PAEDIATRIC WARD NURSES VIEWS OF USING A PAEDIATRIC EARLY WARNING TOOL

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BACKGROUND

- The use of Paediatric Early Warning (PEW) tools has been advocated in the CEMACH report (2008) and the recent NPSA’s ‘patient safety first’ campaign. However, robust evidence of their validity, reliability and effect in preventing ICU and HDU admissions is still lacking (Chapman et al 2010).

- Despite this, many paediatric hospitals in the UK use some form of a PEW tool, although most are not validated (Duncan 2007, Sefton et al 2010).

- Human factors play a significant part in the successful implementation of PEW tools and response systems. Information is lacking about the views and perceptions of paediatric ward nurses about using PEW tools in practice. This information is important since ward nurses are the primary users of the tools and identifiers of clinical deterioration. Nurses must fully engage with PEW tools and must be committed to their use, for these tools and systems to be successful.
The modified Bristol Paediatric Early Warning tool is based on work originally done by Haines et al (2006). Adapted Liverpool (2008)

It is a single parameter trigger system and a tool to screen for ‘clinical deterioration’
All triggers generate a medical review within a agreed time frame
All triggers generate the same response
OBJECTIVES

• To ascertain the views of paediatric ward nurses’ of using the modified Bristol PEW tool embedded in observation charts.
• To explore if perceptions differ in general paediatric wards and specialist tertiary wards.
METHODS

• A questionnaire was developed and piloted with 10 ward nurses.
• A revised 9 question closed-ended questionnaire was distributed to the hospital’s wards (n=18) over a one month period (July 2010) by the researcher (CS).
• Collection boxes were left on each ward for anonymous submission.
RESULTS

• 121 staff responded. 64% were registered nurses, 20% charge nurses, 8% nursing students and 7% care assistants.

• 66% of staff had more than 5 years experience.

• 43% (n=51) had triggered the PEW in the last 6 months. 80% said that it helped them to get appropriate management of the child.

• 62% (n=76) felt that the PEWs did help them to pick up seriously ill children earlier.
RESULTS

“I consciously did not trigger the PEW tool for a patient because…”

• 55% said that the reason a PEW was consciously not triggered was because the child’s observations settled quickly and had a clear cause

• 37% did not trigger the system because the doctor was already on the ward

Overall impressions of the PEW tool and system were

• PEWs were not being triggered frequently enough with sick children being missed (46%), with just over half (51%) feeling that the medical staff didn’t take the PEW system seriously enough
RESULTS

74% said that they thought the PEW criteria were appropriate for their patient group.

However

- Nurses in three ward areas: HDU, transitional care unit and the cardiac ward felt that the current PEW criteria were not useful in their patient group.

- There was a shared view that the PEW parameter criteria should be set for individual patient’s in these speciality areas otherwise the patient’s would constantly trigger the PEW.
RESULTS

• 78% of nurses felt that the individual parameters for triggering the PEW system should be weighted so that a higher score would generate a more senior medical review.

• Three wards had respondents that were more likely to have triggered the PEW in the last 6 months: HDU (57%), cardiac ward (90%) and general surgical (54%).

• 33% of nurses with >5 years experience were more likely to say that the PEW was not useful in their patient group, suggesting they may have needed it less (to tell a child was deteriorating) possibly suggesting that the PEW is more useful with inexperienced and non-trained staff.
CONCLUSIONS

- Overall most nurses were happy with the PEW system. However there was a feeling that the medical team did not take PEW triggers seriously enough.
- Further research should involve investigating the medical staff views of using the current PEW tool and whether the nurse’s perceptions of the medical response is accurate.
- Perhaps with the further refinement of our tool (and the implementation of a graded response system based on different PEW trigger scores) the perceived medical response may improve.
- Further research needs to also be directed into the human factors surrounding PEW tool use and the system that supports it, because even the best tool can only identify a child at risk of deterioration, it can never guarantee appropriate action and management.