iSRRS 2019

The 15th International Conference on Rapid Response Systems and Medical Emergency Teams

18-19 April | Suntec Singapore Exhibition Convention & Centre

Organised by:

In association with:

Managed by:

Abstract

SG-iSRRS1058

Single-tier rapid response system: 5 years' experience

[1]TAKAYUKI KAI,[1]TETSUHIRO TAKEI,[1]KENJI DOI,[1]MICHIKO FUJISAWA,[1]AKIRA KAWAUCHI

[1]Department of emergency and critical care medicine, Yokohama city Minato red cross hospital, Japan

Objectives:

Because the target patients for rapid response system (RRS) and code blue system (CBS) differ, 2-tier responding system is common in hospitals worldwide. To date, few reports have described single-tier RRS. We combined RRS and CBS since 2012, in which single medical emergency team (MET) responded to both inhospital cardiac arrest (IHCA) and clinical deterioration. Our purpose is to evaluate the reasons for activating the system and outcome of patients.

Methods:

This is a single center retrospective study. We collected the information from the medical chart of the patients to whom the system was activated from 2013 to 2017. Criteria for calling MET were set as simply when cardiac arrest would possibly occur or had unexpectedly occurred, and no vital sign criteria were set. For non-IHCA patients, the reasons for activating the system were categorized into A (airway), B (breathing), C (circulation), D (dysfunction of central nervous system, including seizure and syncope), or others. In IHCA patients, cerebral performance category (CPC) scores was collected as an outcome, and the score of 1 or 2 on day 30 was defined as favorable neurological outcome.

Results:

The system was activated for 355 patients during the 5-year period. Of these, 139 patients were IHCA. Of IHCA patients, the rate of return of spontaneous circulation was 51.1%, and the rate of 30-day survival and favorable neurological outcome were 26.6% and 23.0%, respectively. The reasons for activating the system in the remaining 216 non-IHCA patients were categorized into A in 15 (6.9%), B in 66 (30.6%), C in 27 (12.5%), D in 107 (49.5%), and others in 1 (0.5%). The inhospital survival rate was highest in the category A (80.0%), and lowest in C (40.7%).

Conclusions:

We report outcome data of single-tier RRS. Further studies are needed to verify the effectiveness of this systems.