

Analysis of Medication Prescribing Errors in critically ill Children

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Abstract

Objectives: Medication prescribing errors (MPE) can result in serious consequences for patients. In order to reduce errors, we need to know more about the frequency, the type and the severity of such errors.

Methodes: We performed therefore a prospective observational study to determine the number and type of medication prescribing errors in critically ill children in a paediatric intensive care unit (PICU). Prescribing errors were prospectively identified by a clinical pharmacist.

Results: A total of 1'129 medication orders were analysed. There were 151 prescribing errors, giving an overall error rate of 14% (95% CI 11 to 16). The medication groups with the highest proportion of MPEs were antihypertensives, antimycotics and drugs for nasal preparation with error rates of each 50%, followed by antiasthmatic drugs (25%), antibiotics (15%) and analgesics (14%). 104 errors (70%) were classified as MPEs which required interventions and/or resulted in patient harm equivalent to 9% of all medication orders (95% CI 6.5 to 14.4). 45 MPEs (30%) did not result in patient harm.

Conclusion: With a view to reduce MPEs and to improve patient-safety, our data may help to prevent errors before they occur.

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