

Publication

Analysis of medication prescribing errors in critically ill children

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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. We therefore performed 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. A total of 1129 medication orders were analysed. There were 151 prescribing errors, giving an overall error rate of 14ă% (95ă% 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 50ă%, followed by antiasthmatic drugs (25ă%), antibiotics (15ă%) and analgesics (14ă%). One hundred four errors (70ă%) were classified as MPEs which required interventions and/or resulted in patient harm equivalent to 9ă% of all medication orders (95ă% CI 6.5 to 14.4). Forty-five MPEs (30ă%) did not result in patient harm.; With a view to reduce MPEs and to improve patient safety, our data may help to prevent errors before they occur.; • Prescribing errors may be the most frequent medication errors. •In paediatric populations, the incidence of prescribing errors is higher than in adults. What is New: •Several risk factors for medication prescribing errors, such as medication groups, long PICU stay, and mechanical ventilation could be presented. •Analysing the combination of the most frequent prescribing errors and the severity of these errors.

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