

Burnout and the potential ethical implications of whistleblowing in South Africa: a conjecture of the potential impacts on the practice of pharmacy.

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Abstract:

Burnout condition is prevalent in the workplace, with potentially higher rates occurring in individuals working in the healthcare sector and during the COVID19 pandemic. It has been shown to result in healthcare practitioners making medical errors that result in the death of patients or permanent disability in patients. Within the scope of pharmacy, burnout could result in the provision of inadequate pharmaceutical care. In South Africa, the scope of practice of a pharmacist's is embedded in the Good Pharmacy Practice, the South African Pharmacy Council and the Pharmacy Act. Inadequate pharmaceutical care has been associated with increases in adverse drug reactions as well as increased hospitalisations due to medicine errors. Under the conditions of the COVID19 pandemic, healthcare provision often took place while facing resource shortages and placing healthcare professionals in ethically challenging situations. Plans should be put in place to ensure that disclosures can be made within all facets of pharmacy should staff experience burnout to ensure that patient safety is always adhered to, and adequate pharmaceutical care is always provided to patients. Staff working in all different sectors of pharmacy should be made aware of the different Acts that protect them should they choose to make disclosures in the workplace. Purpose of this paper is to discuss burnout, its potential role it plays in whistleblowing and adequate provision of pharmaceutical services and care. Similar considerations should be applied to the laws that protect individuals who choose to become whistleblowers.

Keywords: *Burnout, Pharmaceutical care, whistleblowing, Protected Disclosures Act, Protection Against Harassment Act, Labour Relations Act.*

Introduction

Pharmacist role in patient care and the general ethical implications

At the professional level, pharmacy is not a static field and the conduct and other rules for pharmacists in the healthcare profession are in permanent state of flux [1]. Throughout history, the roles and responsibilities of pharmacists have moved from the primary and only focus on dispensing and compounding of medicines towards the provision of pharmaceutical care to patients [1,2]. Helper and Strand (1990) have defined pharmaceutical care as “the responsible provision of drug therapy for the purposes of achieving definite outcomes that improve a patient’s quality of life” (Helper & Strand, 1990, p. 534; [3]). The movement in the professional mandate demonstrates, at least in part, the refocusing of the roles of pharmacists from a mandate dispensing-oriented towards a more patient-focused one. The focus on patients shows that the correct and responsible provision of medicine therapy, along with lifestyle modifications required for the attainment of desired health outcomes, constitute collaboration between the patient and the pharmacist [4]. The more individualised and patient-centred philosophy of the pharmacy profession has its roots in the efforts in addressing the poor outcomes associated with drug-induced morbidities that occurred as a result of errors associated with dispensing-focused or depersonalised health care systems [3,5].

Inadequate pharmaceutical care can result in the improper use of medicines, leading to severe adverse drug reactions which may require hospitalisation, result in permanent disability or even death [5-7]. Adequate pharmaceutical care results in less medicine errors during dispensing as well as means for reporting and recording any adverse drug reactions along with a recall process should it be required [5]. According to Worley et al (2007, [2]), novel parts of the pharmacist’s professional mandate has started to include increased focus on communication and positive reactivity to their patients. Optimal patient outcomes are obtained when pharmacists work side by side with other healthcare professionals [8].

Although the definition of pharmaceutical care, coined by Helper and Strand, has been used for 30 years, a spectrum of definitions has been adopted in different countries [9]. Such definitions have ethical implications, when discussing and considering the pharmacist's professional mandate and the patient-pharmacist relationship, with the pharmacist functioning as a healthcare provider.

As healthcare professionals, pharmacists are bound by a code of conduct that put the patient at the centre of their ethical considerations. Ethics are the set of principles that help us determine what behaviours are beneficial or detrimental to the existence of human beings [10] therefore ethics in health care specifically refer to applied ethics that focus on the moral decision making with regards to the practice of medicine [11]. The principles that govern healthcare ethics include:

- i. "Autonomy - in the clinical setting this is defined as the patient's moral right to determine what is best for their own health" [11, 12] and practically "this is determined on the basis that the patient is free from any form of coercion and patient is competent enough to make a decision" [13];
- ii. "Non-maleficence - is derived from the oath of Hippocrates that states 'first do no harm' and in the context of a clinical setting would be actions taken by the health care practitioners that refrain from harming the patient" [11-13] "i.e. anything act that worsens the patient's condition such as pain or discomfort" [13];
- iii. "Beneficence - this makes up the other part of Hippocrates oath 'only do good' to define beneficence as acts that aim to maintain and improve the health of patients which is what all actions by health care providers' (HCP) should be based on" [12,13];
- iv. "Justice - this is the extent to which healthcare was provided fairly, more specifically to answer the questions were fair procedures followed and were the resources distributed in a fair manner?" [11-13].

