Situational Awareness in Bronchiolitis

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Background:

Bronchiolitis is one of the commonest illnesses requiring paediatric hospital admission.

How good are we as a team at predicting those likely to deteriorate in the next 24 hours?

Situational awareness is crucial in identifying the deteriorating patient, allowing prompt intervention and resource planning.

Aims:

To assess the accuracy of the multi-disciplinary teams' situational awareness in predicting the likely outcome for patients with bronchiolitis, identifying the main clinical features they used to do this.

**SITUATIONAL
AWARENESS**

Methods:

Results were then analysed using Microsoft excel.

Results:

Results of situational awareness questionnaire	
Total cases	115
Deteriorated	10 (8.7%)
Patient outcome correctly identified	
Correct	93 (89.4%)
Incorrect	11 (10.6%)
Missed deterioration	1 (9%)
Members of team correctly identifying outcome	
Consultants	24 (92.3%)
Junior doctors	28 (90.3%)
Nurses	24 (88.9%)
Senior trainees	17 (85%)
Agreement between team members	25 (73.5%)
Variables used to predict outcome	
Work of breathing	86 (16.1%)
Oxygen requirement	37 (16.1%)
Respiratory rate	36 (15.7%)
Behaviour	30 (13)
Day of illness	27 (11.7%)
Volume of secretions	10 (4.3%)
Heart rate	6 (2.6%)
Results of latest blood gas	2 (0.9%)
Past medical history of patient	1 (0.4%)

Table 1

Key results:

- all members of the team were able to predict clinical outcome at least 85% of the time.
- 10.6% of predictions were wrong BUT only 9% of these failed to identify a patient who deteriorated.
- Inter-professional opinion correlated 73.5% of the time
- work of breathing was the most commonly used factor to determine likelihood of deterioration.
- past medical history, latest blood gas and heart rate were rarely cited as affecting judgement.

Conclusion:

All groups were reasonably accurate at predicting disease course over the next 24 hours, but this could be improved. This highlights the continuous need for team training in non-technical skills such as situational awareness to complement knowledge, ensuring high quality patient care.