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The impact of unprofessional behaviour on patient safety in South Africa: two cautionary tales

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Abstract

In terms of the Rules relating to the Code of Conduct, every pharmacist's prime concern in the performance of his/her professional duties must be for the wellbeing of both the patient and other members of the public. A pharmacist must uphold the honour and dignity of the profession and may not engage in any activity which could bring the profession into disrepute.

Pharmacists engaging in unprofessional conduct or conduct where their regard for their profession is disrespectful, may be involved in activities such as the selling of counterfeit medicines, dispensing medication without prescription, and selling excessive quantities of medicines liable for misuse or abuse, i.e. drug trafficking. These actions can be attributed to factors such as financial incentives, inadequate training, or personal challenges, none of which are acceptable. These pharmacists are viewed as rogue pharmacists with severe implications for patient safety and significant risk of bringing the profession into disrepute.

There are also instances where pharmacists make dispensing errors, supplying incorrect medicines, incorrect strength of medicines or incorrect dosage instructions. These errors are generally inadvertent but can obviously have a negative impact on patient safety. As the custodian of medicine, it is crucial that the pharmacist makes every effort to prevent medication errors. Pharmacists must be aware of areas where the chances of dispensing errors are high, especially those caused by look-alike sound-alike (LASA) medications, as they can lead to adverse reactions or even death. Preventing LASA medication errors requires awareness, generic prescribing, pop-up alerts in computer systems, eye-catching labels and warnings, patient education, and the establishment of process and outcome measures. Pharmacists can also organise high-risk LASA drugs on separate shelves and implement double-checking systems for accuracy when dispensing medications. Dispensing errors can have severe consequences for the pharmacist, including monetary fines, registration suspension or removal, and public scrutiny.

The misuse and abuse of codeine-containing medications pose significant health risks and pharmacists play a crucial role in harm reduction. Measures to address codeine overuse, misuse and abuse include enhanced regulatory measures, public health interventions, surveillance, training, and education. Without some form of centralised database, it is very challenging for a pharmacist to manage this problem as individuals utilise different pharmacies and their medication history is not linked. To address this problem, pharmacists can participate in initiatives such as the Codeine Care Initiative, a centralised data base of codeine-containing medicine use. This allows the monitoring of frequent purchasers of codeine and gives the pharmacist an opportunity to address codeine misuse at the point of dispensing.

Keywords: unprofessional behaviour, patient safety, Code of Conduct

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Introduction

Unprofessional conduct by pharmacy professionals in pharmacy poses a significant challenge to the healthcare system in South Africa. These professionals engage in misconduct by dispensing unsafe or counterfeit medicines, selling excessive quantities of dangerous drugs, and dispensing medications without proper oversight or scrutiny.[1] Inadequate regulation has created an environment where rogue pharmacists can operate unchecked, leading to serious public health concerns.[2] Additionally, the shortage of pharmacists in South Africa, with a ratio of one pharmacist for every 23 375 people, complicates the monitoring and regulation of pharmacists' activities, especially in underserved areas.[3] As a point of interest, the World Health Organization (WHO) guidelines state that the ideal ratio should be one pharmacist for every 2 000 persons.[4]

The impact of unprofessional conduct is further exacerbated by the prevalence of counterfeit drugs distributed through illegal online pharmacies.[2] Unprofessional conduct includes dispensing unsafe or counterfeit medicines, dispensing without a prescription, and selling excessive quantities of dangerous medicines.[5] This not only poses a significant risk to patient safety, but also contributes to the development of drug resistance and has led to a substantial number of deaths, particularly in low- and middle-income countries, including those in Africa.[2] The lack of accountability and the potential for purchasing stolen or counterfeit drugs from these online sources further compound the challenges faced by regulatory bodies and healthcare providers in South Africa.[2,6]

Various actions may contribute to pharmacists engaging in unprofessional conduct, factors such as financial incentives, inadequate training, or personal challenges. These actions can be considered misconduct and/or unprofessional behaviour. Examples of such behaviour include participating in illegal activities like selling medications without prescriptions, or engaging in drug trafficking, and dispensing medications without proper oversight or scrutiny.[5,7,8]

