Factors in Rapid Drug Therapy

In a recent editorial, Glen Brown discussed the need to provide medications in a timely manner. Although true emergencies do occur, when medications must be available immediately, it would not be unusual to find that the needed medication is readily available on the nursing unit as ward stock. For less urgent, but still serious conditions, we must step back and assess each situation individually. Would a pharmacist dispense a benzodiazepine to a patient in respiratory failure? Would we immediately dispense an urgently requested dose of potassium chloride without checking to see what the most recent potassium level was? Is it (and should it be) appropriate for the pharmacist to bypass established checks for every seemingly “urgent” circumstance?

Dr Brown does not mention the other factors (equally important, if not more so) that are out of the pharmacy’s control (e.g., delays in diagnosis, especially in the case of adult meningitis). Time is needed to find and get an order from the prescriber. Time is needed to get the order from the nursing unit to the pharmacy. Time is needed to dispense the medication. Time is needed to get the medication back to the unit. Finally, time is required for the nurse to give the medication to the patient. And how many “urgent” orders get cancelled after review by a more senior physician?

I am not sure what prompted this editorial, but pharmacy is only one part of a much larger pie. We can only control that which we can control, and, as the old saying goes, “haste makes waste”.

Reference

Jeff Chan, RPh
PharmD candidate
Manager, Pharmacy
Thunder Bay Regional Health Sciences Centre
Thunder Bay, Ontario

Dr Brown responds:

I appreciate Jeff Chan’s comments, but they raise some interesting questions.

First, does the pharmacy department of a hospital not have a responsibility to provide significant input into the design and maintenance of the institution’s drug distribution system? I would hope that pharmacists would contribute to, and potentially lead, the efforts of all of an institution’s staff (physicians, nurses, respiratory therapists, information system analysts, architects, etc.) in the establishment of a drug distribution system that is both timely and safe. Although the pharmacy cannot control the design of and actions of all those involved in the drug distribution system, pharmacists’ expertise in identifying potential gaps in a drug distribution system, and their assistance in developing and maintaining a system that ensures patient safety and timely care, would go a long way to addressing deficiencies in care that currently exist in many institutions. For example, pharmacists should be aware of, and should make recommendations related to, the most appropriate method of forwarding prescriptions to the pharmacy (e.g., electronically, by fax, by pneumatic tube). The pharmacy department should be solely responsible for ensuring the establishment of a safe and timely system of drug preparation and dispensing in a central location (the dispensary). The department can also help to optimize methods of drug preparation so that the bedside nurse can quickly obtain and administer medications.

Second, do we really meet the patient’s needs by simply placing as ward stock those medications that are typically needed quickly? Making drugs available as ward stock bypasses any role that the pharmacist might have in assessing the appropriateness of planned therapy. I would further suggest that a prescription for almost any antibiotic should be assessed by the pharmacist before the patient receives the drug to ensure that the dosage and preparation, potential for allergy or drug interaction, and rate of administration (if the drug is to be administered intravenously) are appropriate. However, many pharmacies in Canadian institutions do not have drug distribution systems in place to ensure that the patient who needs prompt drug administration benefits from the expertise of a pharmacist. I fully realize that it is not possible to have a pharmacist review every drug order for every urgent situation “24/7”. Unfortunately, though, pharmacists and pharmacy departments too frequently hide behind this fact to justify a lack of concerted effort for the establishment and maintenance of a truly robust and responsive drug distribution system. My editorial was intended to emphasize that patients suffer when drug distribution systems are not robust and that we, as pharmacists, should be directing efforts toward improving this situation.

Glen Brown, BScPharm, PharmD, FCSHP, BCPS
Pharmacy Department
St Paul’s Hospital
Vancouver, British Columbia
Associate Editor, CJHP