

Medication Incidents Reporting Programme Bulletin



BULLETIN 22 JANUARY 2009

Known Drug Allergy

A common type of medication error is “Known Drug Allergy” which refers to the prescribing, dispensing or administering of a drug to which a patient is already documented to be allergic to. In the first half year of 2008, there were 37 medication incidents classified under this category. Two out of the four severe incidents reported during the period fell into this category, illustrating that “Known Drug Allergy” errors can cause serious harm to patient.

Antibiotics and NSAIDs are the most common drug groups which will lead to “Known Drug Allergy” errors. Cross-sensitivity within the drug group, generic name vs. brand name and use of combination preparation are the possible causes of the problem. If there is any doubt about a medication, it is advisable to consult pharmacist or drug information resources.

In accordance with the prevailing Drug Administration Procedures and Practices (DAR), the drug that the patient is allergic to must be recorded in the appropriate areas of the drug orders and patient’s medical records. Drug allergy history should have been documented on the MAR form as well as in the CMS. Prior to prescribing, dispensing and administration of medications, drug allergy records of the patients must be checked. Allergy checking function exists in the medication order entry (MOE) and dispensing system to alert prescribers and pharmacists. Therefore, one feasible way to minimize the risk is to remove antibiotics from ward stock as far as possible.

There's Known Drug Allergy !



Medication Safety Committee

One of the 2008/09 annual plan targets on risk reduction strategies for medication safety is to improve the safety of high risk medications in wards. In Jul 08, the MSC developed a List of high risk medication, followed by the “Guidelines on Safe Handling of Continuous Epidural Analgesia” and an education guides for staff training being issued in Jan 09. In addition, safety solutions for other high-risk medications on the List will be prepared by the end of Mar 09. For look-alike medications, strip-packing will be included as a tendering requirement for oral hypoglycemics. The approach of purchasing for safety will be further explored.



On 30 Oct 08, a full-day “Annual Conference on Medication Safety” was co-organized by the MSC and the PWH Poison Treatment Centre on improving medication safety in children, the elderly as well as on medication reconciliation.

In Nov 08, the MSC issued the “Do Not Use Abbreviations” List to help reducing the number of medication errors related to the mis-interpretation of the abbreviations.



To sustain the continued effective implementation of guidelines, the MSC will carry out post-implementation review of the issued guidelines in clusters. The visiting team will review the implementation of the issued policies and guidelines and other medication safety-related issues, collect feedbacks from hospitals and share best practice across HA. The first visit will be carried out in 1Q 09.

Drug reconciliation on admission and discharge is another area being pursued. As an interim improvement measure, a summary page of electronic patient record (ePR) is now available, containing information like drug allergy and alert, recent prescriptions in HA, future HA appointment, etc.. The MSC will continue to work with IT on this issue.

Known Drug Allergy

Paracetamol tablet prescribed to patient with documented known drug allergy

A patient with known drug allergy to paracetamol was prescribed with oral paracetamol for hyperpyrexia and with “no known drug allergy” ticked in the drug allergy box of the MAR form. A paracetamol tablet was then administered to the patient as prescribed.

The patient later reported to develop chills and rigor, followed by BP being persistently on the low side and skin rash over upper right and lower limbs.

Subsequently, the patient received intensive drug treatment for the allergic reactions, required close monitoring of vital signs and was later transferred to the intensive care unit.



RECOMMENDATIONS

- ✓ Check carefully patient's drug allergy record before prescribing
- ✓ Tick “No Known Drug Allergy (NKDA)” or record “NIL” in the allergy history of the MAR form only after verification
- ✓ Verify drug allergic history with patient before administration apart from “3 Checks 5 Rights”



Known Drug Allergy

Doloxene Co prescribed to patient with cross-sensitivity to diclofenac sodium

A patient was admitted for right ankle fracture and had been given Doloxene for pain relief. Upon discharge, the patient requested a more potent analgesic. The allergy alert of the patient had shown cross-sensitivity to diclofenac sodium but was overridden with Doloxene Co (containing aspirin) prescribed.

The patient was re-admitted to the intensive care unit several hours after discharge and remained hospitalized for three days for treatment of angioedema.



