# FACTORS INHIBITING STAFF NURSES FROM ACTIVATION OF RAPID RESPONSE TEAM IN A PRIVATE TERTIARY CARE HOSPITAL ISLAMABAD PAKISTAN

Abdul Rahim Khan<sup>1</sup>, Sajjad Ahmad <sup>2</sup>, Muhammad Ali<sup>3</sup>, Khizer Hayat<sup>4</sup>, Muhammad Sabir<sup>5</sup>, Adil Shehzad Lughmani<sup>6</sup>, Khalida Parveen<sup>7</sup>

### **ABSTRACT**

### **OBJECTIVES**

This study was aimed to explore the contributing factors which inhibit the role of nurses in the activation of a rapid response team system in a tertiary care hospital.

### **METHODOLOGY**

A qualitative exploratory study was carried out using focused group discussion in a private tertiary care hospital. The nurse's viewpoint was determined regarding the increased frequency of Cardiopulmonary Arrests in 2018 as compared to 2017 in the hospital setting. Data were thematically analyzed.

### **RESULTS**

Nurses described rapid response teams as "the team comprising of different healthcare professionals equipped with lifesaving resources to patients who need immediate medical care to prevent health deteriorations or the need of intensive care. There is a "Red Flags" criteria established in the hospital setting to activate the RRT system resulting in the quick arrival of a skilled ICU team with needed resources.

### **CONCLUSION**

Many factors hinder the activation of the Rapid Response Team such as Knowledge about the Rapid Response team, role and responsibility confusion about RRT activation, peer pressure, lack of management support.

KEYWORDS: Challenges, Nurses, Rapid response team, Cardiopulmonary Arrest

### How to cite this article:

Khan AR, Ahmad S, Ali M, Hayat K, Sabir M, Lughmani AS, Parveen K. Factors Inhibiting Staff Nurses from Activition of Rapid Response Team in a Private Tertiary Care Hospital Islamabad, Pakistan. J Farkhanda Inst Nur Pub Health. 2022;2(1): 9-14

#### Correspondence

<sup>1</sup> Abdul Rahim Khan, Academic Director, The Quaid-e-Azam Institute of Nursing & HS, Swabi

⊠: arahim111@hotmail.com

**\(\mathbb{\text{\tin}\text{\tett{\text{\te}\tint{\text{\text{\text{\texi}\text{\text{\text{\texi}\text{\text{\text{\text{\text{\texi}\text{\text{\text{\texi}\text{\texitt{\texi}\text{\texi}\text{\text{\texi}\text{\texi}\text{\text{\texi}\text{\texitit}}\text{\text{\texit{\texi}\text{\texit{\text{\t** 

- <sup>2</sup> Sajjad Ahmad, Assistant Professor (Nursing) Institute of Health Sciences School of Nursing, Mardan
- <sup>3</sup> Critical Care Nurse, Pakistan Institute of Medical Sciences (PIMS), Islamabad
- <sup>4</sup>Associate Clinical Nurse Manager, Shifa International Hostpital, Islamabad
- <sup>5</sup> Managing Director, Quaid-e-Azam College of Nursing, Swabi
- <sup>6</sup> Nursing Lecturer, Wah Nursing College Wah Cantt
- <sup>7</sup> Critical Care Nurse, NICU, Pakistan Institute of Medical Sciences (PIMS), Islamabad

### INTRODUCTION

The rapid response team is an emerging concept in the health care system; it began in the 19<sup>th</sup> century in Australia to improve patient outcomes before the patient reaches the Intensive care unit. This initiative has acquired the highest degree of recognition globally in less than two decades and the health care organizations put the concept into clinical practice to enhance patient safety for certain developing medical emergencies to minimize unplanned ICU transfer, and cardiac arrest and unexpected deaths within the hospitals. This concept was incorporated in 2008 into the

