Three-step intervention can reduce pediatric drug errors

January 9 2015

(HealthDay)—A three-step intervention addressing the diverse causes of medication errors can reduce these errors in a pediatric setting, according to a study published in the January issue of the *Journal of Clinical Nursing*.

Noting that one in five preventable adverse drug events in hospitalized children are caused by medication errors, Dorothee Niemann, from the University of Heidelberg in Germany, and colleagues developed a three-step intervention study including monitoring procedure. Pharmacists monitored drug handling by nurses on an 18-bed pediatric ward before and after each intervention step. Each intervention targeted distinct causes of errors, including knowledge deficits; rule violations and slips; and knowledge-, memory-, and rule-based errors, which were addressed in a handout, training course, and reference book.

The researchers found that after the third intervention, there was a decrease in the number of patients who were subjected to at least one medication error in drug handling, from 88 to 49 percent, and a decrease in the overall frequency of errors from 91 to 26 percent. There was a reduction in medication errors caused by knowledge deficits after issue of the handout; for example, errors regarding the correct volume of solvent for intravenous drugs decreased from 49 to 25 percent.

"Our three-step intervention reduced errors and is suitable to be tested in other wards and settings," the authors write.

More information: Abstract
Full Text

Citation: Three-step intervention can reduce pediatric drug errors (2015, January 9) retrieved 20 March 2024 from
https://medicalxpress.com/news/2015-01-three-step-intervention-pediatric-drug-errors.html