

PHARMACY PRACTICE NEWS

USP Report Cites Look-Alike/Sound-Alike Drugs March 2008

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More than 1,400 commonly used drugs are involved in errors linked to drug names that look alike or sound alike, according to U.S. Pharmacopeia's (USP) eighth annual national MEDMARX Data report. These errors can be fatal: 1.4% of the errors resulted in patient harm, including seven errors that "may have caused or contributed to patient deaths," the USP report stated.

For this year's report, USP reviewed more than 26,000 records submitted to the MEDMARX database from 2003 to 2006. These records showed that 1,470 different drugs are implicated in medication errors due to brand and/or generic names that looked or sounded alike. From this data, USP compiled a list of 3,170 pairs of similarly named drugs. "This result is nearly double the 1,750 pairs that were identified in USP's previous report on this topic in 2004," noted the USP report.

In response to the findings, USP said that it is calling on prescribers and pharmacists to include an "indication for use" on prescriptions. To prevent medication errors, USP recommended that this information be conveyed at "several points along the health care continuum." USP also noted that the use of such tools as Epocrates Rx free drug reference, Lexi-Drugs and others "have been helpful in reducing potential medication errors, and the addition of MEDMARX look-alike/sound-alike data will make such tools even stronger."

The ISMP's View

To get the Institute for Safe Medication Practices' view of the USP's 2008 MEDMARX report, Pharmacy Practice News spoke with Matthew Grissinger, RPh, director of error reporting programs at the ISMP.

Q. Various clinical decision support tools were cited by USP as being helpful for avoiding errors from look-alike/sound-alike drugs, presumably by issuing electronic alerts when the medications are about to be prescribed. Is that an effective strategy?

A. I would say it is one possible strategy to prevent errors due to similar drug names. Electronic warnings or alerts may be helpful if used judiciously. But the list published by USP represents every possible pair of drug names that were considered to look alike—more than 3,000 pairs. With pharmacists and physicians already receiving numerous alerts during the order entry process, adding 3,000 more alerts may exacerbate the "alert fatigue" hospitals already are experiencing, when users are presented with a large number of warnings and thus tend to tune them out. This could lead to users missing important alerts that are simply lost in the crowd.

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Q. Can you offer one or two other strategies for limiting errors from look-alike/sound-alike drugs?

A. One strategy would be to physically separate these products. But organizations should determine which name pairs are most problematic—meaning those that have occurred frequently and those that have or could lead to harm if confused. That’s a much more effective strategy than trying to flag every possible name-pair confusion. Once you’ve got a workable list, you can then separate containers of similarly named drugs and force users to go in a segregated, designated area. Another example would be to separate similarly spelled drug names in prescriber and pharmacy order entry systems. For example, hydralazine and hydroxyzine are often confused. An organization could place an “*” before one of the names (e.g., *hydralazine) so that when users type “hydr” into a computer system, only one of the two names would appear (i.e., hydroxyzine).

Differentiation—another strategy we recommend—can be used by hospitals to make certain products “stand out” from others or emphasize key parts of a package (e.g., drug name, strength, concentration). This can be accomplished by many methods, such as the use of stickers, labels, highlighted portions of labels, etc. Organizations should employ both separation and differentiation judiciously, so that they aren’t “diluted” or “overused” to the point that the desired effect is not achieved.

Q. The pharmaceutical industry and clinicians have known for years that look-alike/sound-alike drugs cause errors—sometimes fatal ones. Why does this persist as such a common problem?

A. There are several considerations. First, let’s acknowledge that there have been improvements in this area. Many drug manufacturers are having their new product names tested, for example, using failure mode and effects analysis, to determine any potential for name-related confusion. In addition, the Division of Medication Errors and Technical Support at the FDA also tests/reviews new drug names prior to their approval. But organizations need to do their part by addressing any potential for confusion. For example, facilities should use their own internal error reporting programs to identify problematic drug-name pairs and employ preventive strategies, such as separating and differentiating the products in their storage areas and computer screens. Lastly, organizations should proactively address the potential for these types of errors by learning from external sources of information, such as ISMP, USP and the FDA, that have described issues related to similarity in drug names.