J Farkhanda Inst Nurs Pub Health January-June 2022

Joint Commission"s National Patient Safety Goals, and nowadays many hospitals are running rapid response team systems.<sup>2</sup> RRT is worthless if not activated timely; for the same reason teaching and training of the nurses have been considered a positive factor to improve the identification of the worsened condition of the patient, as well as promoting the patient safety culture within the organization<sup>3</sup>. There are several factors have been affecting the nurses" enthusiasm to initiate the RRT system; including incapability, lack of support by medical and nursing professionals, nurses" less awareness of the situation and the nurses" workloads. 4,5,6 Study conducted in Pakistan revealed that only 30% of nurses initiated the rapid response systems and rest of the 70% initiation was led by ward doctors. There is a need to find out the reasons behind this minimal involvement because activation of the rapid response team is an entirely the nurse-driven process.<sup>7,8,9</sup> Moreover, it was reported to the Chairman Rapid Response Team (RRT) Committee of the Shifa International Hospital (SIH), that the data of the last few months revealed an increase in the frequency of Code Blue, and a decrease in the frequency of RRT which is against the outcome of RRT because the goal of RRT is to reduce the numbers of code blue and here the results were reciprocal. Nurses are the key performer in the initiation and successful lifesaving processes in the hospital settings. Without knowing the factors which directly or indirectly restrict nurses, from acting in the process of RRT, then there is no use in just running the concept of RRT in any of the hospitals. If one can come up to know and address the factors and challenges that restrict nurses from initiation of RRT, the safety and satisfaction of the patients can be enhanced. Although studies addressed the achievements and impact of RRT on patient care, there is a dire need to address the challenges and contributing factors that don't let the nurses initiate the RRT system, which is a lifesaving process. If we come up to know and address the factors and challenges that restrict nurses from initiation of RRT, staff and patients" satisfaction can be enhanced and maintained. Therefore, the purpose of the study is to explore the challenges and contributing factors that restrict staff nurses from acting in a rapid response team in Shifa International Hospital (SIH) Islamabad, Pakistan. Results of this study will be shared with higher nursing and corporate management to run RRT from the core values to provide cost-effective quality medical and nursing care to patients.

#### METHODOLOGY

A qualitative exploratory study design was chosen to determine the contributing factors which inhibit nurses to initiate the process of RRT because this method allows study participants to share their fullest expression regarding a subject.8 Data from participants were collected via focused group discussion. Data was collected after the initial approval of the institutional review board as well as from the hospital administration was granted before the collection of the data. Informed consent of the participants was sought before data collection. All the participants were selected from SIH, Islamabad Pakistan because this hospital has had an established RRT system since 2015. Interested participants were gathered in a conference room for a focused group discussion to explore contributing factors and challenges faced by ward nurses, which prevent them to initiate RRT. Eleven nurses were selected using purposive sampling who have a valid Pakistan Nursing Council and working in adult medical and surgical inpatient wards for at least 12 months. Nurses working in critical care areas, Outpatient departments, Operation rooms and Emergency rooms were excluded from the study. To ensure confidentiality, data was collected in a separate room, and the recorded data will never be shared with anyone except the concerned. Data were analyzed by using the process of thematic analysis initially open codes were applied to transcripts and then data was described under main headings. Results were supplemented with quotes from participants' interviews. Credibility in the current study was ensured by following the standard aspect of data collection and analysis. Transferability in this study can be ensured by expressing these findings in a similar context and further explanation as per the study.

### RESULTS

### Knowledge about the Rapid Response Team

Upon inquiry that the hospital has a functional RRT system, all the participants stated that there is well established rapid response team (RRT) system exists in the hospital setting. The justification was given by the participants that every day three to four announcements in the internal emergency help systems are made in the hospital setting, that services of RRT are required for a particular patient. Upon asking when one should go to call for help, the answer was; that deterioration in blood pressure, heart rate, respiratory rate, changes

January-June 2022 J Farkhanda Inst Nurs Pub Health 1



in the mental status of a patient or the gut feelings that indicate something is not well are the main reasons to activate the RRT system. But when the exact values of these signs and symptoms were enquired about, 9 out of 11 participants were unable to specify the ranges of the components of red flag criteria. Instead of exact values, one participant stated that