Healthcare ethics are important because they affect the entire population as they determine health provision in terms of how patients are treated and how their well-being is prioritized [11]. By understanding the ethical principles in the pharmacy professional settings, it is possible to achieve an understanding and to draft for the HCP to continue in the development of good working and trustworthy relationships with their patients, as well as to contribute towards protection/defence of the patient rights [14]. In this way, the professional mandate execution of a pharmacist's is not only focused on the prevention of harming the patient, but a more holistic approach can be adopted [14]. From the ethical point of view, the principles of autonomy and beneficence, must be carefully weighed. For example, a pharmacist can point out the negative impacts of smoking on the health of a patient, but in the end the patient must have the autonomy to decide whether they will continue to smoke while on medicine's regimens [11, 13]. Justice must be observed in the context of the pharmacist mandate execution by fairly treating a patient regardless of their decision to smoke or not. These issues, to name a few then pose the question of this paper, how and when should ethical concerns be raised and how can they be resolved, specifically how can pharmacists raise these ethical concerns?

Traditionally management of patient health was done by primarily nurses and physicians, but over the years there has been a significant increase in illnesses amongst populations' specifically chronic diseases which need constant monitoring [15]. Subsequently this led to the need for more physicians and nurses despite it still being difficult to meet the demand [15]. This opened a gap in healthcare provision allowing for the pharmacist profession to diversify itself and be more involved in personal patient outcomes, and the patient-oriented mandate of a pharmacist was strengthened in significance [16]. An example of such a plan is shared-decision making (SDM) which is a process in which HCPs such as pharmacists collaborate with patients to reach an evidence-based and value-congruent medical decision in to how to better their care [17]. This approach ensures that the patient is made fully aware of the harms and benefits of any medical intervention by an HCP. The patient's participation in the therapy is based on pharmacist understanding/professional knowledge and its implementation as therapy by incorporating of the patient's preferences and values [8]. A survey conducted by Kayyali et al. [18] found that most patients on chronic

medications and little to no counselling about their medications as well as no input into decisions about their medicine regime. This led to most patients consulting their patient leaflets for any information they did not understand either about side effects or their medicine in general and this possess more risks than benefits to the patient as they may interpret the information incorrectly [18]. Therefore, patient involvement is important as it could help decrease the need for polypharmacy as well as decrease the chance of patients developing adverse drug effects [18,19].

Since the involvement of pharmacists in providing pharmaceutical care, evidence showed a significant decrease in health costs and more importantly an improvement in patient health and as an example a study conducted by Lee and colleagues [20] focused on the pharmacist impact on medicine adherence in patients with chronic diseases over the age of 65 whom were on multiple medicines and it was shown that there was a 35.7% increase from 61.2% to 96.9% [15,20]. This was achievable as pharmacists interact with the patients more frequently during prescription collections [15] than do other clinicians. Patients also do not need to make appointments with pharmacists [15], making it more convenient for patients to provide feedback about their medicine therapy with pharmacists. It is during such interactions the SDM model can be implemented, and pharmacists could play a more active role as a therapy link between patients and their doctors, e.g. through careful and intentional observations and conversations of the patient [19]. This is also supported that SDM could be applied, as the relationship of a pharmacist and their patient can often be less paternalistic compared to other healthcare professionals and patients. Recent and ongoing COVID19 pandemic has open the door to the epidemiology and public health to take centre stage in public discourse in South Africa and around the world.

During the COVID19 pandemic, pharmacies remained open, and patients could visit them. Pharmacists as healthcare professionals could face situations, where their long-term patients might not get their chronic medication prescriptions refilled. Healthcare professionals/HCP, including pharmacists, did face stints of extended working hours to maintain provision of healthcare. Combined with lack of personal protective equipment (PPE) in the early stages of the pandemic, such conditions might have placed increased burdens on pharmacists and healthcare professionals in general. This could contribute to challenging ethical conditions under which pharmacists and healthcare professionals in general would practice. That could in turn result in the burnout of the healthcare professionals such as pharmacists. Burnout, as a trigger for whistleblowing and the wider ethical implications, are explored in the current article. The legislation governing the protection of whistle-blowers in South Africa is also presented. The ethical dimensions of the professional implications of the whistleblowing for pharmacists are touched upon. First, let's look at the stage of the pharmacist practice scope in South Africa.

