

Ensuring that Patients' Drug Information Needs Are Met

Lisa Dolovich

Information about medications is ubiquitous. Patients obtain such information from doctors, pharmacists, nurses, friends, and family members, as well as from other sources such as books, the library, the Internet, pamphlets, television, and magazines. A recent report suggested that over 90% of hospital pharmacies provide individual patient counselling.¹ The authors of another report found that 64% of community pharmacies in Canada have a patient library, and 48% run in-store patient educational seminars or programs.² Pharmacy Web sites accessible to the public are available for 43% of community pharmacies in Canada, and over half of these sites offer disease-specific information.² As well, over 90% of chain drug stores provide written information with each prescription.²

Despite this ready availability of and access to information, patients consistently report that they have unmet needs for therapeutic information. In one study, 36% of hospital inpatients received little or none of the information they sought.³ Fewer than half of the patients in another study reported receiving information about side effects upon discharge, even though 87.5% of these patients desired such information.⁴ Furthermore, physicians' and pharmacists' perceptions of the type and amount of information that patients want differ from what patients actually desire. For example, in one study in which patients and physicians were asked to rank 16 information categories, the information most frequently requested by patients was information about side effects, but this category was ranked 10th by physicians in terms of what they thought patients wanted to know.⁵ In a related study, 2 of the 4 types of information ranked highest by physicians (both related to drug interactions) were requested by less than 5% of the patients.⁵ Additionally, although a multitude of patient information about medications, treatments, and diseases exists, much of this material contains conflicting, inaccurate,

and poorly written information, which is often not evidence based.⁶

It is crucial that patients obtain the information about medications that they feel they need, because patients are the chief decision makers about whether to start or continue a given therapy. Patients have the opportunity to consider their use of medication each time they consider filling a prescription and each time they choose between taking or not taking a medication at home. Patients have expressed that they want personalized therapeutic information — they want to know whether the medication prescribed is right for them in particular. Patients also want to know the side effects for which they are at risk and how long they have to take the medication.⁷ Patients want to have general information about their condition before they make informed decisions about a treatment option, so that they can be certain that the information pertains specifically to them.⁷

Conventional methods of transmitting therapeutic information (e.g., in writing) have been minimally effective at improving clinical outcomes, especially when the information is given to patients without any additional reinforcement or discussion.^{8,9} Patients may need to hear information more than once to effectively digest and understand it. For example, in a randomized controlled trial that evaluated patients' use of a tape recording of a consultation with the physician, the patients in the intervention group listened to the tape of their consultation on average 4 times in 1 week.¹⁰ The way information is presented can also affect its interpretation and the way in which decisions are made. For example, it is well established that relative risk reductions are more persuasive than absolute risk reductions and that loss-framed messages (such as "5% of patients died") are more effective than gain-framed messages (such as "95% of patients survived").¹¹ Patients

also interpret the numeric estimates of probability associated with given words (e.g., “usually”, “possibly”) differently.¹² As well, despite numerous guidelines urging developers to ensure that information is comprehensible at a grade 6 level,^{13,14} few therapeutic information materials meet these standards.¹⁵ To compound the problem, patients’ self-reporting of grade level is often higher than their actual grade level.¹⁵

Improving the delivery of therapeutic information to patients represents a huge opportunity for pharmacists to help prevent drug-related morbidity and to facilitate adherence to medications. Doing so has the potential to yield important clinical benefits for patients. The new CSHP Professional Standards for Hospital Pharmacy Practice¹⁶ provide an excellent point of reference from which to consider how pharmacists can best meet the therapeutic information needs of patients. The CSHP standard related to the pharmacist as a patient advocate (Standard 4) mandates the pharmacist to support the patient and his or her family by providing information and assisting in its interpretation, thereby allowing them to participate in decisions regarding the patient’s drug

therapy. The CSHP standard related to the pharmacist as a patient educator (Standard 5) specifies that each pharmacist should promote “safe, effective and efficient use of drugs through the provision of education to patients, pharmacists and other healthcare providers.” This goal is to be achieved by ensuring that a system is in place to identify patients with the greatest need for drug information and by effectively communicating the appropriate drug and drug-related information needed to promote the safe and effective use of medication. Meeting these CSHP standards is both a demanding and a worthwhile endeavour.

As an aid in meeting the CSHP standards, each pharmacist and those responsible for departmental or hospital-wide delivery of therapeutic information could ask and answer the following questions about their current methods of delivering therapeutic information:

- How is each patient assessed before delivery of therapeutic information to ensure that the content and format of the information provided will be personalized for the patient?
- How do we ensure that patients are receiving information through multiple formats and methods?
- How do we ensure that an individual’s personal benefit and risk profile is incorporated into the therapeutic information we deliver?
- Has the written information we use been tested for readability, and is it at a grade 6 level?
- Have we considered the effect of how information is presented in our written or verbal delivery of therapeutic information?
- How do we ensure that a patient has truly understood the information that we have provided?
- What system is in place to identify patients with the greatest need for drug information?

Of course, numerous barriers hinder the day-to-day consistent delivery of the best therapeutic information. These barriers include lack of availability of the desired information, lack of time to deliver the information, readability problems (grade level is not matched to the patient’s reading level), uncertainty about what information is appropriate for a given patient, and ineffectiveness of the mode of information delivery. Furthermore, patients’ information needs change over time, which necessitates that pharmacists assess each patient’s immediate drug information needs when interacting with him or her.

Continually improving our delivery of therapeutic information to patients is a crucial step in preventing drug-related problems. We know that many patients are not obtaining the intended benefit from their

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medications or they are experiencing preventable adverse events. For example, the median prevalence of preventable drug-related hospital admissions was recently estimated at 4.3%.¹⁷ Approximately one-quarter of adverse drug events in ambulatory elderly patients were also deemed to be preventable.¹⁸ Drug use has reached high levels in Canada, and in 2001, 10 prescriptions (including refills) were dispensed for each Canadian citizen.² Among Ontario Drug Benefit recipients there were an average of 26.9 claims per beneficiary in 2001/2002.¹⁹ Along with this frequent, regular use of drugs and the preventable problems associated with drug use, it is well established that patient persistence with long-term drug therapies such as oral hypoglycemics, lipid-lowering agents, and antihypertensive therapies is poor.²⁰⁻²²

Given these factors, how can we better ensure that patient information needs are met?

Therapeutic information must be individualized for the patient. Patients need to know and agree with the treatment options available so that they can make informed decisions about their health. As hospital pharmacists, we can play a key role by facilitating patients' uptake of therapeutic information. This would greatly improve their ability to engage in therapeutic decision-making and to understand the rationale behind treatment decisions. If patients are informed about, engaged in decisions about, and in agreement with the drug therapies that are prescribed, then they should be better able to monitor their health for intended benefits and adverse events and to persist with therapy that they feel would give them a benefit.

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