"When a patient is unable to maintain Blood Pressure i.e., hypotension which is not responding to intravenous fluids therapy; one should go to activate the RRT system" [participant 1]

In the response to when one should go to activate the RRT system, one of the participants stated that "Desaturation which is not improving with supplemental oxygen therapy; actively bleeding and changes in the consciousness of the patient ....... "nurses activate RRT system when a patient needs intensive care." [ participant 5]

Moreover, one participant said that oncology consultants had given them permission that "nurses activate RRT system and do shift patient to ICU if RRT recommend transferring" [participant 2]

Participants also said that when patients" attendants become furious despite knowing the medical condition of the patient; to control the situation and satisfy the attendants of the patient that healthcare workers are caring about the patient and family, one has to go for facilitation. Here one of the nurses said that

"a patient with Do Not Resuscitate (DNR) and medical code status developed fits for which he has no previous history, meanwhile the nurse announced RRT" [participant 8]

### Inhibiting factors of initiation of RRT

Nurses stated that the fear of unknown consequences inhibits them from acting on the RRT system.

one nurse stated that

"If something went wrong then all the burden comes on the shoulders of the nurses. After that, we have to go through many stages of written investigations, so we avoid activation of RRT system" [participant 3]

Participants were in view that the thought of clashing with doctors and medical team members let not them go to activate the RRT system. As if the nurse activates the RRT system, it might not be acceptable to medical team members.

# Initiating the RRT system; Responsibility of the duty doctor or the nurse

Two out of eleven nurses stated that it was the responsibility of the doctors to activate the RRT system and four were in the view that nurses spent more time with patients and provided them care so they better understand when a patient needs RRT activation. One nurse stated that

"Nursing management has not informed nurses whether they should announce RRT or not." [participant 2]

"If any of both nurses or the doctors are confident on the assessment of the patient and the need of emergency help, must activate the RRT process without any further delay". [participant 6]

"Nurse or the doctors both equally are responsible to announce RRT activation" [participant 4].

One of the experienced nurses expressed his feelings as

"Nurses must have a valid reason that why RRT system was activated; for that reason, nurses must have strong assessment and knowledge regarding patient disease process." [participant 3]

Another participant has a different view

"It depends on the doctor to activate the RRT system or not, nurses have to inform the doctors regarding patient condition" [paricipant7].

# Pressure from nursing, physicians or any doctors not to initiate RRT

Regarding pressure from nursing, physicians or any doctors not to initiate RRT Six nurses stated that

"House officer doctor argues that nurses must inform them about the patient's condition and they will announce the RRT after consulting with seniors' doctors". [participant 1]

Moreover, nurses said

"We provide care to patients, and aware of the baseline symptoms of the patients, we should announce RRT system but it is not in the hands of nurses to activate RRT system for the last two years .....if it is in the hands of a nurse patient's safety may be enhanced". [participant4]

Another nurse stated that "one off our PG doctor announced the RRT when I as a nurse thought it could have waited as the patient was vitally stable ...... but he did not care my sayings, and announced RRT".

Nurses also that

"Negative points are highlighted well around the organization which de-motivates nurses leading to least interest in taking any kind of the responsibilities".[participant11]

11 J Farkhanda Inst Nurs Pub Health January-June 2022

# Challenges to address to make nurses involved in the initiation of the RRT system

### One participant stated that

"It is a general concept that what seniors' nurses do, juniors have to follow; I think this concept should be changed now, to make the system better".

### One participant was of the view that

"If our nursing management/hospital management become able to motivate nurses by supporting them that we are with nurses; will ultimately lead to interest development to learn skills, do assessment effectively"

### Another nurse stated that

"As a nurse, I am not authorized to ask the doctor why you did not announce the RRT as per nursing assessment? This only should be done by senior management, but often our management doesn't do that".