Pharmacist's role in South Africa

Pharmacists registered to practice in South Africa have to comply with the objectives and rules stated in the Pharmacy Act by its board to ensure that adequate care is given to patients. The Pharmacy Act (Act No. 56 of 1974, as amended, [9]), chapter 1, section 3 states that the objectives of the board are the following: "To assist in the promotion of the health of the population of the Republic; to control, promote, establish and maintain adequate standards in respect of pharmaceutical education in the Republic; to control the practice of the pharmacy profession and to investigate in accordance with the provisions of the Act, complaints relating to the affairs of pharmacists and to advise the Minister on any matter relating to pharmacy" (Pharmacy Act, 1974, p. 5, [9]). The Minister here is the National South African Minister of Health. Pharmacists are also responsible for meeting patients' medicine related needs by dispensing prescriptions that are written by an authorised individual/prescriber. They need to effectively evaluate a patient's medicine-related needs by determining the indication of the prescribed medicine, its safety, as well as the effectiveness of the medicine therapy. Therefore it can be said that pharmacists are there to provide information on the correct and safe use of medicine and on dietary and lifestyle modifications to help with the patient's condition. They are also there to monitor compliance as well as the management and prevention of non-adherence [21-23]. As professionals, pharmacists are also responsible for the acquisition of medicines. It is their responsibility to ensure that adequate amounts of medicines are always in stock and that re-packaging and selling of the medicines is constantly supervised to prevent thefts within

the pharmacy [23]. The pharmacist's main concern should always be the welfare of the patient. The provision of adequate pharmaceutical care is a time-intensive process; a sufficient amount of time is required to ensure that all the necessary information regarding the correct and safe use of the medicines is provided to the patient [23,24].

The provision of adequate pharmaceutical care is stated as a minimum standard of function in the Good Pharmacy Practice (GPP) Manual published by the South African Pharmacy Council in 2010 [23]. Text of the GPP's general objectives and requirements of pharmaceutical services state that there should be a sound management structures within the pharmacy to ensure efficient practice within the pharmacy. The GPP further states that quality assurance forms an integral part of pharmaceutical care as it ensures that medicines given to patients are of high quality and that patients are not given expired medicines or medicines no longer registered for use in the country [23,24]. The Pharmacists Code of Conduct also states that the wellbeing of the patient is the main concern in the performance of the pharmacist's professional duties [25]. However, what happens if there is a lack of adequate medicine supply? The pharmacist is now in a situation where they must either dispense the medicine on a first come first served basis or work out who is the most dependant on said medicine. Lack of adequate medicine supply can potentially put a pharmacist in an unethical position where they cannot perform their prime duty.

Pharmacists also understand that failure to meet the minimum standards stated in the GPP can result in disciplinary action against either the individual staff member or the pharmacy as a whole [23]. This gives pharmacists plenty of the incentive to potentially become whistle-blowers. The Pharmacy Act gives the South African Pharmacy Council (the regulatory body/board) disciplinary powers to ensure that if the scope of practice is not adhered to, disciplinary measures can be implemented. Chapter 5 section 39 subsection 1 of the Act states that should a complaint be filled against anyone under this Act (which includes Pharmacists, Pharmacy Technician and Pharmacists' Assistants) the board reserves the right to investigate and upon finding that the individual is guilty of such conduct, they can impose any penalties they see fit as described in section 45 (1) (p. 190, [9]).

Pharmacists in South Africa work in environments that continually demand more of them as time progresses. They have to cope with the demand arising from fulfilling numerous duties along with increased pressures from the patient population for them to work quicker. Understaffing in the public healthcare system also contributes to the pressures experienced by healthcare professionals and pharmacists. These pressures can result in pharmacists experiencing burnout [22]. A burnout, also known as an occupational burnout, is defined as "a syndrome resulting in emotional exhaustion as well as cynicism and is common among individuals who work with people. It is often accompanied by feelings of hopelessness, helplessness, disillusionment, negative feelings towards one's work, life and other people as well as a negative self-concept" [26]. Physiological manifestations of burnout include insomnia, anger, headaches, decreased attention span and impaired memory [27]. Burnout is a serious condition that can result in poorer outcomes regarding patient safety as well as an increase in medication errors. It has also been shown to correlate with increased use of illicit drug use and alcohol abuse by individuals experiencing it [28,29]. Studies conducted in the United States of America on burnout show that among the general working population, the presence of burnout indicators was around 28 %. The same authors found that the prevalence rate was even higher for healthcare professionals having risen from 45.5 % in 2011 to 54.4 % in 2014 [27].

