MEDICATION ERRORS

For Better Understanding, All Patients Need Improved “Health Literacy”

Matthew Grissinger, RPh, FASCP

Mr. Grissinger is a Medication Safety Analyst at the Institute for Safe Medication Practices in Huntingdon Valley, PA (www.ismp.org).

PROBLEM: Many people, even health care professionals, have trouble functioning well as patients. Whether limited by knowledge, socioeconomic factors, emotional or clinical state, or cultural background, people’s level of health literacy—the ability to read, understand, and act on health care information—is often dangerously low.

A popular television show, “ER,” portrayed this problem well. In the episode, a Spanish-speaking woman misunderstood the directions for taking isoniazid (INH). The prescription label stated that the medication should be taken “once” daily. In Spanish, however, “once” (pronounced ohn-say) means “eleven.” The patient died from taking this excessive dose.

Another real-life example involved a Spanish-speaking mother who applied oxiconazole nitrate 1% cream (Oxistat®, GlaxoSmithKline) to her baby’s inflamed rash up to 11 times each day. The mother was simply following the prescription directions, which stated, half in English and half in Spanish, “Aplicarse once cada dia til rash is clear.” Fortunately, this was a topical medication, and although the inflammation worsened, no permanent harm resulted.

Other examples of patients who have had difficulty reading and understanding medication directions are abundant. One elderly patient could not determine whether he had picked up his bottle of acetaminophen label, could not accurately state their child’s dose. Some teenagers who misunderstood directions for contraceptive jelly ate it on toast every morning in an attempt to prevent pregnancy.

Lest you believe that poor health literacy is an isolated problem for the elderly, disabled, uneducated, or lower socioeconomic classes, here are some startling facts from the American Medical Association’s Health Literacy Introductory Kit, which includes a videotape: ¹

- More than 40% of patients with chronic illnesses are functionally illiterate.
- Almost 25% of all adult Americans read at or below a fifth grade level, whereas medical information leaflets are typically written at a 10th grade reading level or higher.
- An estimated 75% of patients discard the medication leaflet stapled to the prescription bag without reading it.
- Only 50% of all patients take their medications as directed.
- Low health literacy skills have increased our annual health care expenditures by $73 billion.

People who have difficulty reading or understanding health information are ashamed and often hide the problem from others. Underdeveloped literacy isn’t always obvious. Researchers have reported poor reading skills in some of the most poised and articulate patients.

SAFE PRACTICE RECOMMENDATIONS:

Patient education requires a new approach; clinicians should assume that everyone has a literacy problem. After all, people at all literacy levels prefer simple, straightforward instructions and written materials.²⁻⁴ Here are some strategies to consider:

- **Patients should be offered small amounts of information at a time.** First, clinicians should tell patients only what they need to know in order to follow directions. The desired behavior, not the medical facts, should be emphasized. Background information can be left for subsequent visits.
- **Printed materials should be written at a fifth grade reading level or lower.** The use of clear captions, ample white space, pictures or diagrams, and supplementary videotapes can help in explaining concepts. Most people, even those who read well, depend on visual clues to reinforce learning and to spark memory.
- **Patients must feel involved in their health care.** Focus groups of patients can be used to help write personally relevant and culturally sensitive educational materials. After patients understand the information, clinicians should ask them how the subject can be explained to others. A different focus group of patients should review the final materials and highlight any words or concepts that they do not fully understand.
- **A system should be created to verify that patients understand their instructions.** Clinicians should avoid asking “yes/no” questions; instead, they should ask patients to show and tell them how they would take their medication so that any problems can be easily spotted.
- **Clinicians must become familiar with evolving technology.** For example, talking prescription labels (TalkingRx® from Millennium Compliance or EnvisionAmerica’s “ScripTalk”); recording devices for prescription instructions (AskO’s Aloud®); and electronic pill organizers and reminders (Epill®) are now being tested or are already on the market.

REFERENCES

**MEDICATION ERRORS**

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**Web sites:**
- Asko Corporation: www.askocorp.com
- Center for Health Care Strategies: www.chcs.org
- Envision America: www.environamerica.com
- Epill®: www.epill.com
- Millennium Compliance Corporation: www.talkingrx.com
- National Council on Patient Information and Education: www.talkaboutrx.com

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The reports described in this column were received through the USP–ISMP Medication Errors Reporting Program (MERP). Errors, close calls, or hazardous conditions may be reported on the ISMP (www.ismp.org) or the USP (www.usp.org) Web site or communicated directly to ISMP by calling 1-800-FAIL SAFE or via e-mail at ismpinfo@ismp.org.