### Support from management toward nurses

Regarding Support from management for nurses" participants stated that

"Doctors have the edge of having the support of their consultant but nurses have not; doctors back and support each other but nursing management doesn't[participant10]".

One of the participants stated that "Nurses need the motivation to keep RRT running; our management must question the doctors why it was delayed in a particular scenario"

## Possible causes for increased frequency of code blues

Nurses told that

"Our junior doctors are unable to manage such patients, and nurses have to take permission for activation of RRT system, all this leads a patient to code blue situation". [participant6]

One nurse was of the point of view that

"When the concept of RRT started in this hospital, every person including hospital management was interested in it; which decreased over time; I think it shouldn't be".[participant 8]

Participants also said that one of the main causes of the increased number of cardiac arrests is because the priority of the wards healthcare providers is to stabilize the patient through different physicians" consultations first resulting in the delay in activation of the RRT.

### DISCUSSION

This study explored the factors that restrict staff nurses from activation of rapid response participants identified some aspects while providing care such as knowledge of nurses regarding need and activation of RRT. A systematic review found that knowledge of staff regarding the need for RRT affects the activation of RRT. 10,11,12 In this study participants also reported that We can say that there is a restriction to nurses from doctors not to announce the RRT system till they assess the patient. There is role confusion among nurses and the doctors, initiating the RRT system, the responsibility of the duty doctor or the nurse; it must be clear by the medical and the nursing management at a great forum to end the hesitancy of the nurses. Studies show that there are organizational factors that hinder timely activation of RRTand Organizations need to study these delays, especially withinside the place of calls to masking physicians previous to RRT activations. 13,14,15 All the nurses were aware that doctors and nurses are equally responsible for the activation of the RRT system but the culture of the hospital promotes doctors" participation in all RRT activations. Pressure from nursing, physicians or any doctors not to initiate RRT must be dealt with sophisticated policies empowering nurses, so that nurses may start working enthusiastically in the provision of emergency care to the patients Make nurses involved in the initiation of the RRT system for which they must be offered different refresher courses at the hospital setting. Organizations need to look at RRT activation delays specifically withinside the place of calls to mask health care providers previous to RRT activations. Differences among strong points corporations spotlight the want for schooling throughout specialities on the popularity of the acutely deteriorating patient. 16,17,18 Healthcare providers also need to be properly trained regarding the assessment of patients with medical emergencies. Furthermore, Support from management toward nurses must be seen in actions rather than verbalization. Further research is needed to study further about making the RRT system more compatible with patients by overcoming the challenges faced by nurses to fully utilize the services of the first line of defence to deal with patients to prevent deterioration of symptoms and improve patient outcomes.

### LIMITATIONS

Generalizations of results may not be possible due to the qualitative and descriptive nature of the study. The study focused on factors that inhibit from activation of the process of the RRT system, but the knowledge and the skills have not been assessed.



### **CONCLUSION**

Based on this study's findings it may be concluded that many factors hinder the activation of the Rapid Response Team such as Knowledge about the Rapid Response team, role and responsibility confusion about RRT activation, peer pressure, and lack of management support. These organizational factors need to be addressed by management by providing proper training and support to staff to avoid delays in future.

