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Nurses' perceptions of accessing a Medical Emergency Team: A qualitative study

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ABSTRACT

Background: Medical Emergency Teams (METs) have been developed and implemented with the aim of improving recognition of and response to deteriorating patients. Yet, METs are often not activated or used effectively by nursing staff. The reasons for this are not fully understood.
Objectives: The aim of this study was to explore nurses' experiences and perceptions of using and activating a MET, in order to understand the facilitators and barriers to nurse's use of the MET.
Design, setting and participants: An interpretive qualitative approach was adopted to explore nurses' experiences and perceptions of using and activating the MET. This study was set in a large public teaching hospital in Southeast Queensland, Australia. Fifteen registered ward nurses who had cared for patients who had deteriorated on the ward, and as a result of this deterioration were admitted to the Intensive Care Unit (ICU) as an unplanned admission, were interviewed about their experiences and perceptions of using a MET.
Methods: In-depth, semi-structured interviews were conducted with ward nurses who had cared for a patient who had deteriorated. Interviews were recorded and transcribed verbatim. The interviews were analysed thematically.
Findings: Four themes relating to the participants' experiences and perceptions of using a MET emerged from the data. These themes were: (1) sensing clinical deterioration; (2) resisting and hesitating; (3) pushing the button; and (4) support and leadership.
Conclusion: This work identifies why nurses do not activate METs appropriately. This delay in MET activation potentially exposes the deteriorating patient to suboptimal care and increases the risk of adverse events.

Background

The past decade has seen increasing focus on recognising and responding to the deteriorating hospitalised patient.[1–3] Much of this interest has been prompted by findings that have demonstrated patient deterioration is often not recognised or responded to in a timely manner.[4–6] Failure to recognise and respond to patient deterioration and to escalate care has led to an increased risk of adverse events in hospitalised patients that may have been avoided had appropriate care been instituted earlier. Patients who deteriorate in hospital exhibit premonitory signs of physical decline many hours before this clinical deterioration.[7–9] Failure to escalate care for deteriorating patients can have devastating consequences; it may lead to increased length of hospital stay,[9] decreased quality of life,[10] or death[11] as well as a significant increase in health-care costs.[12–14]

In response to this recognised threat to safe, high-quality care, the Medical Emergency Team (MET) has been implemented. METs have been implemented in Australia, America and Europe. Currently, there are a number of different MET models in clinical practice.[8] For example; METs can be either physician or nurse led.

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METs have been developed as an early intervention strategy for patients who deteriorate suddenly. The aims of the METs are to avert admission to critical care units, facilitate discharge from critical care units and share critical care skills throughout the hospital.[8] The potential for a MET to improve patient outcomes is compelling, but researchers have struggled to demonstrate consistent improvements in patient outcomes.[15]

A recurrent research finding is METs are under-utilised by health-care practitioners, particularly nurses, who are responsible for activating 80% of METs.[16–18] The under-utilisation of METs suggests that opportunities for early intervention and escalation of care for deteriorating ward patients are missed and this may jeopardise patient safety, lead to adverse events and prevent effective utilisation of scarce critical care resources.

Study aims

The aim of this study was to explore nurse's experiences and perceptions of accessing a MET in an Australian hospital. We also aimed to understand what facilitated nurse's use of a MET and what nurses identified as the barriers to using a MET.

Methods

An interpretive qualitative approach was adopted to explore nurses' experiences and perceptions of using a MET. Qualitative research is inductive, rather than testing pre-determined hypotheses[19,20] allowing for an in-depth understanding of the experiences and meanings that individuals attach to a phenomenon.[20]

Setting

The setting for this study was a large public teaching hospital in Southeast Queensland, Australia. The hospital was purposefully selected because it has an organisational culture that supported the aims and objectives of the MET and also had a well established MET. In this research setting a single parameter system that incorporated MET calling criteria was used.[8] Clinicians using the single parameter system undertook periodic observations of selected vital signs and compared these vital signs to a set of criteria with a predefined threshold, and if any of the criteria for activation were met then a response algorithm was activated. These calling criteria were displayed throughout the hospital and displayed on cards worn on lanyards. The response to clinical deterioration, was determined by the activation of the MET in order to escalate care for patients experiencing, or at risk of, clinical deterioration. The research setting also used the traditional method of accessing immediate help and support—a separate cardiac arrest team—in the event of a cardiorespiratory arrest.

Sample

A consecutive sample of consenting registered ward nurses who had cared for medical patients, within the 12 h prior to the patient's unplanned admission to ICU were invited to participate in this study. A total of 15 registered ward nurses were recruited from five medical wards in the hospital. The timeframe of 12 h prior to unplanned admission to ICU was chosen to cover the period when patients were unstable and, therefore, most likely to have required a MET. The mean number of years of nursing experience of the participants was 5 years and 3 months, with the shortest being 6 months and the longest 22 years. Three of the participants were clinical nurses, in other words senior registered nurses; one of the participants was a new graduate nurse. Recruitment of participants continued until no new information was forthcoming from participants.

Procedures

Data collection occurred over a 6-month period between March 2011 and August 2011. The ICU admission book was checked every morning between Monday–Friday to identify patients who had experienced unplanned admissions from the medical wards. If a patient met these criteria, the appropriate Nurse Unit Manager (NUM) was contacted and, following their approval, information sheets and consent forms were left with the NUM to distribute to the nurses who had cared for the patient during the 12 h prior to the patient's unplanned admission to ICU. The registered nurses (RNs) then contacted the researcher if they were interested in being interviewed. In-depth interviews were conducted within 48 h of the patients' admission to ICU; this timeframe was used to improve participants' recall and recollection of caring for each specific deteriorating patient. Face to face interviews were held between the participants and the researcher. Interviews were conducted in a room at the hospital separate to the ward area and were arranged at a date and time convenient to the participant. All interviews were recorded using a digital recorder and transcribed by the researcher. Interviews took between 40 min and 1 h. Given that factors affecting nurses' experiences, perceptions, and practices of using METs have been explored in a limited manner, interview questions were broad, giving participants the opportunity to tell their stories and recount their experiences. The questions used in the interview guide were developed from literature and from discussions with the supervision team. An interview guide was developed to ensure that all relevant issues were discussed. Initial interview questions included:

1. Can you tell me about your experience of caring for a specific patient who was admitted to the Intensive Care Unit?
2. Can you tell me about the patient management decisions you made while caring for this patient?
3. What factors influenced your decision to activate or not activate the MET?
4. What are your experiences of using the MET?
5. What do you identify as the barriers in relation to activating the MET?

In qualitative research, the researcher is regarded as a research instrument and this necessitates the identification of personal values, assumptions, and biases at the outset of the research study. The researcher's perceptions of the care and management of the deteriorating ward patient has been shaped by personal experiences. She is an experienced ICU nurse and a lecturer who teaches students enrolled in a Masters of acute care. The supervision team provided expert guidance in relation to managing potential bias and assumptions.

Ethical considerations

Ethical permission was granted from the hospital and university ethics committees and the study satisfied the research governance requirements of participating organisations. Written informed consent was obtained from each participant prior to each interview. Particular attention was paid to ensuring that the participants' identity remained protected at all times; achieved by using pseudonyms.