Emergency Operation Centre staff views on identifying patients at imminent risk of out-of-hospital cardiac arrest during the Emergency Medical Service call for help

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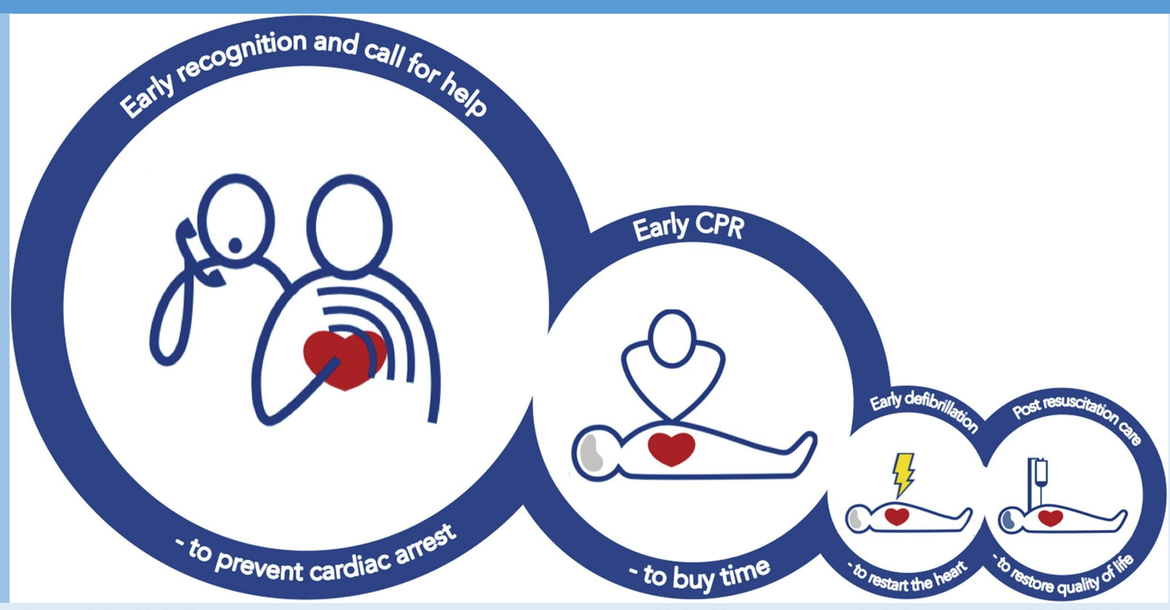
Background

The triage of emergency calls is an important element of the "Chain of Survival" in out-of-hospital cardiac arrest (OHCA) and in the recognition of deteriorating patients. Studies have indicated that call triage in Emergency Medical Services (EMS) may trigger a suboptimal response to some patients with life threatening conditions.

The aim of this study was to investigate Emergency Operation Centre (EOC) staff views on the barriers to identification, and how to improve the early identification of patients contacting EMS who are at imminent risk of cardiac arrest.



Deakin C. D. (2018). The chain of survival: Not all links are equal. *Resuscitation*, *126*, 80–82. https://doi.org/10.1016/j.resuscitation.2018.02.012

Methods

This was a qualitative study using interviews and focus groups with EOC employees. Two UK EMS participated in the research. We aimed to recruit 20 participants to the study using purposive sampling.

Reflexive thematic analysis (RTA) was used to analyse the data using a combined inductive and deductive approach. The deductive and inductive analyses were combined into the final overarching themes and sub themes. Themes were identified where there was a central organising concept.

Results

Twelve semi-structured interviews were completed between July and September 2021. Four participants also took part in a focus group in September 2021.

Three main themes were identified: The dispatch protocol and EMD audit; Identifying and responding to deteriorating patients; Education, knowledge and skills. Each of these main themes were broken into sub-themes.