Codeine use in South Africa

The overuse, misuse, and abuse of codeine in South Africa presents significant health risks for the public, and pharmacists play a crucial role in mitigating the associated risks. Codeine, a short-acting opiate, is commonly used to treat mild to moderate pain, as well as coughs and diarrhoea. However, its sedating and euphoric effects make it susceptible to abuse, placing the onus of harm reduction on pharmacists, who are often the first point of contact for over-the-counter (OTC) codeine-containing medicines.[9-11] The misuse and abuse of OTC codeine-containing medications is of growing concern, with the accessibility of these drugs and their potential for psychological dependence and harm from overuse prompting calls for enhanced regulatory measures and public health interventions. Case study 1 highlights the experience of a 32-year-old construction worker who became addicted to Stilpane® capsules, prescribed for postoperative pain relief following a work-related injury.

Case 1 – A case study of codeine addiction and prescription fraud

A 32-year-old hardworking construction worker had been prescribed Stilpane® capsules (containing codeine, meprobamate and paracetamol) for postoperative pain relief following a work-related injury.

As time went on, he found himself needing higher doses of Stilpane® to achieve the desired pain relief which then led to unintended euphoric effects. Eventually, he began to misuse Stilpane®, taking it even when he was not in pain, solely to experience its mood-altering properties. This misuse led to dependence and a full-blown addiction, with his life becoming centred around obtaining and using Stilpane®. He started looking for any codeine-containing products that could be obtained OTC. However none of these products gave him the same euphoric effect as Stilpane®.

Facing challenges in obtaining Stilpane® through legitimate means, he resorted to forging prescriptions to maintain his supply. He would imitate the handwriting of healthcare professionals, create fraudulent prescription pads, and manipulate pharmacy records to obtain Stilpane® illegally. This led to dependence on the drug and a cycle of ever-increasing Stilpane® consumption as he sought to prolong these pleasurable effects.

As his addiction deepened, he faced significant challenges within his personal and professional life. He began to prioritise obtaining Stilpane® over his responsibilities at work, resulting in decreased productivity and strained relationships with colleagues. Financial strain also emerged as he spent a substantial portion of his income purchasing Stilpane® illegally through the illicit market when his prescription ran out.

He realised that he needed help but faced several barriers when attempting to find help for his addiction. Limited access to addiction treatment resources, such as specialised rehabilitation centres and addiction support groups, made it difficult for him to find support and the appropriate assistance he needed. Additionally, societal stigma surrounding addiction hindered him from openly discussing his struggles, leading to feelings of isolation and despair.

Research has indicated that easy access, infrequent refusal, standard questioning, and limited interventions by pharmacists have contributed to the misuse of OTC codeine-containing medicines. Furthermore, reports have highlighted instances of unprofessional conduct by pharmacists selling OTC codeine-containing medicines to patients without providing adequate pharmaceutical care. This deviant behaviour is particularly concerning given the trust placed in pharmacists to improve and assist with patient health outcomes, as outlined in their code of conduct and ethical rules.[12]

Despite legislative measures, such as the stipulation of the maximum recommended dose in the Medicines and Related Substances Act 101 of 1965, codeine misuse and abuse continue to be of growing concern in South Africa.[9,13] A comparative analysis of pharmacists' perspectives on codeine use and misuse in South Africa, Ireland, and the UK revealed that the majority of participants saw codeine misuse as a public health issue, with a high proportion of South African participants expressing the need for greater codeine control.[14]

The misuse of codeine is a significant public health issue, particularly concerning OTC pain and cough relief medication. In South Africa, OTC preparations containing 20 mg or less of codeine per dosage unit can be sold without a prescription under the supervision of pharmacists, with sales required to be recorded in the pharmacy. However, the regularity of purchase of these products, indicative of their popularity, may also be a potential indicator of misuse.[14]

