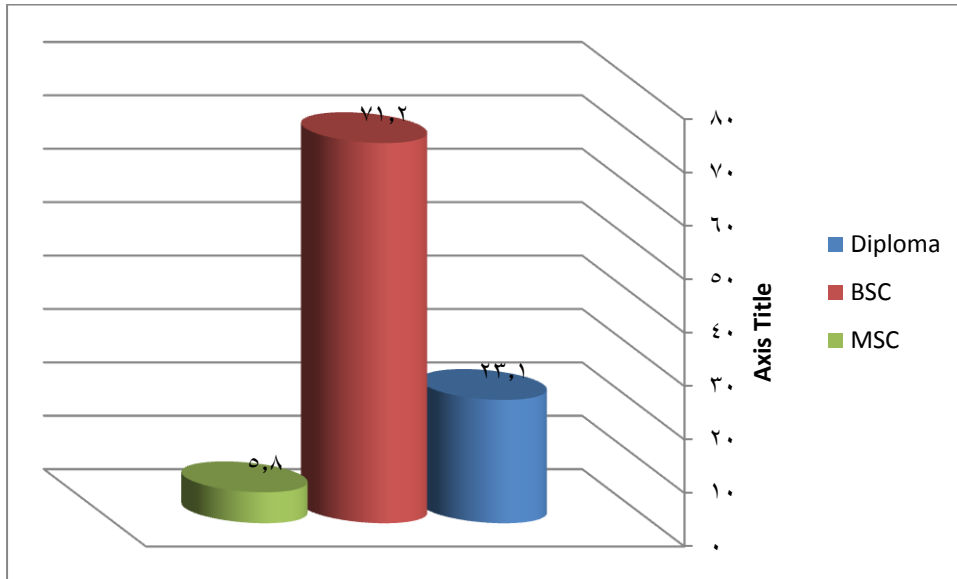


Figure (3) distribution of participants according to their level of education

(NO=52)

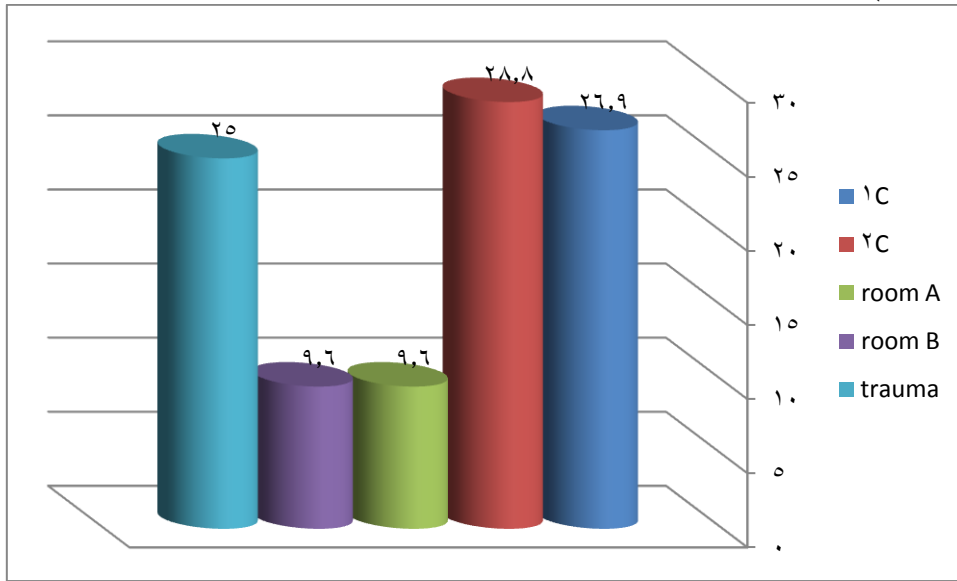


Figure (4) distribution of participants according to their place of work

Table (1) distribution of participants according to Protocol of rapid response teams

	Frequency	Percent
Available	44	84.6
UN available	6	11.5
Not known	2	3.8
Total	52	100%

This table showed most than half (84.6) % of participants are available to protocol of rapid response teams,

Table (2) distribution of participants according to Code of rapid response team and known for all staff

	Frequency	Percent
Known	35	67.3
Not known	17	32.7
Total	52	100%

This table showed more than two half (67.3) % of participants are known of code of rapid response team.

Table (3) distribution of study group according to challenges in establishing through call and environment of rapid response team

	Frequency	Percent
Solved	29	55.8
Unsolved	21	40.5
No challenges	2	3.8
Total	52	100%

This table showed more than half (55.8) % of study group are solved problem.

Table (4) distribution of study group according to Use SBAR tool to call Rapid response team

	Frequency	Percent
Used	32	61.5
No used	15	28.8
Not known	5	9.6
Total	52	100%

This table showed more than half (61.5) % of study group are use SBAR tool to call rapid response team.

Table (5) distribution of study group according to training about Rapid response team

	Frequency	Percent
Never	32	61.5
Once	13	25.0
Twice	2	3.8
three or more	5	9.6
Total	52	100%

This table showed more than half (61.5) % of study group are no training about rapid response teams.

Table (6) distribution of participants according to Understand the role of nurse during rapid response call

	Frequency	Percent
Understand	46	88.5
no Understand	6	11.5
Total	52	100%

This table showed major (88.5) % of study group are understand the role of nurse during rapid response teams.