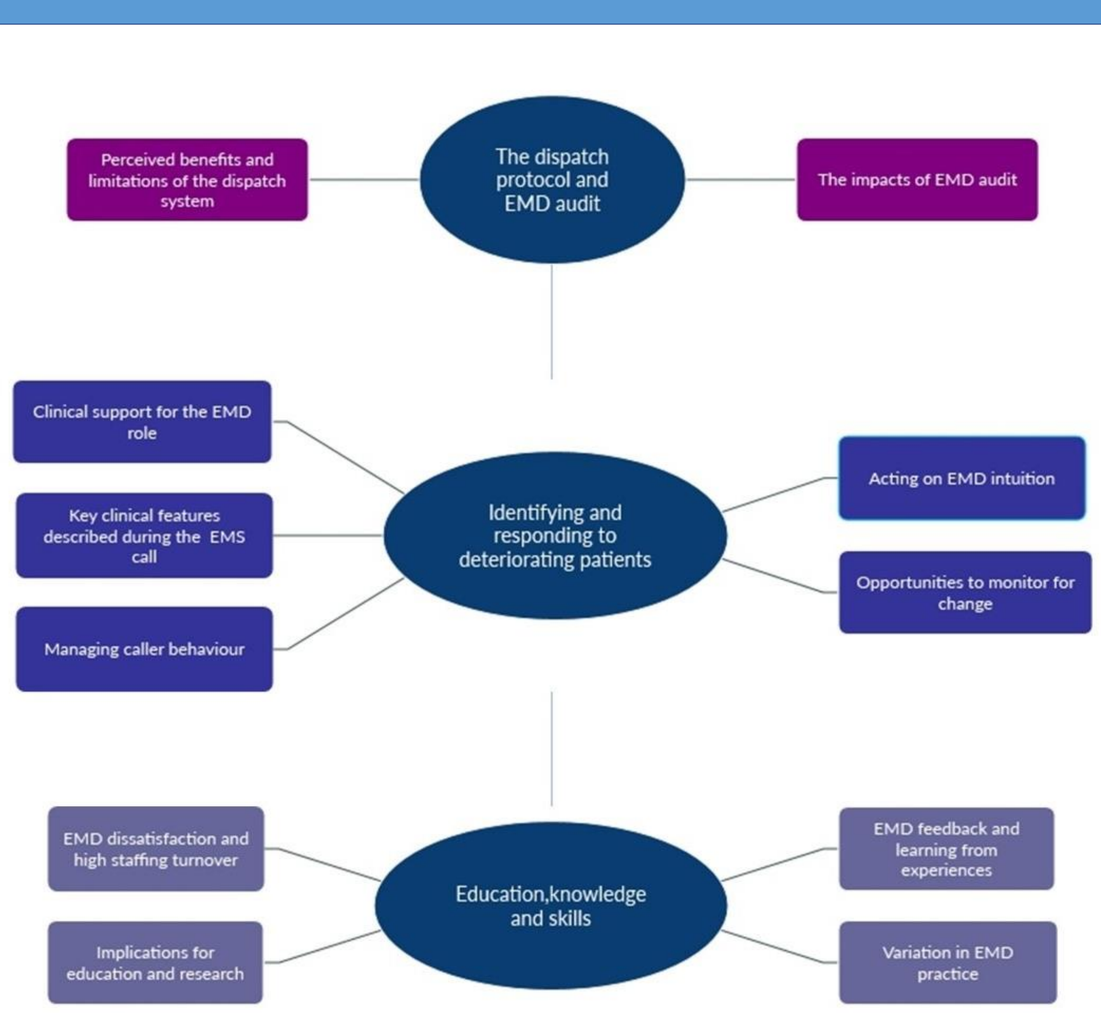
P03 "And I think it's... it's kind of the same for when you're probing for those bits of information with your unwell patient, you're... you're going to get in trouble for doing it despite the fact that that's... that's kind of the only reason you're... you're doing the job is for that one patient at that one point, but yet, you're not allowed to do what you think you need to".

P10 "…and then it goes back to what we said earlier about having to raise somebody, them not knowing what you mean and then having to get a clinician, and then you've got this, sort of… at least a 15 minute period there when potentially you might get a duplicate call, "Oh, yeah, patient's not breathing now." Okay, great, you know, that… that's, sort of, the battle that you have so…".

P05 "…if we can get something, if we can move to a position where we're more intimately understand the sort of correlation between kind of red flags or red flag phrases or, you know, what are those early warning signs that we..."

P07 "So yeah, like getting the feedback on especially ones that suddenly go to arrest, I think is really important, at least so that I've got the chance to go, actually, can I listen back to that?

Themes and Sub Themes



Conclusions

Participants identified several barriers to recognising patients at imminent risk of OHCA, including the restrictive dispatch protocol, lack of opportunity to monitor a patient, compliance auditing and inadequate clinical and communication education. Participants reported that clinician support for the EMD role was not always adequate. Callers are unaware of the structure of the EMS call which leads to initial confusion and a lack of patient outcome feedback restricts EMD learning and development.

IMARI **IM**proving the **A**mbulance recognition and **R**esponse for patients who are at **I**mminent risk of cardiac arrest

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