The condition of burnout experienced by individuals in managerial positions can have detrimental effects on the entire organisation as it can result in mismanagement; this shows that when responsible pharmacists who are in charge of ensuring that the pharmacy runs smoothly and that the needs of the staff, patients and other healthcare professionals are met experience burnout, it will lead to detrimental effects throughout the pharmacy, resulting in a lack of adequate pharmaceutical care provision to patients and often times clashes with other healthcare professionals [26-31]. It is imperative that plans are put in place to identify burnout situations so that the necessary assistance can be offered to the pharmacy staff. Burnout can be associated with stigma as most staff feel that they should be able to cope with the demands of the job without feeling overwhelmed [30,31]. As such, most staff may try to hide the symptoms associated with the burnout can potentially lead to them making medication-related errors, as well as not providing

adequate pharmaceutical care to patients. There should be a reporting system in place that allows for the pharmacy staff to hold each other accountable for errors that could result in loss of adequate patient care [31]. A study conducted in South Africa on pharmacy personnel working in hospital pharmacies, community pharmacies as well as those in executive positions within pharmacy sectors found that 33% of pharmacists and 30% of pharmacy technicians had moderate to high levels of burnout [32].

In addition, it can be said that burnout can be triggered by the physical and psychological exhaustion on the job and the potential for the pharmacist to feel or be put in a position where they have to question their professional, as well as personal ethical values and approach to patient care. Such ethical conundrums can trigger remedial mechanism, where pharmacists have very few choices to exercise to protect the patient health. Whistleblowing can be one such activity, and it can be seen as an individual seeking remedy of a serious breakdown in the functioning of the healthcare system by engaging an inside or outside watchdog authority, e.g. an Ombud. As an activity, whistleblowing tends to not be appealing to most people. Individuals tend to not want the responsibility of getting their colleagues into trouble out of fear of being ostracised by others even when the accusations are substantiated by proof [33]. This article seeks to present some ethical and legal aspects of the whistleblowing as they apply to pharmacists in South Africa, with special focus on the strained conditions of the COVID19 pandemic and possibility of burnout. The paper is aimed by the authors to be a combination of theoretical and practical analysis on the potential crisis/disaster risk management implications of whistleblowing in the context of the South African pharmacy and the COVID19 implications in this context.

Methodology

The paper starts with the outline of the general scope ethics of pharmacy in South Africa and its links to the professional practice of pharmacists in the country. This is followed by the description of the legislation which is relevant to the reporting of whistleblower claims in South Africa. The most relevant sections of the relevant pieces of legislation that govern whistleblowing, and that are relevant to the practice of pharmacy or potential sections of the legislation which pharmacists might make use of when reporting whistle-blower complaints, will be discussed as well. Some ethical conflicts and implications a pharmacist might face in the execution of their profession and that might trigger a whistleblowing complaint will be discussed in the text below.

Results and Discussion

Maintaining ethics as a pharmacist

Despite the great improvements in healthcare in recent decades, the healthcare systems can still face ethical and practical challenges, e.g. in relation to improper medicine management. One way in which use, and effectiveness of medicines can be observed, studied, and evaluated through the collection of epidemiological data on medicine use. In more detail, pharmacists can help here through the practice and participation in pharmaco-epidemiology which is ‘the science concerned with the benefit vs. risk balance of drugs that are prescribed in populations as well as analysis of the medicine therapy’ [34]. Pharmaco-epidemiologic data can be obtained from epidemiology studies for specific populations, and this may then outline cost-effectiveness of some medicines being used, adverse drug effects as well as analysis of the risk vs. benefit of the medicines [34]. Healthcare pharmaceutical stakeholders can use pharmaco-epidemiologic data to understand the prescribing, usage and outcomes of specific medicines on the market [35] as well outcomes that are specific to the drug [35].

