EMERGENCY TROLLEYS: AVAILABLE AND MAINTAINED BUT ARE THEIR LOCATIONS KNOWN?

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Abstract:
Emergency trolleys are developed and placed in strategic locations to improve the efficiency of the medical teams' response to emergencies. We conducted a survey to assess the team's knowledge of the presence and location of these trolleys in the Ambulatory Care Hospital in Glasgow, Scotland.
The results highlighted a considerable deficiency in the knowledge of these trolleys' locations in the unit.
We anticipate this problem to be much more common than expected. We suggest that similar surveys should be conducted as part of the regular audits in all units and should involve all staff involved in such emergencies.

Key Words: Emergency trolleys, difficult intubation trolley, cardiac resuscitation trolley

Introduction:

There are a number of emergency trolleys put together for easy access of specialist equipment in case of emergencies. [1] The trolleys are developed through national guidelines and local multidisciplinary team discussions. They have named individuals and a clear schedule that ensures they are maintained. Most medical units regularly audit these practices.[2] The location of these trolleys has to be known by the teams using it. We conducted a survey to check the percentage of doctors that know about the emergency trolleys and their locations. The study was performed in the Ambulatory Care Hospital (ACH) in the Glasgow Victoria Infirmary. The doctors surveyed worked in the Aneasthetic department in the hospital.

Objectives:

The study objectives were to determine the percentage of doctors who know about the presence and the location of the emergency trolleys in the ACH. Furthermore, we aimed to determine the percentage of the different grades of doctors who know about the presence and places of the emergency trolleys.

Methods:

A paper questionnaire was developed and distributed to the ACH Anaesthetists. Their responses were collected and transferred to an electronic spreadsheet and analyzed.
The emergency trolleys in the ACH are the Difficult Intubation trolley, the Cardiac Resuscitation trolley, the Snatch Box (containing the O negative blood), the Malignant Hyperpyrexia trolley and the Major Haemorrhage trolley.

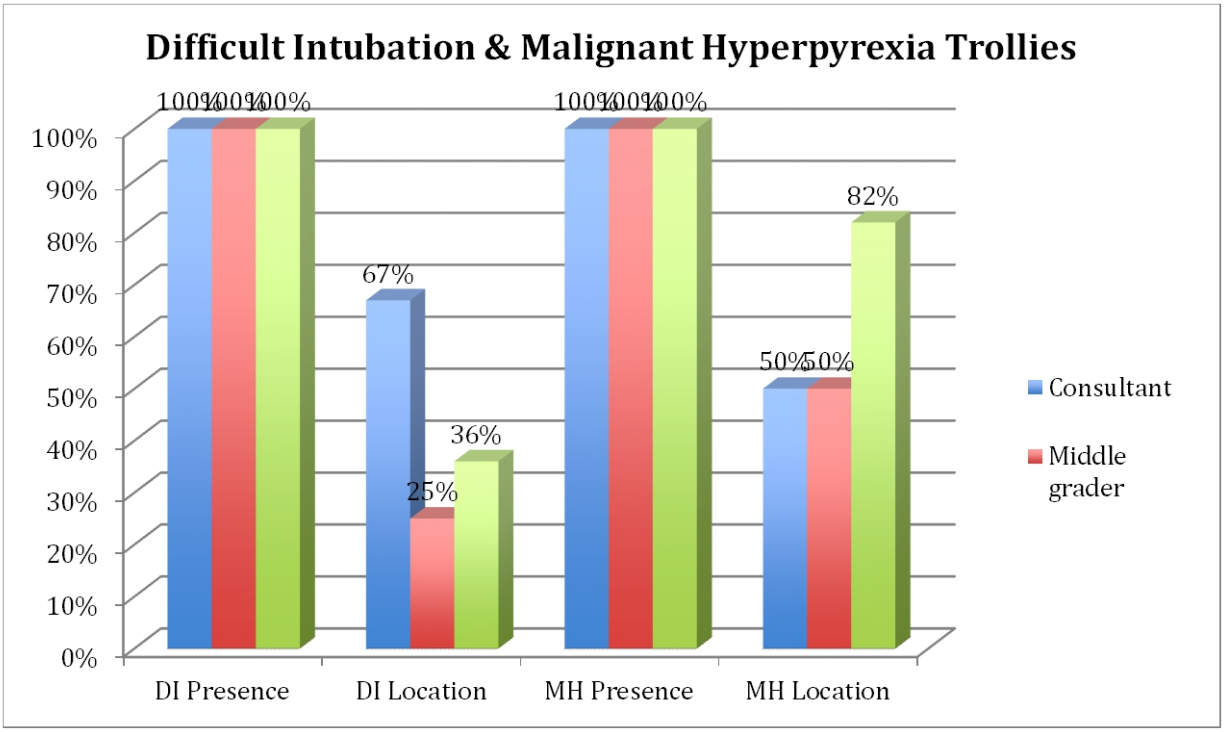
Results:

