

ED-Based Pharmacists Are Rx for Better Care

ACEP News May 2006

By Nellie Bristol Elsevier Global Medical News

When a middle-aged man was wheeled into Pasadena, California's Huntington Hospital emergency department with cardiac arrest following an allergic reaction to a bee sting, the emergency team quickly set about reviving the patient's ailing heart.

While nurses and physicians were concentrating intensely on the task, pharmacist Jill Hara, Pharm.D., was able to step back and view the situation through a different professional lens.

"Being that extra dimension [to the health care team], I thought, 'Hey, we should get some Benadryl on board to stop the allergic reaction,' " Dr. Hara recalled. The suggestion was well received by the physician, and the patient's allergy symptoms

were addressed at the same time as the cardiac arrest, thus speeding and improving patient care.

Dr. Hara's example is one of many that can be cited by a growing cadre of pharmacists assigned to hospital emergency departments. Emergency professionals and patient-safety experts agree that having the medication expert's trained eye and hand in the frequently chaotic and fast-paced ED improves continuity of care, increases patient safety, and offers systems enhancements that greatly boost patient care.

Medication errors are the most common type of adverse event, and EDs are one setting where they are more likely to occur, noted Lucy Savitz, Ph.D., senior health services researcher at RTI International. "Having a professional focusing on [medication] is a real asset to patient care," she said.

To enter the profession, Dr. Hara developed her own job proposal and sent it to Huntington and another hospital for their consideration. Both facilities offered her a job, and she started at Huntington in 2005. She monitors patients in the ED, looks for possible adverse drug interactions, and ensures that patients are continuing to take medications for chronic conditions. She also aided a project to investigate pediatric medication errors and helped develop a related educational handout for ED staff.

Pharmacist Roshanak Aazami, Pharm.D., has worked in the 42-bed ED at Cedars-Sinai Medical Center in Los Angeles since 2002. She spends her time in clinical consultation with physicians and nurses, giving advice on medication restrictions, reviewing orders, and making adjustments to ensure regimens are safe and effective. She also responds to all trauma arrivals.

Dr. Aazami enjoys the opportunity the ED offers a pharmacist to be more directly involved in patient care. "I'm involved from the get-go, versus waiting for something to be thought through, then written out by the physician, and then the paper trail comes to me and I retrospectively review it." In the ED, "you're much more at the forefront of that."

The involvement allows her not only to make sure drugs and dosages match the patient's needs, but also to help determine the best medication choice for the patient. "That is something very unique that I treasure," she explained, "because I get to do a lot more of that in the emergency department."

In addition to her clinical duties, Dr. Aazami cochairs the ED medication safety committee, made up of emergency staff. That committee allows adverse events to be discussed in a nonpunitive manner and, combined with reports and trends, developed into systems improvements. "This collaborative process has really allowed us to consistently evaluate, improve, and maintain our gains on the medication safety front," she said.

The enthusiasm Dr. Aazami and Dr. Hara have for their jobs is mirrored by the physicians they work with. Dr. John Bibb, an emergency physician at Cedars-Sinai, said pharmacists aid the ED in many ways. For example, he said, they make sure drugs match the protocol for particular illnesses, and they procure drugs the ED does not have immediately on hand.

In addition, Dr. Bibb said, the pharmacists arrange for the most up-to-date treatment for HIV/AIDS needle-stick injuries and stay abreast of new drug developments. "They're going to catch mistakes and prevent mistakes," he said. "Physicians may not be aware of the interaction of some of the new drugs with the older drugs in terms of allergy."

When the pharmacist first started at the Huntington Hospital ED, "honestly, I said, 'Yeah, well, it's a nice addition,' "said Huntington ED head Dr. Stanley Kalter. But "it's more than a nice addition - it's a positive." Other staff have responded similarly, he added.

In addition to consulting with nurses and physicians on drug interactions and IV drip rates, pharmacists in the Cedars-Sinai ED removed look-alike drugs from the Pyxis system to avoid adverse events, said Dr. Joel Geiderman, cochairman of the Cedars-Sinai department of emergency medicine. They also trim ED costs by adhering to the formulary and reducing adverse events.

No figures were readily available to determine cost-effectiveness of the pharmacy positions. But "kudos should definitely go to the administration for being visionary and for putting patient safety above the bottom line," Dr. Kalter said.

A 2005 study by the American Society of Health-System Pharmacists found that only 3.5% of hospitals surveyed have a pharmacist assigned to the ED for any period of time, and only 5% required pharmacist review and approval of medical orders before drugs are administered in the ED.

But RTI's Dr. Savitz said the landscape is changed dramatically because of recent Joint Commission on Accreditation of Healthcare Organizations requirements on hospital medication reconciliation.

She predicts increases in the number of ED and transition pharmacists. "Looking at trends is not really going to reveal where things are going," she said.

While waiting for additions to their field, Dr. Aazami and Dr. Hara keep in touch with their small corps of ED pharmacists via an Internet mailing list, now 80 members strong. As members of a relatively new specialty, ED pharmacists have "pretty much learned on the job and figured things out and established their specialty as they went along, in collaboration with the ED team," Dr. Aazami said.

The only complaint physicians seem to have is that there aren't more of them. Asked if his ED has 24-hour pharmacist coverage, Dr. Bibb responded, "I wish."