

Research Article



Nightmare of Pharma Profession: Confusing Brand Names

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ABSTRACT

India's pharmaceutical industry is now the third largest in the world in terms of volume. The Indian Pharmaceutical sector is highly fragmented with more than 20,000 registered units. With tens of thousands of drugs currently on the market, the potential for error due to confusing drug names amongst the practicing doctors, pharmacists and patients is significant. Many of the brand names were similar looking (orthographic) and similar sounding (phonetic). Any reports of confusing brand names should be taken seriously and renaming their product should be considered.

Keywords: Pharmaceutical industry, prescription errors, brand names.

INTRODUCTION

India's pharmaceutical industry is now the third largest in the world in terms of volume. The Indian Pharmaceutical sector is highly fragmented with more than 20,000 registered units. Following the delicensing of the pharmaceutical industry, industrial licensing for most of the drugs and pharmaceutical products has been done away with. Manufacturers are free to produce any drug duly approved by the Drug Control Authority.¹ With this growth, various drugs with catchy brand names have been introduced.

With tens of thousands of drugs currently on the market, the potential for error due to confusing drug names amongst the practicing doctors, pharmacists and patients is significant. Confusion over the similarity of prescription and over-the-counter (OTC) drug names has accounted for as many as 25% of all reports to the United States Pharmacopeia Medication Errors Reporting (USP MER) Program.²

The proposed names are subjected to pre-approval screening by the pharmaceutical manufacturers to various organizations like US Pharmacopeia (USP) and US Food and Drug Administration (US FDA). Numerous case reports and studies have thrown light on the confusion over similar drug names.³⁻¹⁰ Despite these efforts, new names that are similar to the existing names continue to be approved.

We carried out the study to isolate confusing brand name products, which are used currently in the Indian market and to describe potential effect of this confusion on the therapeutic success.

MATERIALS AND METHODS

Recent issues of commonly used drug formularies i.e. Indian Drug Review (IDR) (May-June, 2012), Drug Today (April-June 2014) and Monthly Index of Medical Specialties (MIMS)- India (June 2013, March-2014) were referred to and the brand names included in them were analysed. Some other brand names available with the pharmacists but not included in these two formularies were also checked. Same name (identical), similar-looking (orthographic), and similar-sounding (phonological) names that could cause confusion among the prescribing doctors and dispensing pharmacists were sorted out.

They were then divided into four categories and the risk-benefits of wrong prescribing and dispensing to the patients, doctors, pharmacists, and the drug manufacturers were assessed.

RESULTS

Many of the brand names were similar looking (orthographic) and similar sounding (phonetic). The brand names were divided into four categories based on their effect on therapeutic success.

Table 1: (Category-I) Look-alike brand names, different generic names, different manufacturers

Brand name	Generic name	Manufacturer
Acem	Clarithromycin	Emcure pharm Ltd
Acein	Enalapril	Targof pure Drugs Ltd
Adcom	Telmisartan	Intel Pharma
Adcon	Fluconazole	Admac
Alparazole	Alprazolam	Laborate
Adprazole	Omeprazole	Admac
Alflox	Norfloxacin	Alkem
Alfox	Oxcarbazepine	Medi Health



