USP Issues Perioperative Medication Error Report

BY ELIZABETH MECHCATE
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ROCKVILLE, MD — More than 11,000 perioperative medication errors were reported to a national database of hospital medical error reports between 1998 and 2001.

Of these, 5% resulted in harm, according to a report issued by the United States Pharmacopeia.

The database, known as MEDMARX, is operated by the USP and is the largest national database of hospital medical error reports in the United States, receiving about 15,000 new reports every month.

The 11,239 perioperative medication errors reported by healthcare professionals in 7 years were divided into four settings: outpatient surgery (30% of the total reports), the preoperative holding area (7%), the operating room (34%), and the postanesthesia care unit (29%). The proportion reported in the preoperative holding area was lower because this category was added to the database in 2003.

The 5% rate of harmful perioperative errors is about threefold higher than the proportion of medication errors resulting in harm in all other areas of the hospital combined. Harmful errors were divided in all four perioperative areas but were most common in the operating room. The proportion of perioperative medication errors that resulted in harm was higher among patients under age 17 than it was among older patients.

Among the medication errors that resulted in harm, there were four deaths, including one pediatric patient, according to Diane D. Cousins, a registered pharmacist and vice president of the Center for the Advancement of Patient Safety at the USP.

Errors included administering the wrong medication or the wrong amount, administrating the medication at the wrong time, omitting a medication or a dose, or administering medication incorrectly.

In the operating room, omission and wrong drug administration were the most common mistakes, she said. For example, a surgeon called in an order for a dose of ampicillin to be given during surgery that was scheduled a week later, but the order was never recorded. As a result, the patient (a child) never received the drug.

In the postanesthesia care unit setting, the most typical errors involved prescribing and administering incorrect amounts of drugs, she said. After an elderly patient was discharged from the postanesthesia care unit to an inpatient unit, it was discovered that the patient was receiving too much heparin because of a programming error in the postanesthesia care unit.

The results were announced during a press briefing sponsored by the USP, which released the report in partnership with the Uniformed Services University of the Health Sciences, the Association of PeriOperative Registered Nurses, and the American Society of PerAnesthesia Nurses.

The results of the national analysis of medication errors related to surgery, Ms. Cousins said during the press conference.

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