Shortcuts that don't save time

Error-prone abbreviations may save time for the writer, but they do not for the dispenser. Nearly everyone in health care uses shortcuts such as abbreviations and symbols in an effort to conserve time when handwriting or typing words, phrases, or units of measure.

Some of these shortcuts can be very time consuming for the person on the receiving end, however. The telephone calls and reference material checks made in order to clarify these shortcuts may pose a greater potential for error than if the statement were initially written out in full. It's not until medical abbreviations, symbols, or nonstandard dose designations lead to patient harm that action is taken to prevent future misunderstandings.

For a complete list of error-prone abbreviations, symbols, and dose designations, see www.ismp.org/Tools/errorproneabbreviations.pdf

Q1D or QID?

Some abbreviations used to indicate the frequency of drug administration can be problematic. A computerized prescription for "penicillin VK 500 mg Q1D X 7D" led a pharmacy technician to type a label as the directions implied: "Take 1 tab p.o. daily for 7 days." A pharmacist subsequently realized that penicillin for this patient was supposed to be taken four times a day, not once a day. The physician had mistyped "Q1D" (q one day) instead of "QID" in the computerized order entry system.

It is also not uncommon for nonstandard dose designations to lead to errors. Although it wasn't a factor in this case, the abbreviation "D" for day in "7D" can also cause problems if it is misunderstood as "7 doses."

Legibility matters

Even when a prescriber has legible handwriting, the use of the abbreviation "q.d." or "qd" has led to errors. For example, the loop of a cursive "q" that comes up between the "q" and the "d" (see Figure 1) or a period after the "q" can look like an "i," causing some to read the notation as "qid."

The use of the abbreviation "q.o.d." (every other day) has also caused problems because it has been misinterpreted as "q.d." (every day) or "q.i.d." (four times daily) if the "o" is poorly written. In the prescription in Figure 2, digoxin was intended to be dosed qod, but the dispenser initially misinterpreted the instructions as "qid" because of the way the "o" was written. In order to prevent confusion, write out the directions "daily" and "every other day" instead of using abbreviations that can be subject to misinterpretation.

Would you believe that the letter "q" could look like the number "5"? Just look at the handwritten order in Figure

Figure 1

3. The physician had prescribed Levoxyl (levothyroxine—King) "1 tab po q day," but the "q" was misread as a "5," and the medication was subsequently dispensed with directions to take "1 tab 5 days each week."

In this case, the patient was familiar with the proper dosing frequency and recognized the mistake immediately. Although the pharmacist misinterpreted "q" as "5," the error could have been avoided if the pharmacist had not assumed that the physician intended to write "each week" on the prescription.

Write it out

"AD" is sometimes used as an abbreviation for right ear (aura dexter). One problem with this abbreviation is that a handwritten lowercase "a" can easily look like an "o." Thus, a patient might risk getting an otic medication in the right eye (OD or oculus dexter) instead of the right ear.

In one case, a physician ordered "Auralgan (antipyrine, benzocaine, glycerin) two drops AD" for a patient in the emergency department, but the nurse administered the drops into the patient's right eye. When the error was discovered, the eye was flushed and the patient suffered no permanent harm. Using "AS" for left ear or "AU" for each ear might cause similar problems. "AD" has also been misread as "PO" or as "QD" (if the tail of the handwritten lowercase "a" looks likes a "q").

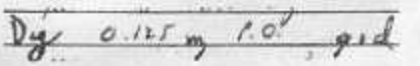

Figure 2

Another type of error related to the abbreviation "AD" has surfaced recently. Tired of writing out "as directed" when transcribing prescriptions received by telephone, one pharmacist began to abbreviate that term as "AD." Later, a pharmacy technician misinterpreted the directions for an oral liquid prescription

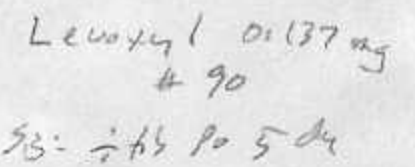

Figure 3

transcribed as "5 mL TID AD" and typed the directions as "one teaspoonful three times a day in right ear." "AD" would be a good abbreviation to avoid in general. The best practice is to write out all directions for left and right ear and eye.

—Institute for Safe Medication Practices

The reports described in this column were received through the ISMP Medication Errors Reporting Program (MERP). Errors, close calls, or hazardous conditions may be reported on the Institute for Safe Medication Practices (www.ismp.org) website or communicated directly to ISMP by calling 800-FAIL-SAF (800-324-5723) or e-mailing ismpinfo@ismp.org. The topics in this column are covered in greater detail in *Medication Errors, 2nd edition*, written by ISMP President Michael R. Cohen, BPharm, MS, ScD. The book may be purchased from APhA at www.pharmacist.com or by calling 800-878-0729.