Information was collected from 31 Anaesthetists who worked in the ACH, over a period of 3 days. They included 11 junior trainees, 4 middle graders and 16 consultants.
In total, 90% of all doctors knew of the presence of all the emergency trolleys, but only 48% knew of their correct locations.

As regards the overall knowledge of the presence of the emergency trolleys all 3 groups (consultants, middle graders & junior trainees) scored similarly at 92.5%, 80% and 91% respectively. As regards the overall knowledge of the location of the trolleys, the consultants scored worst at 42.5% followed by the middle graders at 45% and the junior trainees scored 58%.
The knowledge of the presence of the different types of trolleys varied.

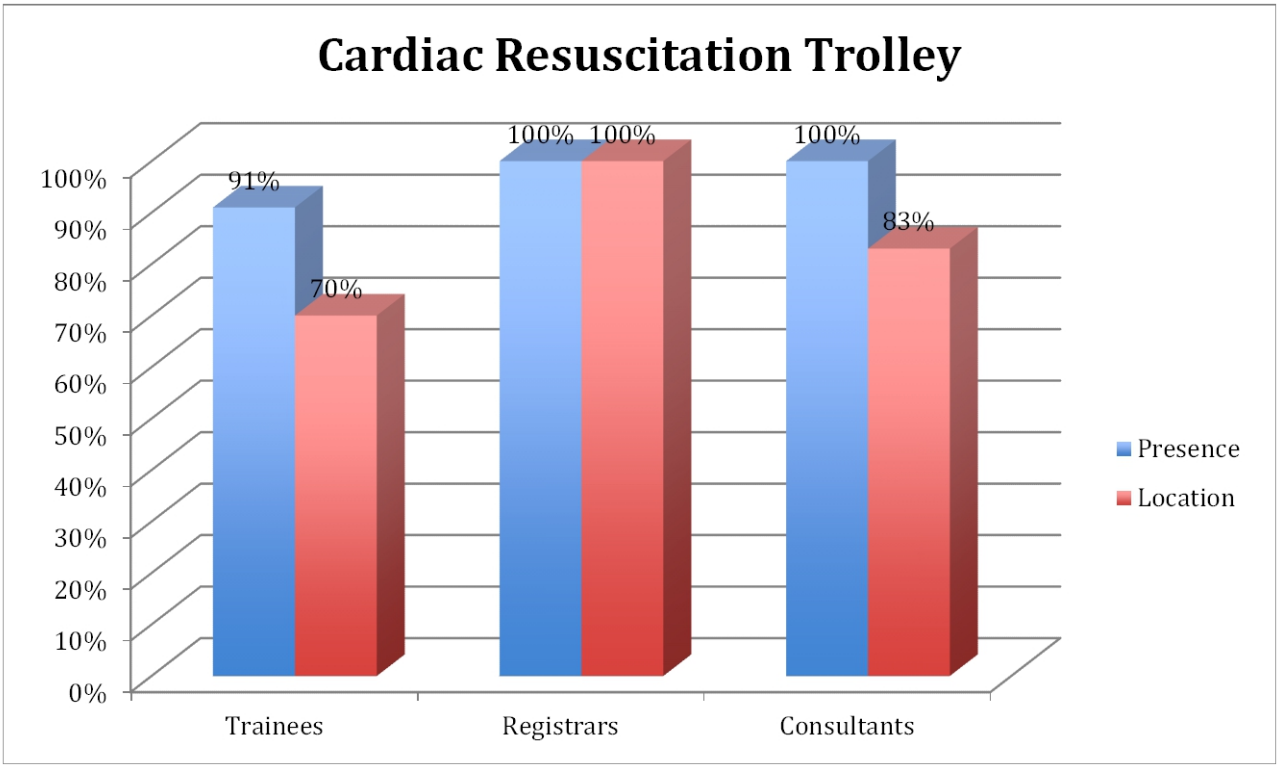
The difficult intubation (DI) and the malignant hyperpyrexia (MH) trolleys scored the highest. All doctors knew of the presence of these trolleys. The location of the trolleys was not as well known and this is highlighted in the following graph.

