

A case series of duplication errors due to brand name confusion – experience from a Sri Lankan teaching hospital

Mamunuwa AMVGN¹, Jayamanne SF^{1,2}, Coombes J^{3,4}, Lynch CB³, Perera DMP^{1,5}, Pathiraja VM¹, Shanika LGT¹, Mohamed F^{1,6}, Dawson AH^{1,7}.

¹ South Asia Clinical Toxicology Research Collaboration

² Faculty of Medicine, University of Kelaniya, Sri Lanka

³ Princess Alexandra Hospital, Australia

⁴ University of Queensland, Australia

⁵ Austin Health, Australia

⁶ Faculty of Allied Health Sciences, University of Peradeniya, Sri Lanka

⁷ Royal Prince Alfred Clinical School, University of Sydney, Australia

Introduction and objectives: Confusion with drug names has been identified as a leading cause of medication errors. The majority of these errors result from look-alike or sound-alike drugs. This case series aims to provide examples of duplication errors due to brand confusion where there are no similarities in names.

Method: Information for this case series was extracted from a database prospectively collected from Colombo North Teaching Hospital as part of a study conducted to evaluate the impact of the addition of a clinical pharmacist to the standard inpatient care.

Results: Of 800 patients reviewed during the study period of 7 months, clinical pharmacist identified 8 cases of duplication errors due to prescribing generic and brand names of the same drug, but with no similarities in name. Cases identified include duplication of frusemide caused by the lack of awareness that “Amifru” (a combination of frusemide and amiloride) contains frusemide. Similarly, a patient was prescribed ‘H Pylori Kit’ plus the three individual drugs included in the ‘Kit’ prescribed using their generic name. A patient was found to be taking 2 different brands of carbidopa and levodopa not knowing the two contained the same drugs.

Conclusion: Brand confusion does not necessarily arise from look-alike or sound-alike drug names. It can be due to various brands of generic ingredients and lack of awareness of drug names among the patients. Employing trained clinical pharmacists in the wards, educating patients on discharge drugs, and appropriate labelling of medicines may prevent these errors.

A CASE SERIES OF DUPLICATION ERRORS DUE TO BRAND NAME CONFUSION - EXPERIENCE FROM A SRI LANKAN TEACHING HOSPITAL

Mamunuwa AMVGN¹, Jayamanne SF^{1,2}, Coombes J³, Lynch CB⁴, Perera DMP^{1,5}, Pathiraja VM¹, Shanika LGT⁶, Mohamed F^{1,6}, Dawson AH^{1,7}

¹South Asian Clinical Toxicology Research Collaboration, Sri Lanka, ²Faculty of Medicine, University of Kelaniya, Sri Lanka, ³Princess Alexandra Hospital, Australia, ⁴University of Queensland, Australia, ⁵Austin Health, Australia, ⁶Faculty of Allied Health Sciences, University of Peradeniya, Sri Lanka, ⁷Royal Prince Alfred Clinical School, University of Sydney, Australia

INTRODUCTION

Confusion with drug names has been identified as a leading cause of medication errors.

The majority of these errors result from look-alike or sound-alike drug names.^{1,2}

However, brand confusion may occur without similarities in names³.

OBJECTIVES

This case series aims to provide examples of duplication errors due to brand confusion where there are no similarities in the names.

METHOD

Information was extracted from data prospectively collected from Colombo North teaching hospital as part of a study conducted to evaluate the impact of the addition of a clinical pharmacist to the standard inpatient care.

RESULTS

Of 800 patients reviewed during the study period of 7 months, clinical pharmacists identified 8 cases of duplication errors due to drug name confusion, but with no similarities in names



CASE 1

52 year old male (alcoholic cirrhosis) patient with painful breast enlargement on spironolactone 100mg bd & frusemide 40mg bd

Gynaecomastia, a well known adverse drug reaction to spironolactone was suspected

A senior doctor on the ward ceased spironolactone and frusemide

Commenced 'Amifru' (a combination of 40mg frusemide and 5mg amloride).

The discharge prescription included frusemide 40mg twice daily, spironolactone 100mg twice daily plus 'Amifru' 1 tablet twice daily

Duplicating diuretics can result in patient harm from over-diuresis. Continuing spironolactone could have resulted in worsening gynaecomastia and/or hyperkalaemia in the context of adding amloride.

This patient, being in the intervention arm, received clinical pharmacy services. Thus, this issue was identified and communicated to the prescriber before discharge by the clinical pharmacist.

CASE 2

71 year old male patient, admitted for esophago-gastro-duodenoscopy (OGD) showed evidence of gastric ulcers

The gastroenterologist recommended 'H. Pylori kit' twice daily for two weeks followed by omeprazole 20mg twice daily.

The patient was given a prescription for this 'Kit' prior to discharge. The 'kit' included amoxicillin, metronidazole and omeprazole

The discharge prescription also included the three drugs in the 'Kit' prescribed generically

During the follow up phone call conducted six days after discharge, as part of the clinical pharmacy study, it was found that the patient was taking the 'H. Pylori Kit contents' plus the three individual drugs concurrently.

This could potentially result in worsened side effects, particularly gastrointestinal effects and is also an unnecessary cost to the patient.

No pharmacist intervention was made at discharge as this patient was in the control arm and therefore was not reviewed by the clinical pharmacist as an in-patient

CASE 3

An 85 year old male patient with a history of Parkinson's disease, admitted with decreased level of consciousness and impaired speech.

Whilst obtaining the medication history from the carer, the clinical pharmacist identified that the patient had been taking two brands of levodopa 250mg/ carbidopa 25mg ('Tidomet' and 'Syndopa').

The carer was not aware that the two drugs were equivalent

This misadventure resulted in a doubling of the prescribed dose and the potential for increased side effects.

CONCLUSION

Brand confusion does not necessarily arise from look-alike or sound-alike drug names. It can be due to numerous brands of generic ingredients and lack of awareness of drug names among the patients.

EMPLOYING TRAINED CLINICAL PHARMACISTS IN THE WARDS,

EDUCATING PATIENTS ON DISCHARGE DRUGS

APPROPRIATE LABELING OF MEDICINES

may help preventing these errors.

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REFERENCES

- Rataboli P.V., Garg A. Confusing brand names: Nightmare of medical profession. *J Postgrad Med* 2005; 51(1): 13-16
- Joshi M.C., Joshi H.S., Tariq K. A prospective study of medication errors arising out of look-alike and sound-alike brand names confusion. *The International Journal of Risk and Safety in Medicine* 2007; 19: 195-201
- Bramely D. E. P. The ability of anaesthetists to identify generic medications from trade names. *Anaesthesia and Intensive Care* 2009; 37(4): 624-629