### **CONFLICT OF INTEREST:** None

### **FUNDING SOURCES: None**

#### REFERENCES

- 1. Hillman KM, Bristow PJ, Chey T, et al. Antecedents to hospital deaths. Intern Med J. 2001;31(6):343-348.
- 2. Shapiro SE, Donaldson NE, Scott MB. Rapid response teams seen through the eyes of the nurse. Am J Nurs. 2010;110(6):28-36.
- 3. Galhotra S, Scholle CC, Dew MA, Mininni NC, Clermont G, DeVita MA. Medical emergency teams: a strategy for improving patient care and nursing work environments. J Adv Nurs. 2016;55(2):180-187.
- 4. Currey J, Allen J, Jones D. Critical care clinician perceptions of factors leading to medical emergency team review. Australian critical care. 2018 Mar 1;31(2):87-92.
- Donaldson N, Shapiro S, Scott M, Foley M, Spetz J. Leading successful rapid response teams: A multisite implementation evaluation. J Nurs Adm. 2009;39(4):176-181.
- 6. Salamonson Y, van Heere B, Everett B, Davidson P. Voices from the floor: nurses" perceptions of the medical emergency team. Nurs Crit Care. 2006;22(3):138-43.
- 7. Douw G, Schoonhoven L, Holwerda T, et al. Nurses' worry or concern and early recognition of deteriorating patients on general wards in acute care hospitals: a systematic review. Crit Care. 2015;19(1):230. Published 2015 May 20.
- 8. Shehzad S. Emergency Response Services in Peshawar. Journal of Gandhara Medical and Dental Science. 2015 Oct 20;1(2):1-2.
- 9. Chua WL, See MTA, Legio-Quigley H, Jones D, Tee A, Liaw SY. Factors

- influencing the activation of the rapid response system for clinically deteriorating patients by frontline ward clinicians: a systematic review. Int J Qual Health Care. 2018;30(6):492
- Jackson S, Penprase B, Grobbel C. Factors Influencing Registered Nurses' Decision to Activate an Adult Rapid Response Team in a Community Hospital. Dimens Crit Care Nurs. 2016;35(2):99-107.
- 11. Kolluru, Singh, Kanwar, Szpunar, & Saravolatz. Demographic and clinical characteristics of responders and nonresponders to rapid response team interventions. J. Clin. Outcomes Manag., 2010;17(9), (407-412).
- 12. Jäderling G, Calzavacca P, Bell M, Martling CR, Jones D, Bellomo R, Konrad D. The deteriorating ward patient: a Swedish–Australian comparison. Intensive Care Med. 2011;37(6):1000-5.
- 13. Beitler JR, Link N, Bails DB, Hurdle K, Chong DH. Reduction in hospital-wide mortality after implementation of a rapid response team: a long-term cohort study. Crit Care. 2015;15(6):R269.
- 14. Sandroni C, D'Arrigo S, Antonelli M. Rapid response systems: are they really effective?. Crit Care. 2015;19(1):104. Published 2015 Mar 16.
- 15. Solomon RS, Corwin GS, Barclay DC, Quddusi SF, Dannenberg MD. Effectiveness of rapid response teams on rates of in-hospital cardiopulmonary arrest and mortality: A systematic review and meta-analysis. Journal of hospital medicine. 2016 Jun;11(6):438-45.
- 16. Ko BS, Lim TH, Oh J, Lee Y, Yun I, Yang MS, Ahn C, Kang H. The effectiveness of a focused rapid response team on reducing the incidence of cardiac arrest in the general ward. Medicine. 2020 Mar;99(10).
- 17. Lee BY, Hong SB. Rapid response systems in Korea. Acute and Critical Care. 2019 May;34(2):108.
- 18. Rocha HA, Alcântara AC, Rocha SG, Toscano CM. Effectiveness of rapid response teams in reducing intrahospital cardiac arrests and deaths: a systematic review and meta-analysis. Revista Brasileira de terapia intensiva. 2018 Jul;30:366-75.
- 19. Younas A, Pedersen M, Tayaben JL. Review of mixed-methods research in nursing. Nursing research. 2019 Nov 1;68(6):464-72.

13 J Farkhanda Inst Nurs Pub Health January-June 2022

### **CONTRIBUTORS**

- 1. Abdul Rahim Khan Data Acquisition; Critical Revision
- 2. Sajjad Ahmad Concept Design; Data Acquisition; Data Analysis/Interpretation; Drafting Manuscript; Critical Revision; Final Approval
- 3. Muhammad Ali Drafting Manuscript
- 4. Khizer Hayat Critical Revision
- 5. Muhammad Sabir Drafting Manuscript
- 6. Adil Shehzad Lughmani Data Analysis / Interpretation
- 7. Khalida Parveen Data Aquisition