Considering these challenges, there is a need for comprehensive measures to address codeine misuse and dependence in South Africa, including enhanced surveillance, revised scheduling, and increased awareness among healthcare professionals and the public about the potential risks associated with codeine misuse. Furthermore, efforts to strengthen the addiction treatment sector and provide appropriate training for dealing with codeine-related problems are essential to effectively tackle this issue.[15]

Pharmacists in South Africa can help reduce codeine misuse by implementing several measures. Firstly, they can participate in the Codeine Care Initiative, which identifies at-risk patients and educates pharmacists on the issue.[15,16] Pharmacists can also monitor patients who frequently request excessive amounts of codeine, using their professional judgement to identify potential

misuse. This proactive approach is crucial in addressing the global public health concern around codeine dependence.[15,16] Therefore, pharmacists would benefit from enhanced training and education to effectively address codeine misuse and dependence.[15,16]

Case 2 – A case study of look-alike sound-alike (LASA) medications: Cyclogest® and Cytotec®

Preventing dispensing errors is essential for patient safety and preventing negative outcomes in health care. These errors can occur for several reasons, including similar-looking and -sounding medications, improper labelling, inadequate staffing, and lack of training, or oversight. The confusion caused by LASA medications can lead to serious consequences for patients, such as adverse reactions, prolonged hospital stays, or even death.[17]

LASA medications are drugs that resemble other medicines dispensed by healthcare professionals. This can lead to confusion and errors, as these medications have similar names, packaging, appearance, and mode of administration. Studies have shown that LASA medications account for a significant portion of medication errors, with 4% considered near misses and a range of 6.2% to 14.7% documented.[17] Some of these errors have resulted in serious harm and even death. Case 2 highlights the importance of preventing LASA medication errors in health care and the need for healthcare providers and pharmacists to be vigilant in differentiating between LASA medications to ensure patient safety.

Case 2 exemplifies the serious consequences of medication errors in health care. Underscoring the need for a comprehensive approach to medication safety, including measures to prevent LASA medication errors by addressing these challenges, healthcare systems can work towards minimising the occurrence of medication errors and safeguarding patient well-being.

To prevent and address LASA medication errors, pharmacists can adopt the following strategies:[18]

- *Awareness of LASA medications:* Healthcare professionals and organisations should be aware of problematic drug names and maintain a comprehensive list of confused drug names, including look-alike and/or sound-alike medication names (Refer to Table I).
- *Prescribing medications by their generic names:* Prescribing medications by their generic names can help reduce confusion and minimise the risk of LASA medication errors.
- *Installing pop-up alerts in computer systems:* Implementing pop-up alerts in computer systems can help healthcare professionals identify potential LASA medication errors and prevent them.
- *Placing eye-catching labels and warnings:* Using eye-catching labels and warnings on medications can help healthcare professionals and patients distinguish between similar-looking medications.
- *Patient education:* Educating patients about common errors and encouraging them to question medications that look different than expected can help detect LASA medication errors. Furthermore, including the indication on a prescription has been suggested as a potential intervention to impact prescribing practice and reduce the risk of dispensing errors.
- *Mandatory patient education:* Requiring mandatory patient education in outpatient settings before dispensing a medication with a problematic look-alike and/or sound-alike name can help ensure that patients are aware of the potential risks.
- *Opening prescription bottles with patients:* When possible, opening the prescription bottle with the patient to visually confirm the expected medication can help prevent LASA medication errors.
- *Establishing process and outcome measures:* Collecting data periodically to assess the effectiveness of LASA medication error prevention strategies and implementing process and outcome measures can help improve patient safety.
- *Inventory management:* Organise the pharmacy's high-risk LASA drugs on distinct shelves.[19] To minimise these risks, implement guidelines or standard operating procedures.[19]
- *Systems in place:* Dispensers should implement a rigorous double-checking system to ensure accuracy when dispensing medications. This includes verifying the name and strength of the medication. Patient counselling can also help identify any discrepancies. Furthermore, a built-in scanning system can be used to confirm that the dispensed medication matches the one captured in the system, providing an additional layer of security.

