Inquisitive patients: The last line of defense

As many as one in five medications reaches patients in error.¹

More than one-third of these errors originate during medication administration.² Although more errors occur when prescribing drugs than when administering them, about half of prescribing errors are caught by nurses and pharmacists before they reach the patient. But just 2% of errors that originate during drug administration are intercepted.³ Thus, errors made in the process of administering medications are much more likely to reach the patient. This, coupled with data that show that more than half of the harmful errors originate during drug administration,² make a powerful case for encouraging patients to ask questions and seek satisfactory answers about their medications before taking them.

A tragic example in which patient concerns were not investigated fully involved an informed patient who told her healthcare providers that she felt something was very wrong after 2 days of treatment with cyclophosphamide. Numerous times, the patient and her husband asked the nurses and physicians to check her chemotherapy orders for a mistake. This was not the first time the patient had undergone chemotherapy treatment; it seemed very different this time. But the dose administered was the dose prescribed, as listed in a new chemotherapy protocol. Thus, nurses and physicians reassured her that the orders were correct.

Unfortunately, the patient received an unrecognized four-fold overdose of cyclophosphamide because, each day for 4 days, she received an entire course dose. The staff had misinterpreted the protocol which stated the dose as “4 g per m² days 1-4,” with an intended meaning to give a total of 4 g over 4 days in divided doses. But the pharmacists, physicians, and nurses thought 4 g was to be given each day for 4 days. It is impossible to say whether the patient would have survived if the error had been caught after 2 days, but there is no doubt that 4 days of course dose therapy contributed to her death.

With the flu season upon us, act now to prevent mix-ups between flu vaccines and other drugs or vaccines packaged in look-alike cartons and vials. Last flu season, numerous patients received TUBERSOL (tuberculin purified protein derivative [PPD]) instead of FLUZONE (influenza virus vaccine). These products, both now manufactured by Sanofi Pasteur, come in colorful cartons with similar design patterns, almost to the point of distraction (see photos of this year’s packaging). The errors were later discovered when documenting the expiration dates and lot numbers, which didn’t match previously documented lot numbers of Fluzone injections.

Other mix-ups have been reported between flu vaccine and neuromuscular blocking agents. A nurse gave seven patients pancuronium injection instead of flu vaccine during a community vaccination program. The look-alike vials were near each other in the refrigerator. Luckily, all patients survived because injected amounts were small and they were immunized in the ED, where trained staff and rescue equipment were readily available.

Consider the following strategies to reduce the risk of flu vaccine mix-ups:

- Require documentation of lot numbers and expiration dates before vaccine administration. (Actual administration should be recorded afterwards.) This facilitates full reading of the label before injection, and recognition of errors if the numbers don’t match documentation of prior injections.
- Request prefilled vaccine syringes from pharmacy for use whenever possible.
- Ask pharmacy to apply auxiliary labels (e.g., FLU VACCINE), or to highlight the drug name by circling it with a pen, to help distinguish products from one another.
- Store different vaccines separately.
- Limit storage of neuromuscular blocking agents to units where its immediate use may be needed (e.g., OR, ED, critical care). Store these drugs in a separate container and affix “Warning—Respiratory Paralyzing Agent” labels to the vials and outer storage container.

A new patient safety video produced by FDA in cooperation with ISMP, Avoiding Fatal Overdoses with Fentanyl Patches, is now available at: www.ismp.org/Pages/FDA/videos.htm. The video, which can be downloaded for free viewing, covers various ways in which fentanyl patches have been involved in serious errors, and how to avoid them.
The Institute for Safe Medication Practices (ISMP) is pleased to announce its 8th Annual Cheers Awards winners and Lifetime Achievement Award recipient. The Cheers Awards honor individuals, organizations, and companies that have set a superlative standard of excellence for others to follow in the prevention of adverse drug events. This year’s award winners are:

- Association of periOperative Registered Nurses (AORN), Denver, CO
- CLARION: Students Building a Better Healthcare System Together, Minneapolis, MN
- Patient Safety Rounds Program at Dana-Farber Cancer Institute, Boston, MA
- Fostoria Community Hospital, Fostoria, OH
- John Gosbee, MD, MS, National Center for Patient Safety, VHA, Ann Arbor, MI
- Johns Hopkins Community Physicians, Baltimore, MD
- Joanne Kowiatek, RPh, MPM, University of Pittsburgh Medical Center, Pittsburgh, PA
- David Marx, JD, Outcome Engineering LLC, Plano, TX
- St. John's Mercy Medical Center, St. Louis, MO
- Target Corporation, Minneapolis, MN
- Lorri Zipperer, Cybrarian, Zipperer Project Management, Evanston, IL

Subscriber Award

The ISMP Medication Safety Alert!® Subscriber Award is being presented to The Cleveland Clinic Foundation, in Cleveland, OH, in recognition of its successful large-scale implementation of selected recommendations from the ISMP Medication Safety Alert!® and the other ISMP newsletters, to prevent patient harm.

Lifetime Achievement Award

The ISMP Lifetime Achievement Award is being presented to Herbert S. Carlin, DSc, Vice President, Pharmaceutical Management Insight, Inc. The award honors individuals who, throughout their careers, have made ongoing contributions to patient safety. Dr. Carlin has a long history of influencing the safe naming and labeling of drug products through service on the United States Pharmacopeia's (USP) Nomenclature Committee and the FDA-USP Product Labeling Committee.

Awards Celebration

On Tuesday evening, December 6, 2005, ISMP will be holding its 8th Annual Cheers Awards Dinner to honor this year’s recipients. The dinner will be held at Cili Restaurant & Bar at the Bali Hai Gold Club, Las Vegas, NV, near the site of the 2005 American Society of Health-System Pharmacists (ASHP) Midyear Clinical Meeting. Please consider joining us!

To attend the event, or to make a tax-deductible donation to support the Cheers Awards, please visit ISMP online at www.ismp.org or call ISMP at 215-947-7797.