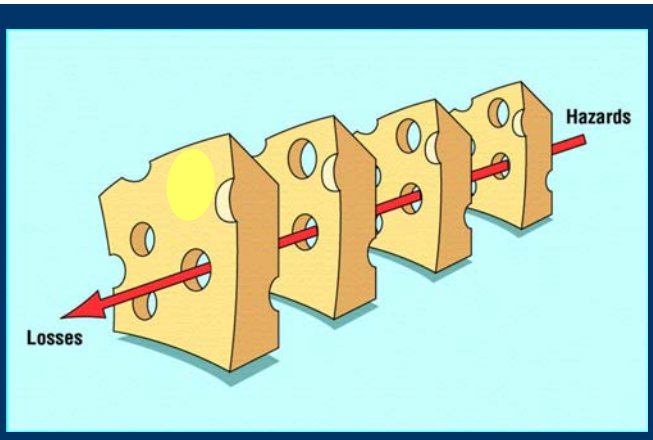
Medication Safety Today



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I name that patient in .....three

The latest edition of Use and Control of Medicines (DHSSPS, April 2004) recommends that three pieces of information can be used to confirm the identity of a patient before administering a medicine.

1. Verbally checking the patient's name.
2. Verbally checking the patient's date of birth.
3. Checking the patient's name, date of birth and unique registration number on the identity bracelet against the Kardex / prescription.

When verbally checking patients' details, always ask them to tell you their name and date of birth, rather than asking them to answer 'yes' or 'no' to the name and date of birth that you tell them.

What is your Trust policy for confirming the identity of a patient for the administration of medicines?

A prescription for failure

Bisoprolol and carvedilol are two medicines used in the management of heart failure. However several medication incidents have been reported involving confusion with these two medicines where the wrong medicine, the wrong dose or the wrong frequency has been prescribed, administered or dispensed.

Wrong medicine – care needs to be taken with each medicine to avoid confusion between bisoprolol (Cardicor®) and carvedilol (Eucardic®).

Wrong dose – both beta-blockers are prescribed in low doses with careful dose titration. Most doses involve the use of a decimal point, therefore take care to write clearly.

Wrong frequency – remember that in the management of heart failure, carvedilol is prescribed twice daily and bisoprolol is prescribed once daily. Check the BNF for details of the dose regimens.

Calculations

1. A dose of 120 micrograms of adrenaline (epinephrine) is required to treat a child of 10 months with anaphylactic shock. How many millilitres of 1 in 1,000 adrenaline (epinephrine) solution will be required?
2. A patient requires 30mg of dihydrocodeine. They are receiving the oral solution which contains 10mg/5ml. How many millilitres are required?
3. A patient requires levothyroxine 75 micrograms. You have levothyroxine 25 microgram tablets as stock on the ward. How many tablets are required to make up the dose?
4. A patient has been prescribed alfentanil 250 micrograms. This product is available as 1mg/2ml ampoules. How many millilitres will be required?

Answers overleaf.

Good housekeeping

There have been reports of blister strips of different tablets or capsules being found in the wrong box. Further review showed that these were not due to dispensing incidents or a defective medicine from the manufacturer but due to well-intentioned 'house-keeping'.

Safety tip:

- If you have a number of boxes of the same medicine in the medicines trolley, don't be tempted to amalgamate these. Return the extra stock to the medicines cupboard.

Did you know?

Rosiglitazone and pioglitazone (thiazolidinediones or 'glitazones'), used in the treatment of type 2 diabetes mellitus, are contra-indicated in patients with cardiac failure or a history of cardiac failure.

Why?

These antidiabetic medicines can cause fluid retention that may exacerbate or precipitate cardiac failure.

Clear as mud!

Medication incident reports sometimes describe occasions where a pharmacist has endorsed or annotated the incorrect generic medicine name on a patient's Kardex. Examples have included:

- Celectol® (celiprolol) endorsed as celecoxib
- Cipralex® (escitalopram) endorsed as citalopram
- Cipramil® (citalopram) endorsed as escitalopram
- Epilim® (sodium valproate) endorsed as phenytoin
- Actonel® (risedronate) endorsed as alendronate or alendronic acid
- Galfer® (ferrous fumarate) endorsed as ferrous sulphate

The majority of endorsements made by pharmacists clarify prescribing and facilitate the safe administration of medicines. However where an annotation is incorrect, this can lead to administration of the wrong medicine or prescribing of the wrong medicine at discharge. Pharmacists should take particular care with:

- brand and generic names that are similar to other medicine names;
- new medicines with which they are unfamiliar; and,
- medicines where they have previously had a 'mental block' with the brand or generic names.

The use of the generic medicine name by prescribers will reduce the need for this type of endorsement. Staff noticing an incorrect annotation should:

- ensure the prescription is rewritten correctly;
- inform the pharmacist; and,
- report the medication incident.

Right tools for the job

Dosing devices, such as pipettes, provided by manufacturers of oral liquid medicines may not always be suitable for accurately measuring all doses. When issuing medicines to patients/carers:

- ➢ Pharmacy staff should check that the dosing device supplied has the necessary markings to measure the prescribed dose. If there are no markings for that dose, supply an oral syringe ensuring it fits the bung.
- ➢ All staff should ensure that the patient/carer understands the dose and can use the dosing device provided. Ask them to show you the dose they will administer.

This may be a particular issue where the prescribed dose is outside of the licensed dose range, for example in paediatrics.

Answers (1) 0.12ml (2) 15ml (3) 3 (4) 0.5ml

We are all aware of lifestyle advice to limit the amount of salt added to food. Patients with hypertension, heart disease and renal failure are often additionally advised to maintain a low sodium diet.

Do you consider the sodium content of certain medicines? The table below outlines the quantity of sodium contained in some antacids, antibiotics and analgesics. Take a look – you may be surprised! Bear in mind, the maximum recommended daily intake of salt for adults is 6g (103mmol sodium) from all sources.

Medicine Type	Examples	Approximate sodium content per day at common daily dose (mmol)
Antacids (tablet and liquid preparations)	Gastrocote®	4-22
	Gaviscon®	8-48
	Gaviscon® Advance	9-18
	Peptac®	25-50
	Rennie Duo®	21-42
	Magnesium carbonate	18
	Magnesium trisilicate	18
Antibiotics (injectable)	Tazocin®	23-28
	Timentin®	48
	Metronidazole	40
	Ciprofloxacin	30-60
	Fluconazole	30
	Synercid®	48
Effervescent tablets	Soluble paracetamol	140
	Soluble co-codamol 8/500	140-150
	Soluble co-codamol 30/500	110-135
	Phosphate-Sandoz®	100

- The BNF indicates where a medicine is known to have a clinically significant sodium content.
- The words 'low Na^+' are added after some antacid preparations in the BNF to indicate a sodium content less than 1mmol per tablet or 10ml dose.
- Effervescent tablets should generally be reserved for patients with swallowing difficulties or where no other preparation exists.

If you have any comments on this newsletter, please contact Sharon O'Donnell, Medicines Governance pharmacist on ext 2600 at Belfast City Hospital or by e-mail at Sharon.odonnell@bch.n-i.nhs.uk.

The Medicines Governance Team website and previous newsletters can be viewed at www.dhsspsni.gov.uk/pgroups/pharmaceutical