Confusion Between SEROQUEL® and SERZONE-5HT₂® Reported in Canada

AstraZeneca Canada and Bristol-Myers Squibb Canada have issued a joint alert to health care professionals, Canadian hospitals and relevant professional associations, after receiving a report of a medication error where SERZONE-5HT₂® (nefazodone) was prescribed and SEROQUEL® (quetiapine) was received by a patient. The alert also refers to previous cases in the U.S. including “a 25 year-old female who experienced fever and respiratory arrest after taking Seroquel for 3 days instead of Serzone, and eventually died, although the causal relationship has not been established”. The alert reminds physicians “to print clearly on prescriptions and ensure that patients know the name and the purpose of their medication. Pharmacists are reminded that the two medications should not be stored in close proximity to each other, and pharmacists need to confirm with both the physician and patient that the correct medication is being dispensed.”

The May 29th, 2002 issue of the ISMP Medication Safety Bulletin informs us that there have been over 20 reported mix-ups in the U.S. between SERZONE®, an antidepressant, and SEROQUEL®, an antipsychotic drug.

The July 11th, 2001 issue of the ISMP Medication Safety Bulletin discusses various contributing factors to errors between these two products: (i) the brand names can look very similar when handwritten; (ii) they have the same prefix SER and therefore may be stored together or appear on the same computer screen; (iii) both drugs are available in 100 mg and 200 mg strengths, as tablets; (iv) both are used in mental health and can have similar dose ranges and frequencies.

Some additional measures to prevent confusion between these products include:
• Educate patients about the potential for confusion between the two products so that they can be watchful when their prescriptions are dispensed or refilled.
• Use both the generic name and trade name when prescribing.
• Add a warning statement in pharmacy computer systems or order entry systems.
• Add a warning sign where the drugs are stored.

Consider the use of ‘Capital Letters’ in order entry software programs, computerized inventory programs and labels as a way of differentiating the trade names: e.g., SerOQUEL and SerZONE-5HT2. See also the discussion below about the potential merits of selectively using capital letters.

Problematic Drug Names, Packaging and Labelling

The FDA continues to demonstrate leadership in advancing patient safety. The Office of Generic Drugs of the FDA has requested drug companies who market selected look-alike drug names to voluntarily revise the appearance of their established names. Letters were sent to individual manufacturers encouraging them to visually differentiate their established names with the use of “tall man” letters. By changing the print format on labels the hope is that medication errors resulting from look-alike confusion will be minimized.

Examples of the recommended revisions include:

<table>
<thead>
<tr>
<th>Established Name</th>
<th>Recommended Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daunorubicin</td>
<td>DAUNOrubicin</td>
</tr>
<tr>
<td>Doxorubicin</td>
<td>DOXOrubicin</td>
</tr>
<tr>
<td>Dobutamine</td>
<td>DOBUTamine</td>
</tr>
<tr>
<td>Dopamine</td>
<td>DOPamine</td>
</tr>
<tr>
<td>Vinblastine</td>
<td>VinBLAStine</td>
</tr>
<tr>
<td>Vincristine</td>
<td>VinCRIStine</td>
</tr>
</tbody>
</table>

For more information on this initiative visit the website http://www.fda.gov/cder/drug/MedErrors/nameDiff.htm.

We can proactively learn from these examples and consider incorporating the same changes into our writing practices, computer software entries and dispensing labels.
Ask pharmacy staff to help identify other look-alike / sound-alike names. If the print format of the drug name is entered in software or on pharmacy dispensing and pre-packaging labels through a creative use of lower and upper case letters, this may help reduce the risk for error. This can also become a ‘trigger’ to warn staff of a problematic drug name. The unusual typeset with “tall man” letters could alert staff that the product has a potential for look-alike / sound-alike substitution errors.

In the past two years various reports to ISMP Canada have included mix-ups between sound-alike / look-alike drug names. Examples of print format that we have previously suggested for specific drugs include TobraDEX (to differentiate from Tobrex) and ENOXaparin to differentiate from Erythropoietin.

References:
1. AstraZeneca Canada Inc. and Bristol-Myers Squibb Canada Inc. Important safety information regarding medication errors resulting from confusion between SEROQUEL® and SERZONE-5HT2®. October 31, 2002.

ISMP Canada is a national voluntary medication incident and ‘near miss’ reporting program founded for the purpose of sharing the learning experiences from medication errors. Implementation of preventative strategies and system safeguards to decrease the risk for error-induced injury and thereby promote medication safety in healthcare is our collaborative goal.
To report a medication error to ISMP Canada: (i) visit our website www.ismp-canada.org or (ii) e-mail us at info@ismp-canada.org or (iii) phone us at 416-480-4099. ISMP Canada guarantees confidentiality and security of information received. ISMP Canada respects the wishes of the reporter as to the level of detail to be included in our publications.