Amsat	Ampicillin	Vensat
Amset	Amlodipine	Pulse
Azoo	Azithromycin	Group Pharmaceuticals
Azox	Alprazolam	Aarpik remedies
Benzol	Danazol	Solitaire
Benzole	Albendazole	Flamingo
Bromolin	Amoxycillin	Cipla
Bromotin	Bromocriptine	RPG LS
Celib	Celecoxib	Unichem Lab Ltd
Celin	Vitamin-C	Glaxo Smithkline
Cetapin	Metformin	Hoechst-Marion-Roussel
Setalin	Sertraline	La Pharmaceuticals
Clomin	Dicyclomine + Paracetamol	Core Healthcare
Clomip	Clomipramine	Reliance Formulations
Colax	Sodium picosulfate	Strassenburg Pharmaceuticals
Zolax	Alprazolam	Intas Laboratories
Coxib	Celecoxib	Brown&Burk Pharmaceuticals
Coxid	Rifampicin	Aristo Pharma
Dialox	Tinidazole	Aglowmed
Diamox	Acetazolamide	Wyeth
Dazolic	Ornidazole	Sun
Dazolin	Sertraline	Daksh
Dan	Diclofenac	Unison Pharma
Dax	Cefadroxil	DWD Pharm
Depik	Imipramine	Aarpik
Depin	Nifedipine	Zydus Cadila
Doxin	Dothiepin	Intas Laboratories
Spoxin	Sparfloxacin	Medley Pharmaceuticals
Eltocin	Erythromycin	IPCA Lab Ltd
Eltroxin	Thyroxine	Glaxo Smithkline
Eracef	Ceftriaxone	Brawn Laboratories
Evacef	Cefotaxime	Neon Laboratories
Farizym	Enzymes	Infar
Farigyn	Tinidazole	Pfizer Ltd
Felix	Cefpodoxime	Positif
Feliz	Citalopram	Torrent
Flex	Ofloxacin	Siomond
Flexi	Ondansetron	Adley
Flumed	Fluconazole	Indon Pharmaceuticals
Flumet	Phenylephrine containing cold preparation	Shaimil Laboratories
Flunat	Fluoxetine	Sun
Flunaz	Fluconazole	BMV
Glz	Gliclazide	Alembic Chemical Works
Glez	Glipizide	Aristo Pharma
Glucar	Acarbose	Glenmark
Glucart	Glucosamine	Juggat
Glyred	Gliclazide	Novartis

Glyrep	Metformin	Emcure Pharm Ltd
Hycin	Roxithromycin	Saga Labs
Hymine	Albendazole	Intra Labs
Lodol	Haloperidol	Symbiosis
Lodoz	Bisoprolol	Merck
Lorvan	Lorazepam	Cipla
Lorvas	Indapamide	Torrent
Neosaid	Nimesulide	Blue Cross Laboratories
Nemocid	Pyrantel pamoate	Ipca Laboratories
Norten	Propranolol	Baroda
Nortin	Nortriptyline	La Pharma
Ocimix	Ciprofloxacin/O rnidazole	Panacea
Ocimax	Omeprazole	Pidek
Odace	Lisinopril	Alidac Genetics & Pharmaceuticals
Olace	Olanzapine	La Pharmaceuticals
Oraxim	Cefuroxime	Lark Laboratories
Oraxin	Cyproheptadine containing 'tonic'	Centaur Laboratories
Pronim	Nimesulide	Unichem Lab Ltd
Pronil	Fluoxetine	PIL Pharmacia India Ltd
Rinitrin	Cetirizine	Sigma Laboratories
Ranitin	Ranitidine	Torrent Laboratories
Rispod	Cefpodoxime	Symbiosis
Rispond	Risperidone	Microsynapse
Sinopil	Lacidipine	GlaxoSmithKline
Sinopril	Lisinopril	Themis Pharmaceuticals
Tibitol	Ethambutol	PCI
Tobitil	Tenoxicam	Ranbaxy Lab Ltd
Topdep	Citalopram	Orchid
Topdip	Amlodipine	RPG LS
Trip	Nortriptyline	Pfizer Ltd
Triz	Cetirizine	Indoco Remedies Ltd
Wincid	Omeprazole	Wings Pharmaceuticals
Wincip	Ciprofloxacin + Tinidazole	RPG Life Sciences
Wormin	Mebendazole	Cadila Pharma
Wornil	Albendazole	Mount Mettur Pharma
Wypan	Pantoprazole	YACCA
Wypar	Nimesulide	YACCA

Table 2: (Category-II) Look-alike brand names, different generic names, same manufacturer