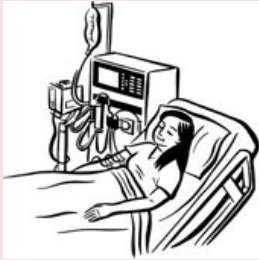
RECOMMENDATIONS

- ✓ Clarify the ingredients of a combination/commercial product with pharmacist or drug information resources if in doubt
- ✓ Beware of the risk of cross-sensitivity between different NSAIDs
- ✓ Check carefully before overriding an allergy alert

Wrong Patient

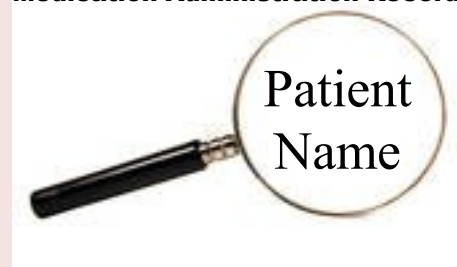
Clozapine and propranolol prescribed to wrong patient

A patient was prescribed unintentionally with clozapine and propranolol on an oral MAR form bearing the patient's name label. The prescriber was not the case doctor of the patient.



The patient's condition deteriorated and found with neurological responses. Urgent medical and ICU assessments were made, and the patient required close monitoring of neurological and vital signs.

Medication Administration Record



RECOMMENDATIONS

- ☑ Verify the patient's identity and check against the patient's name label on the MAR form before prescribing

Wrong Patient

Medications mistakenly administered to another patient

Patient A's medications had been checked against the patient bracelet before administration and counter-checked by another staff. However, since the patient had swallowing problem, the medications were taken to the trolley for crushing. The crushed medications including prazosin and isosorbide dinitrate were given to an adjacent patient B instead.

Patient B developed hypotension, tachycardia, and complaints of dizziness and chest discomfort an hour after drug administration. The patient required treatments with gelofusine infusion and dopamine drip. The patient's blood pressure and pulse rate resumed normal around an hour later.



RECOMMENDATIONS

- ☑ Verify patient's identity right before administering medication
- ☑ Adhere to drug administration guidelines and "3 Checks 5 Rights"

The Number of Incidents by Severity (Jan – Jun 2008)	
Severity Index	Jan - Jun 2008
0	256
1	451
2	80
3	13
4	4
5	0
6	0

Top 3 Most Common <u>PRESCRIBING ERROR</u> (Jan – Jun 2008)		
Position	In-patient	Out-patient
No. 1	Wrong Strength/ Dosage (21%)	Wrong Patient (38%)
No. 2	Wrong Patient (18%)	Wrong Strength/ Dosage (21%)
No. 3	Wrong Drug (13%)	Wrong Drug (13%)

Top 3 Most Common <u>DISPENSING ERROR</u> (Jan – Jun 2008)		
Position	In-patient	Out-patient
No. 1	Wrong Drug (38%)	Wrong Label Information (25%)
No. 2	Wrong Strength/ Dosage (14%)	Wrong Drug (20%)
No. 3	Wrong Dosage Form (10%)	Wrong Strength/ Dosage (16%)

Top 3 Most Common <u>ADMINISTRATION ERROR</u> (Jan – Jun 2008)		
Position	In-patient	Out-patient
No. 1	Dose Omission (24%)	Wrong Dose (21%)
No. 2	Extra Dose (18%)	Dose Omission (13%)
No. 3	Wrong Drug (10%)	Wrong Patient (11%) Wrong Drug (11%) Extra Dose (11%)

**Summary of Incidents by Most Common Underlying Causes
(Top 5) in Jan – Jun 2008**

Underlying Causes			
In-patient	Total 381	Out-patient	Total 225
1. Failure to comply with policies or procedures	48%	1. Failure to comply with policies or procedures	40%
2. Failure in communication/misinterpretation of order	17%	2. Incorrect computer entry	20%
3. Distraction	13%	3. Distraction	10%
4. Similar drug name/appearance	9%	4. Similar drug name/appearance	10%
5. Inadequate knowledge/skills	8%	5. Failure in communication/misinterpretation of order	9%