Table (7) distribution of participants according to Criteria for Calling an RRT

	Frequency	Percent
poor knowledge	22	42.3
sufficient knowledge	13	25.0
good knowledge	17	32.7
Total	52	100%

This table showed less than half (42.3) % of study group are poor knowledge regarding Criteria for Calling an RRT.

Table (8) distribution of study group according to level of education regarding rapid response team

Variable	Disagree	Neutral	Agree
The Rapid Response Team arrived in a time manner	10	13	29
	19.2%	25%	55.8%
The Rapid Response Team was knowledgeable and implementing care needs	9	5	38
	17.3%	9.6%	73.1%
Ward nurses support decision to call a rapid response	11	9	32
	21.2%	17.3%	61.5%
Senior nurses support Junior nurse to decision to call a rapid response	12	3	37
	23.1%	5.8%	71.2%
The patient outcome was improved	13	13	26
	25%	25%	50%
Effective communication was carried out between bed side nurse and Rapid Response Team in regards to patients condition and medical history.(SBAR) TOOL	9	10	33
	17.3%	19.2%	63.5%
The call was appropriate	5	11	36
	9.6%	21.2%	69.2%

Disagree		Neutral		Agree	
frequency	percentage	frequency	Percentage	Frequency	Percentage
10	19.2%	13	25%	29	55.8%
9	17.3%	5	9.6%	38	73.1%
11	21.2%	9	17.3%	32	61.5%
12	23.1%	3	5.8%	37	71.2%
13	25%	13	25%	26	50%
9	17.3%	10	19.2%	33	63.5%
5	9.6%	11	21.2%	36	69.2%

Level of education * use SBAR tool to call rapid response team Cross tabulation					
		Value	A symp. Std. Error(a)	Approx. T(b)	p.value
Interval by Interval	Pearson's R	-.209	.122	-1.511	.137(c)
Ordinal by Ordinal	Spearman Correlation	-.255	.132	-1.867	.068(c)
N of Valid Cases		52			

Level of education * use SBAR tool to call rapid response team Cross tabulation					
		Value	A symp. Std. Error(a)	Approx. T(b)	p.value
Interval by Interval	Pearson's R	-.209	.122	-1.511	.137(c)
Ordinal by Ordinal	Spearman Correlation	-.255	.132	-1.867	.068(c)
N of Valid Cases		52			

Level of education * Criteria for Calling an RRT cross tabulation					
		Value	Asymp. Std. Error(a)	Approx. T(b)	p.value
Interval by Interval	Pearson's R	-.038	.126	-.269	.789(c)
Ordinal by Ordinal	Spearman Correlation	-.028	.130	-.199	.843(c)
N of Valid Cases		52			

Training about rapid response team * Criteria for Calling an RRT cross tabulation					
		Value	Asymp. Std. Error(a)	Approx. T(b)	p. value
Interval by Interval	Pearson's R	.357	.114	2.702	.009(c)
Ordinal by Ordinal	Spearman Correlation	.224	.142	1.625	.110(c)
N of Valid Cases		52			

years of clinical experience * Word nurses support decision to call a rapid response cross tabulation

		Value	Asymp. Std. Error(a)	Approx. T(b)	p.value
Interval by Interval	Pearson's R	-.014	.137	-.102	.919(c)
Ordinal by Ordinal	Spearman Correlation	-.037	.138	-.264	.793(c)
N of Valid Cases		52			

years of clinical experience * Senior nurses support Junior nurse to decision to call a rapid response cross tabulation

		Value	Asymp. Std. Error(a)	Approx. T(b)	p.value
Interval by Interval	Pearson's R	-.082	.142	-.583	.563(c)
Ordinal by Ordinal	Spearman Correlation	-.112	.140	-.797	.429(c)
N of Valid Cases		52			

Chapter five:-

Discussion

Conclusion

Recommendations

DISCUSSION

This descriptive cross-sectional hospital based study was conducted in Omdurman Military teaching Hospital with main aim to assess Nurse's awareness regarding criteria of rapid response team for deteriorated patient.

Regarding criteria for call RRT the study showed that less than half (42.3) % have poor knowledge about it, these finding indicated because (61.5) %. Of nurses never exposed to any training about RRT, these finding addresses the importance of training in enhance the quality of care through evidence based.

In addition to that, the study reveal that, most of them (88.5) %had good knowledge regarding understanding the role of nurse during rapid response call, that mean nurses provide good work with the RRT which lead to good out come and reflect on team work and responsibility .

More over , regarding participant knowledge about use SBAR tool to call rapid response team , more than half of them (61.5) %were used it , in spite of they were never trained about RRT , also half of the Participant (50) % commented that patient outcome improve was adequate.

Conclusion

This study reveals that, participants had a poor knowledge regarding criteria of rapid response team, it was (42.3) Result reveals that, more than half of participants have BSC in nursing (71.2), and no one have a PHD degree in nursing. Result interpret the good knowledge of participants regarding to questions except their poor knowledge about criteria for calling a rapid response team the percentage is(42.3)and(61.5) haven't training about rapid response team.

From this study we can concluded that targeted group needs more experience about rapid response team to improve their quality of nursing care.

Recommendations

According to study findings researcher recommended the following:-

-Education program should be designed and introduced to increase participant's knowledge about criteria and protocols of rapid response teams.

- All challenges and problems that facing implementation of rapid response team in study area should discussed and resolved.

- Apply training program for senior nurses about how to decidability to call rapid response team.

-continuous evaluation for all staff to use SBA R tool

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