Table I: Similar sounding drugs

Drug name	Confused drug name
Accuretic	Amiloretic
Allergex	Aterax
Arycor	Aspavor
Casodex	Bisodex
Brexicam	Brazepam
Cardicor	Concor
Cefoxitin	Cefotaxime
Cefotaxime	Ceftriaxone
Cortaject	Caverject
Ciprobay	Cipralex
Cytotec	Cyclogest
Diflucan	Diprivan
Diovan	Zyban
Doribax	Dobutrex
Diprivan	Ditropan
Dormicum	Dormonoct
Humalog	Humulin
Hydralazine	Hydroxyzine
Keppra	Kaletra
Lasix	Losec
Nifedipine	Lexamil
Solu-Cortef	Nomodipine
Streptomycin	Solu-Medrol

Tertroxin	Streptase
Tertroxin	Eltroxin
Tobrex	Diotroxin
Taziject	Tobradex
Xatelto	Tazobax
Xefo	Xyzal
Tienam	Zofer
Ivedal	Invanz
Cardicor	Winthrop clopidogrel
Macaine with adrenaline	Concor
Cefazolin	Macaine with dextrose
Cefazolin	Ceftriaxone
Sabax metoclopramide	Cefuroxime
Stilamin	Sabax Magnesium Sulphate
Solu-Medrol	Sandostatin
Diflucan	Depo-Medrol
Tareg	Dalacin-C
Heparin	Tegretol
Cefazolin	Adrenaline
Cyklokapron	Cefuroxime
Solucortef	

In South Africa, as in other countries, it is essential for pharmacies to implement measures to reduce the risk of dispensing errors, including the use of technology, staff training, and standardised procedures for dispensing medications to mitigate the probability of dispensing LASA medicines incorrectly.

The impact of dispensing errors: understanding the consequences

Over and above the potential civil litigation and the costs associated with medical malpractice, there are also the professional misconduct consequences in terms of the Rules relating to acts or omissions for which the Council may take disciplinary steps[20] ([GNR. 599, published on 31 March 1989] read together with Section 45 of the Pharmacy Act, 53 of 1974).[21] In the case of dispensing errors, and related to the LASA case study, the consequences can be a high fine of R25 000 per charge, the suspension of registration or removal of registration. One must also bear in mind that when the dispensing error is by a pharmacist's assistant, the responsible pharmacist and/or supervising pharmacist is also held liable for the dispensing error as well as other collateral charges relating to a lack of implementation of systems to mitigate dispensing errors (responsible pharmacist), the lack of supervision of pharmacy support personnel (responsible pharmacist or supervising pharmacist), and persons acting outside their scope of practice (pharmacist's assistant dispensing without consulting the supervising pharmacist).

Serious dispensing errors and dispensing errors caused by gross negligence may result in the matters being referred to the Committee of Formal Inquiry (CFI). When this happens, the outcome of a guilty finding is published on public forums such as the SAPC website.[22] These guilty judgements remain against a person's name for a minimum of five years, which means that such person is not professionally in good standing with the SAPC.

Conclusion

The consequences of pharmacists engaging in unprofessional conduct can be severe, causing patient harm and subsequent legal implications. Dispensing errors, including dispensing the wrong medication and providing incorrect dosages or directions for administration, are also of significant concern as they can result in adverse drug events causing morbidity or even mortality. It is essential for pharmacists to implement measures to prevent such errors, particularly those caused by LASA medications. To address this, various measures such as awareness, vigilance, generic prescribing, pop-up alerts in computer systems, eye-catching labels and warnings, patient education, and establishing process and outcome measures are crucial. Additionally, pharmacists can play a pivotal role in preventing medication errors by organising high-risk LASA drugs on separate shelves and implementing double-checking systems for accuracy when dispensing medications. Furthermore, the overuse, misuse and abuse of codeine-containing medications pose significant health risks, and pharmacists can contribute to harm reduction through enhanced regulatory measures, public health interventions, surveillance, training, and education. It is imperative to recognise the potential legal and ethical implications of medication errors and to prioritise patient safety through comprehensive measures and ongoing professional development.

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