Safe Medication Practices

By Christine Koczmara

The medication error happened in early 2002 when my son was approximately 6 years old. He had severe ear pain that kept him up most of the night, despite use of over-the-counter pain medication. The following Sunday morning, I took him to a clinic where a physician diagnosed him with acute otitis media (ear infection). The physician wrote a prescription for an antibiotic (amoxicillin) and an analgesic/painkiller (codeine elixir).

Upon leaving the clinic I read the prescription and noted that the physician had ordered codeine liquid fifteen milligrams (15 mg) by mouth every four hours as needed. The physician wrote a prescription with all the Latin abbreviations. I remember thinking to myself this appeared to be a large dose as I had thought the usual dose was 1.3 mg per kg per day (my son was approximately 22 kg at the time for which the upper dose limit would be 66 mg rather than 90 mg per day). Because of my son’s pain and the perceived urgency of wanting to get the prescription filled and get home, I did not go back to the pharmacist for clarification.

My son and I went to the closest pharmacy to get the prescription filled. Upon paying for the prescription, the pharmacist and I had a dialogue about the medication and who it was intended for. The pharmacist informed me that he thought the dose might be a little too large for my son who had never taken this type of analgesic medication and indicated I should administer half the dose. I acknowledged my similar thoughts. Along with the usual dialogue about side effects to watch for (e.g., drowsiness), the pharmacist also informed me that he did not have enough codeine to fill the prescription and had put the remainder on back order.

When I reached my car, I had an uneasy feeling that something wasn’t right. I checked the labels of the two bottles of codeine elixir I had received (each containing 200 mL, total of 400 mL). I read the printed directions on the bottles: Give 1 tablespoon every 4 hours as needed. The labels also had 5 mg/mL printed on them. I quickly calculated each single codeine dose to be administered would have been 75 mg (1 tablespoon or 15 mL multiplied by 5 mg/mL equaled 75 mg of codeine per dose, equivalent to the amount of codeine found in 2 Tylenol ® #3 tablets). The directions should have read to give 3 mL rather than 15 mL every 4 hours.

Despite my son tearfully wanting to go home, I knew we had to go back to the pharmacy. I indicated to the pharmacist that I thought there was a mistake with the codeine dispensed and wanted him to double check the prescription. The pharmacist initially told me he didn’t think there had been a mistake. However, I spoke up firmly with my convictions that this could not be correct. This led to the prescription being rechecked, the original codeine elixir taken back and dispensed in full (one bottle of 120 mL or 600 mg codeine in total rather than the 400 mL or 2,000 mg of codeine that had been received in part). Because of this, my health-care background and knowing the potential consequences, this error weighed very heavily with me. Although I knew this was an honest mistake, I would have liked the pharmacist to be more open and apologize or even thank me for bringing this to his attention to indicate that he too appreciated the potential seriousness of this ‘near miss’. I knew this error had valuable lessons that if widely shared, could prevent recurrence in many health-care settings. To accomplish this, I reported the incident to ISMP Canada so that it could be shared in their national safety bulletin along with system-based recommendations in an effort to prevent recurrence. (All ISMP Canada safety bulletins are available at: http://www.ismp-canada.org/publications.htm.) I firmly believe that sharing such information can result in valuable learning for all practitioners rather than each practitioner having to repeat the mistake themselves.

Today as I focus my energies on the field of patient safety, I believe this “good catch” story continues to be one to tell, not only to practitioners but also to patients.

Patients can learn from this as they also have a significant role to play — they are the last source for a check to occur when receiving medications. With good communication and interactions between health-care workers and patients, errors can be prevented.

It is vital for all patients to be an active participant in their medications. This includes: • Know the names and dosages of medications prescribed. • Know what medications are for and how they should be taken. • Know that the dialogue that occurs with a practitioner can play an important role in the verification process (e.g., the dialogue between recipient and the pharmacist such as to the medication, dose, and indication is also intended to confirm correctness). • Ask questions of health-care practitioners to address any concerns or gaps in information. • Speak up if concerns remain, and do not address satisfactorily or you remain uncomfortable with the situation to ensure that your concerns are understood. It is not a matter of trust but rather human errors can occur.

Report a medication error or near miss to ISMP Canada: (by phone at 416-5899 or 1-866-54-ISMPC (47672), through the website at www.ismp-canada.org or by email to info@ismp-canada.org) so others can learn from them.

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