Brand name	Generic name	Manufacturer
Bioclox	Clarithromycin	Biochem
Biodoxi	Doxycycline	Biochem
Clomine	Clomipramine	PIL
Clozine	Chlorpromazine	PIL
PD-Mox	Amoxycillin	Parenteral
PD-Rox	Roxithromycin	Parenteral
Zyrof	Rofecoxib	Zydus
Zyrop	Erythropoietin	Zydus

Table 3: (Category-III) Look-alike brand names, same generic names, different manufacturers

Brand name	Generic name	Manufacturer
Ceftrion	Ceftriaxone	Claris Life
Ceftron	Ceftriaxone	Inga Lab.Pvt Ltd
Diclofen	Diclofenac	Biochem
Diklofen	Diclofenac	Stadmed Pvt Ltd
Ena	Enalapril	Menarini Raunak Ph. Ltd
Enam	Enalapril	Dr.Reddy's Lab Ltd
Oflex	Ofloxacin	Finecure
Oflox	Ofloxacin	Protec
Aflox	Ofloxacin	Anikem Lab
Taxim-O	Cefixime	Alkem Lab Ltd
Axim-O	Cefixime	Kee Pharm Ltd

Table 4: (Category-IV) Sound-alike brand names different generic names, different and same manufacturers

Brand name	Generic name	Manufacturer
Allerzine	Cetirizine	Jenburkt Ltd
Alergin	Ephedrine+Theophylline	Cipla Ltd
Hemsi	Ferrous fumarate	Serum International
Hemsyl	Ethamsylate	Indoco Remedies
Mala-D	OCP	Unicure Remedies Pvt Ltd
Maladine	Mepacrine	Unicure Remedies Pvt Ltd
Oceph	Cefixime	Emcure Pharm Ltd
Ocef	Cephalexin	Osper

DISCUSSION

The four categories of confusing brand names listed above present a bird's eye view of the difficulties posed by the prescribers and dispensers due to exactly identical, look-alike and sound-alike names. Needless to say, the names mentioned above are just the 'tip of the iceberg' and there could be many more confusing brand names available in the Indian and the world drug market.

Categories I, II, IV pose a very high danger to the prescribing doctors, pharmacists, and patients. A slight deviation of legibility on the part of the prescribing doctor or lack of observation and careless attitude of the dispensing pharmacists can cause serious damage or injury to the patient.

Although Category III listed above appears harmless to the consuming patients, it is of definite concern to the practitioners and manufacturers. A new manufacturing company often competes with a reputed brand by giving a similar name to its drug.

Most of these recommendations are quite far-fetched and remote and may take time before they are actually put into practice. Therefore, considering the Indian scene,

we propose a few simple and immediate steps to prevent brand name confusion:

The Practitioner

Doctors should be well-versed with pharmacological (generic) names and the brand names that are available in their local setting. We should try to write drugs in legible handwriting. Although 'legibility' is something 'impossible' for most of us, a tip can be very helpful.

The Dispenser/Pharmacist

The pharmacists should be wholly convinced about the nature of the brand they are dispensing. If there is any doubt about the name, they should not hesitate to consult the prescribing doctor before dispensing. It is always desirable for the pharmacist to have knowledge of the doses of commonly used drugs. It is observed that many times they dispense the brands available at their shop rather than what is written in the prescription. This practice should stop.

The Patient

A literate patient can himself check if the dispensed product is 'exactly the same' as per the doctor's prescription. He should bring to the notice of the pharmacist in case of any doubt and refuse to accept any variations being handed over. Illiterate patients should make it a habit to verify the dispensed drug with the doctor or any literate person at home or in the neighbourhood.

The Manufacturer

Now is the time when the manufacturing companies should also join hands in the battle against this common enemy. They should do a thorough check about the available brand names before naming their product. Any reports of confusing brand names should be taken seriously and renaming their product should be considered.^{11,12}

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