Pharmacists in general are considered the best positioned when it comes to information regarding the use of medicines, dispensing and can educate the public and practitioners about the medicines use [35]. They also and work closely with pharmaceutical companies to come up with ways in which drug can be made safer and any other ways it can be utilized [35]. West-Strum et al. [35] describes how a pharmacist after obtaining pharmaco-epidemiologic data can practice their ethical code of conduct through assessment of drug effect at individual patient level. They can achieve this by taking note and recording any patient who reports adverse reactions to the medicine they are on, the pharmacist is therefore required to report

these findings and by following this ethical code which is patient benefit before business, the data they collect and record with a few patients may then be used at a population level to improve drug safety or even recall the drug if the adverse effects cannot be rectified [35].

This is an example of how a pharmacist, in their capacity has acted ethically through engaging with other healthcare workers on effect of a specific medicine [35] as well as followed their ethical code of conduct by ensuring the well-being of the patient [25]. Though this is on a small scale, a pharmacist may be a whistleblower on a larger scale. Pharmacists may also monitor medicine tolerance as well as complications through a process known as pharmaco-vigilance defined by WHO as ‘the science related to assessing, detecting, understanding and the prevention of any possible adverse drug related problems’ [36]. Collection of data under pharmaco-vigilance is like that of pharmaco-epidemiology as described previously and a pharmacist can and usually works in both capacities. Pharmaco-vigilance unlike pharmaco-pathology is an ongoing process that most pharmacists are required to practice as this is within their scope of practice even though requirements may vary slightly across countries. So it can be said that pharmaco-vigilance practices must follow best international norms [37,38]. If these norms, and other pharmacists’ norms are not adhered to, pharmacists might be forced to seek alternative mechanisms to raise alarm or awareness about the shortfalls in healthcare provision. One of such mechanisms is whistleblowing.

Whistleblowing in healthcare and the practice of pharmacy

Moore & McAuliffe (2010, [39]) define a whistleblower as an individual responsible for the identification of an incompetent, illegal or unethical situation in the workplace and reports it to an individual possessing the power to stop the wrong. This includes the reporting of members of staff for actions thought to be unethical particularly pertaining to the provision of adequate patient care [39,40]. In South Africa, individuals witnessing unlawful and unethical behaviour often feel too intimidated to speak out against such behaviours because whistleblowers are often confused with spies and informants. Thus, this historical context has allowed for the stigmatisation of whistleblowing, leading to its use being unconsciously discouraged rather than consciously encouraged [41].

Proper structures must be implemented that have a zero tolerance to any misconduct and training on how to properly address any misconduct identified [42] and the process of addressing these misconducts to the relevant boards is known as whistleblowing [42] which is the disclosure of ethical misconduct [43]. All healthcare workers have a moral obligation to raise their concerns about any misconduct they observe and any potential risks to patients [44] however being a whistleblower is always met with oppositional challenges from authorities as well as colleagues [43]. These challenges include being shunned by colleagues, labelled a ‘traitor’ or no action being taken by the institution with regards to the misconduct [43]. Though being a whistleblower is encouraged, those that do step up to the post receive severe backlash such as losing their job, death threats or legal action causing most people to keep silent [43,44] and misconduct being ‘swept under the rug’ like it never happened [44]. Reasons behind why some institutions would show a significant lack of support towards whistleblowers is to avoid losing sponsorship, loss of prestige, negative reviews from the public and possible litigation [45]. This then puts into perspective on what these companies’ value more, their standing or patients’ lives and if it’s the former then there is a direct ignorance on beneficence, which as stated before is acting in a manner that benefits patients.

It is therefore important to educate both health care practitioners and institutions on the importance of whistleblowing and that it does not always need to end up with the whistle-blower being shunned. Such ways this can be done is by setting up harassment committees, grievance boards, standards officer- these ensure that both clinical practice and reports of fraud are conducted in a respectful manner and establishment of educational centres on what and how to respond to whistleblowing [45]. However, though these measures have been put in place, it is difficult to accurately determine if they are used accordingly and effectively as whistleblowers still face the personal battle between self and/or the potential negative impacts on the good of patients [45]. Another hurdle whistleblower must face is providing proof of misconduct even though this should be done by the regulatory authorities when they are conducting their investigations [45].