It is notable that more trainees (82%) were aware of the correct location of the MH trolley than

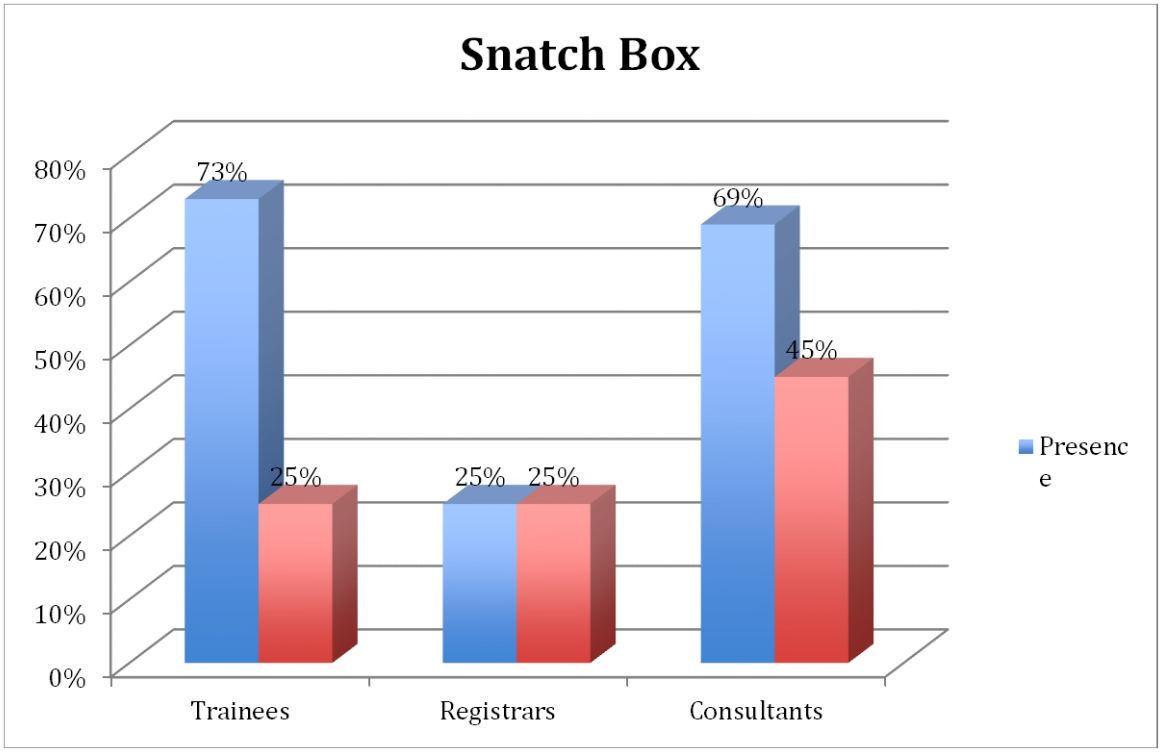


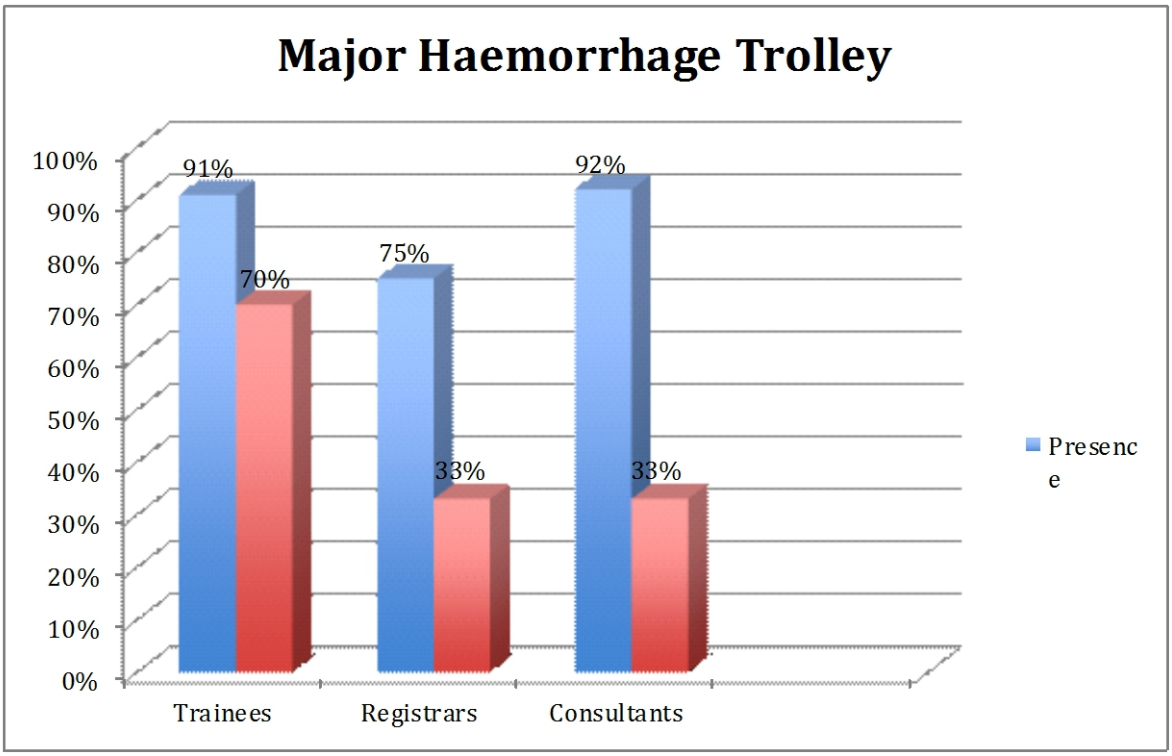
consultants (50%).

The location of the cardiac resuscitation trolley was better known, with 83% of consultants aware of its location.



As for the snatch box's location, it scored very poorly with only 45% of consultants knowing its correct location and only 69% aware of its presence.
While 92% of consultants were aware of the availability of a major haemorrhage trolley only 33% of the consultants knew of its correct location. Once again more trainees (70%) knew the location of the trolley than consultants (33%).





Discussion:

The emergency trolleys were developed to maximize the efficiency in critical situations when seconds could make a difference for the patients' survival. The trolleys are routinely checked and if used, are restocked. This process is audited regularly. No such emphasis is placed on ensuring that all staff know the location of these trolleys.

Our survey shows clearly that a significant number of both permanent staff and trainees are ignorant of the correct location of the trolleys. In some instances the doctors were not aware of its presence at all.

It is interesting that a greater number of junior trainees were aware of the location of the trolleys than the consultants (42.5% vs. 55% respectively). This may be due to the induction programme the trainees attend at the start of their placement. Their knowledge of the trolleys' location, however, remains generally poor.

We suggest various ways to increase awareness of the presence and location of the trolleys. This includes signs and arrows highlighting their location in the hospital. We also advise a greater degree of involvement of the trainees and consultants in updating and restocking the trolleys. Local study days and emergency drills should include the location of the trolleys and not just the clinical aspect of saving the patients. Lastly, we recommend that this survey should be repeated at regular intervals.

Conclusion:

Our survey identifies an important and dangerous risk factor in the management of emergencies. We advocate the expansion of the survey to include other doctors from different disciplines as well as nursing and paramedical staff who may be called upon to retrieve those trolleys in emergencies.

References:

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