DHBNZ Safe and Quality Use of Medicine Group

Look alike sound alike medicines workshop

June 12th 2008, 12.30 to 15.00pm
Conference Room, The Backbencher, Molesworth St, Wellington

Attendees:

Beth Loe (National Coordinator)	Marilyn Crawley (WDHB) (Chair)
Gigi Lim (Auck Univ)	Elizabeth Plant (Taranaki)
Adam McCrae (PHARMAC)	Peter Black (ADHB)
Peter Moodie (PHARMAC)	Tony Fraser (bpac^{nz})
Mary Seddon (CMDHB)	Roy Morris (Otago)
Frances McClure (GP)	Jenny Langton (MOH)
Desiree Kunac (NZPhvC)	Anita Frew (ACC)
Tanya Roth (MOH)	Stewart Jessamine (Medsafe)
Pippa MacKay (RMIANZ)	Debbie Wyber (RMIANZ)
Vanessa Beavis (ANZCA)	Tony Williams (JFICM)
Heather Ann Moodie (ANZCA)	Alan Merry (ANZCA)
Roger Smart (Douglas)	Barbara Moore (Pharmacy Council)
Carolyn Hooper (PDA)	Euan Galloway (Pharm Soc)
Elizabeth Culverwell (IVNO)	Carolyn Johnstone (IVNO)
Sanjoy Nand (Pharmac)	

1. Presentation: Defining the problem – Mary Seddon

Mary presented the background on systems failures and human fallibility giving examples of actual situations and how recurrence could be prevented by putting a forcing function into the system. Emphasis was given to the fact that when an error occurs, individuals could be removed but the risk situation would remain. The result would be that the same error will be repeated.

2. Practical examples – Elizabeth Plant, Marilyn Crawley, Desiree Kunac

Examples of product pairs that have been implicated in selection errors either in the dispensing or administration process were shown for inspection. Please see attached list for the products.
In addition an example of confusing labelling on mixture bottles was presented. This used an actual case involving an overdose of diazepam elixir which was labelled as 10mg in 10mL and which the doctor had mistaken as 10mg in 1mL. The majority of mixtures are labelled as mg per mL or possibly mg per 5mL.

This provoked some discussion about labelling that was particularly difficult to read on ampoules. It was agreed that red lettering was the hardest to read.

3. Problems in theatre – Alan Merry

Alan presented the work he has done on medication safety in theatres. He identified that 41 steps were needed to give an anaesthetic injection in theatre and that if the injections were presented in syringes a lot of these steps would be removed. In a New Zealand study that allowed anonymous reporting of

anaesthetic errors one in every 133 anaesthetic administrations was reported as an error. This study was repeated in the US and the results there indicated that there was an error in 1 out of every 150 anaesthetic administrations. A study has also confirmed that an optimist bias occurs i.e. the majority of anaesthetists believe that errors occur frequently in theatres but they believe that they have not personally made any errors.

A systemic review of anaesthetic practice made five strong recommendations:

- Read the label
- Labels should be checked with a second person or device before a drug is drawn up or administered
- Label legibility is optimised
- Syringes should (almost) always be labelled
- Formal organisation workspace

Alan introduced barcodes and colour coded labelling with the colour related to the purpose of the injection on ampoule labels in theatres at Mercy Ascot Hospital and this has been shown in studies to reduce the incidence of errors.

4. How can the risks be minimised and possible solutions?

Discussion was wide ranging and looked at various possible solutions some suitable for all products, some suitable for ampoules only. The fact that New Zealand is a small country is an advantage in regard to being able to be flexible and innovative in finding a solution to the problem.
Specific suggestions were:

- Greater standardisation of doses so the number of products could be reduced
- Having fly labels on ampoules
- Standardisation of colour codes by type of product
- Requiring the purpose to be stated on both the label and the prescription
- Presenting injections in pre-filled syringes
- Use of tall man letters
- Bar coding of medicines

It was also agreed that a central agency with a proactive approach was needed. Medsafe suggested and agreed to convene a group of experts to consider the risks for any new product.

PRODUCTS WHICH ARE ALIKE AND COULD BE MISTAKEN.

Salbutamol(Asthalin) Nebs –2.5mg & 5mg/Duolin neb-- appearance very similar.

Morphine amps (DBL)-- All strengths- appearance very similar.

Ciprofloxacin Suspensions—strengths very similar in appearance.

Doxepin/Dothiepin oral

Ceftriaxone / Cefotaxime –appearance & strengths

Fentanyl amps/Sodium Chloride 0.9% amps 10ml
(A lot of Aztra Zenaca poly amps are similar in appearance)

Suxamethonium/ pancuronium(Aztra)—appearance
Neostigmine/ Atropine (Aztra)—appearance

Dopamine/Dobutamine Inj

Calcium Chloride/ Calcium Gluconate (DBL) Inj

Acetylcysteine/ Papaverine Inj—appearance

Metoclopramide/ Gentamicin Inj

Candesartan 4 & 8mg Tablets – appearance

Hyoscine hydrobramide/ Hyoscine Butylbromide I.V

Ketamine/ Dexamethasone I.V

Ferrogradumet/ Ferrograd Folic/ Ferrograd C

Heparin Inj –appearance & strenghts

Lignocaine Amps--appearance