In order to destigmatise whistleblowing, it is imperative that individuals be made aware of why whistleblowing is important, particularly in a clinical setting as it ensures that patients do not experience medicine related errors as well as insufficient pharmaceutical care as a result of pharmacist burnout going largely unreported by pharmacy staff [1,2,26-28]. Pharmacists tend to face excessive job stress along with subpar work environment and irregular work schedules, which can result in physical along with mental fatigue, all contributing factors to the development of a burnout syndrome [41]. Because most healthcare professionals tend to experience burnout at some point or another in their careers, they may be reluctant to tell on their colleagues for errors they see them performing out of fear of being treated the same in the future should they experience a burnout [40]. It is imperative to remind staff that when they do blow the whistle on issues pertaining to pharmaceutical care in the pharmacy, they ensure that patients are protected from issues such as medication errors and subpar pharmaceutical care; issues which have the potential to result in detrimental effects for the patients. A distinction must also be made between whistleblowing and complaining. When filing a complaint, the complainant usually has a personal interest in the outcome of the complaint [39,40].

A whistleblower, however, does not necessarily need to have a personal interest in the issue that they are raising and as such have no obligation to provide proof. They can be seen as merely messengers raising concerns regarding certain issues that they observe in the workplace to individuals of a higher ranking for further investigations [39,40]. Whistleblowing provides an avenue for which employees in the workplace can speak up when they observe unethical conduct. It enables the employer to reduce potential risk to the organisation as it allows for the identification and resolving of any allegations of ethics violations as efficiently and as quickly as possible [46]. Rossouw and van Vuuren (2017, [47]) have stated that an organisation's ethics management maturity can be related to the current beliefs it has towards whistleblowing. In settings or immoral ethical conduct, whistleblowing is not tolerated and those who choose to become whistleblowers are punished. In settings where there is compliance regarding ethical conduct, whistleblowing is actively encouraged and facilities are in place that protect the whistleblowers [47]. When whistleblowing, it is important that the whistleblower put the case across to the relevant individuals in a calm manner, keeping in mind that he/she is not a complainant. The whistleblower must also be aware that the/she may not be thanked for their efforts [41].

Whistleblowing legislation in South Africa

In South Africa, there are laws that protect individuals who choose to become whistleblowers. Two of the most important Acts governing these laws are The Protected Disclosures Act of 2000 (Act No. 26 of 2000, as amended) as well as The Protection Against Harassment Act of 2011 [48-51]. The Protected Disclosures Act, 2000 (Act 26 of 2000, as amended), provides practical guidelines for employees regarding how they can disclose issues in the workplace. The guidelines mention that choosing to remain silent about issues of malpractice as well as other offences taking place in the workplace results in employees inadvertently contributing to becoming part of a culture that fosters improper behaviour, ultimately undermining their careers as well as resulting in detrimental effects to the population of South Africa. This has been observed when cases of corruption, particularly in Government sectors go largely unreported [48-50]. An example of this is the public health sector. Most of the hospitals in the public sector are largely under-funded due to corruption and mismanagement of funds. This has a negative effect on the delivery, affordability and accessibility of health services to the population of South Africa. Corruption in healthcare directly affects the supply chain management of medicines, leading to patients not receiving medicines for their indicated conditions on time [52,53].

The Protected Disclosures Act 2000 (Act 26 of 2000, as amended) provides procedures not only for the disclosing of information but also offers protection to the employees that choose to disclose information. The Act states that no employee or worker should ever be penalised or victimised by his/her employer as either a direct or an indirect result of having disclosed information in line with any of the procedures stated in the Act [48]. The objects of the Act are to ensure that adequate protection is given to an employee or worker regardless of whether they work in the public or private sector. Pharmacy, as a profession is very vast, with pharmacists working in retail community pharmacies, in both public and private hospitals, in

research laboratories as well as in the pharmaceutical industry [10]. Thus, pharmacists in all sectors should be made aware that the Act protects them regardless of where they work, as improper behaviour in all sectors of pharmacy can cause harm to patients and in some cases may even result in death. The Act also states that disclosure of information by employees such as pharmacists who choose to become whistleblowers should be done in a responsible manner [48-50].

For information to be considered a disclosure, the Act states that it must meet at least one of the stated criteria. Pharmacists should be made aware of these. The information provided by the pharmacist will constitute disclosure if it complies with at least one of the following five statements listed below:

Firstly, if the actions of the individual mentioned in the disclosure fails to meet their legal obligations in terms of provision of healthcare to the patients than the pharmacist/whistleblower-to-be are bound to report that a person is likely to have failed meeting to fulfil their legal obligations [41,48-50]. The Pharmacy Act states that pharmacists should always act within their scope of practice, ensuring that patients are provided with adequate pharmaceutical care to ensure that their medicine-related needs are adequately met. This is their legal obligation [23,24,51]. The GPP principles mandate that all pharmacists, who are currently actively practising in the profession, have a legal obligation to ensure that the service they provide is of a high quality and that the service complies with its standards as published by the South African Pharmacy Council (SAPC) in rules. Pharmacists must provide services within their scope of practice at all times. The GPP further states that “pharmacists in each field of practice must accept personal responsibility for their self-assessment and maintain competency throughout their involvement in the profession” (p. 5). When burned-out health care professionals continue practising in their respective fields, negative consequences are bound to result. This is because burnout results in diminished quality of care provision by the health care professional. Physiological effects of burnout such as impaired memory and a decreased attention span can easily lead to medical errors. In the United States of America, approximately 250000 patients die each year due to medical errors [27]. It is imperative that pharmacists witnessing others failing to meet the legal requirements of their jobs report this as quickly as possible as to prevent death by medical error [27,40,48-50].

A second requirement is that a pharmacist knows about an individual who is likely to commit a criminal offence or had already done so [48-50]. Burnout has been associated with not only physical and emotional exhaustion but is also associated with the abuse of alcohol as well as the use of illicit drugs [27-29]. The use of the illicit drugs can result in the pharmacists facing criminal charges should they be found in possession of illicit drugs [27-29,48]. Health care professionals, including pharmacists, have been shown to be at a higher risk for substance abuse and premature deaths [54]. Pharmacists, through their scope of practice, have access to controlled medicines that are highly addictive and have the potential to result in abuse as well as dependence. Thus, pharmacists that are experiencing burnout and are already taking illicit substances can steal controlled medicines from the dispensary. This can result in pharmacists facing either disciplinary action, having criminal charges brought against them, a fine or all three [22,23,54]. This, in turn, can also have a negative impact on the pharmacy where the alleged perpetrator works as the pharmacy could be fined or it could be demoted to a lower class during inspections by the SAPC due to its failure to secure the scheduled medicines correctly [23,24].

A third requirement is that a miscarriage of justice needs to have occurred or be likely to occur [47-49]. Pharmacy is a multi-disciplinary field that involves other healthcare practitioners. Errors performed in the pharmacy can result in the implication of other healthcare professionals such as nurses who administer medicines that pharmacists dispense, particularly in a hospital setting [23]. Inadequate pharmaceutical care has been shown to result in medicine errors that cause the patient to experience adverse drugs reactions that require hospitalisation at times or even result in death [5-7]. These medicine errors are preventable. Pharmacists should report any errors performed by their colleagues as early as possible to prevent future errors from occurring [47-49]. The National Health Act (Act No.61 of 2003) states “that the access to

adequate health care services is a constitutional right of all the people of South Africa” [55]. As such, it is important that all health care professionals work in a synergist manner to ensure adequate patient outcomes.

A fourth requirement is that the health as well as the safety of individuals have been or are likely to be placed in dangerous situations by the actions of the individual(s) named in the disclosure [48-50]. Burnout has been shown to result in Healthcare Professionals making grave errors during their treatment of patients. The provision of inadequate pharmaceutical care in the pharmacy profession has been linked to improper use of medicines by patients due to lack of adequate counselling by the pharmacist on the correct use of medicines. Dispensing errors can also result when pharmacists are not being careful particularly for medicines that have different indications for use but have similar sounding names and similar packaging. Other errors that can result can be due to the incorrect strength of a medicine being given to the patient [23]. These errors can result in the patients experiencing adverse drug effects that can range from mild to severe. In severe cases, hospitalisation, permanent disability or even death can result [3,5].

A fifth requirement is that the environment within which pharmaceutical care is taking place should either be currently experiencing or be likely to experience endangerment [48-50]. Pharmacists not only dispense medicines but their scope of practice also allows them to compound certain medicines as well as medicinal products. The compounding of chemotherapeutic agents used in the treatment of malignancies has the potential to become occupational and environmental hazards for the pharmacy staff if not compounded correctly. Most of these compounds have a narrow therapeutic index and occupational exposure to them has been associated with both short term as well as long term effects for pharmacy staff. Short term effects include headaches, nausea and vomiting, hair loss along with hypersensitivity reactions [56,57]. Long term effects of these agents include the development of secondary malignancies, congenital deformities, infertility as well as an increased risk of miscarriages thus making the immediate environment within which they are compounded dangerous and requiring meticulous care and attention to detail during their preparation [56-58]. Some of the medicinal agents compounded by pharmacists also tend to be administered directly into the bloodstream. It is imperative that the immediate environment within which they are compounded remains aseptic. Failure to maintain sterility has been linked to outbreaks of diseases associated with microbial infections. An outbreak of meningitis and strokes occurred due to the contamination of methylprednisolone acetate administered via epidural injections used in the treatment of back pain in the United States [59,60].

The Pharmacists code of conduct also states ‘Confidentiality’ as a major ethical standard Pharmacists need to uphold [25]. However, when making disclosures, there are certain routes that the whistleblower can take. Section 3 of the Protected Disclosures Act 2000 (Act 26 of 2000, as amended) states that “a disclosure can be made to a legal representative, an employer, a minister or MEC of a province” (provincial Minister of Health in South Africa)”, i.e. “a specified person or body or make a general disclosure to any person”. Most employees tend to want to know what the legal standpoint is for the disclosure that they plan on making prior to making the disclosure. By seeking legal advice, they disclose the information to said legal advisor, so a pharmacist must ensure that anyone who has access to information that is related to a patient respects its confidential nature. The information must be kept confidential and only used in the purpose of obtaining legal advice [48-50]. An employee disclosing to an employer also does so in good faith. The employee must ensure that they act in an honest and responsible manner without any ulterior motives or gains from making the disclosure. Most places of employment such as pharmacies tend to have anti-corruption measures such as hotlines and standard operating procedures in place that allow for employees to make disclosures. Employees should be made aware of these [40,49].

The Act also provides the information regarding what the whistleblower is protected against. Pharmacists should be made aware of these as part of their standard operating procedure to ensure that they are aware that they will not face any repercussions should they choose to blow the whistle on issues of inadequate pharmaceutical care. The whistleblower must be protected from an occupational detriment. The whistleblower must not be subjected to any disciplinary action as a result of the disclosure. The whistleblower must also not be intimidated, harassed, demoted, suspended or dismissed as a result of the disclosure. He/she must also not be transferred to a new department against their will or be refused a promotion or a transfer as a result of the disclosure [48-50]. The whistleblower must also not be refused a

reference or be given a negative reference as a result of the disclosure. If the whistleblower is dismissed as a result of making the disclosure, the dismissal will be deemed an unfair dismissal [29]. The occupational detriments previously stated and the dismissal would be deemed unfair labour practices as stipulated in the Labour Relations Act, 1995. Under section 186(2)(d) as well as section 187 (1)(h) of this Act, the whistleblower is protected from unfair dismissal as well as unfair labour practices [61].

The fear of being harassed by ex-colleagues who have been fired as a result of the whistleblowing might also deter some pharmacists from becoming whistleblowers. However, the pharmacist also has the ethical responsibility to report inadequate pharmaceutical care as they must always put the wellbeing of the patient first, as stipulated in the Pharmacists code of conduct [25]. Pharmacists should be made aware that should they be harassed either in the workplace or outside of the workplace as a result of the disclosure, The Protection Against Harassment Act of 2011 can be implemented to offer them protection. The Act defines harassment as “directly or indirectly engaging in conduct that the harasser knows or ought to know causes harm or inspires the reasonable belief that harm may be caused to the complainant or a related person” (p.4). Section 2 of this Act allows individuals to obtain a protection order against an individual harassing them. The protection order is granted by the Magistrate’s court and stops the perpetrator from harassing the whistleblower further [51].

Given the severity of the potential punishments associated with whistleblowing, pharmacists might be afraid of potential false claims being raised against them. It is imperative that they be made aware that The Protected Disclosures Amendment Act of 2017 (Act No. 5 of 2017) also offers protection against this. It is particularly difficult to prove that inadequate pharmaceutical care has occurred particularly if patients do not return to the pharmacy in retail to lodge a complaint. It is easier in hospital pharmacies, where treatment is provided to the admitted patients, to spot errors resulting from inadequate pharmaceutical care. It is also easier to spot lack of compliance in manufacturing pharmacies as errors made in this field tend to result in the recall of medicines. Because the recall is linked to batch numbers, it is easier to track when the batches were manufactured, which individual(s) manufactured it, as well as which day it was manufactured [23]. This issue is another matter that falls under the Pharmacists Code of Conduct in terms of the control over medicine. Pharmacists have a professional responsibility to exercise control over all medicines purchased or supplied and are required to take affirmative action on product recall and similar matters. Pharmacist must not purchase, sell or supply medicine if they doubt its safety, quality or efficacy as they are the gatekeepers of medicine [25]. All this falls into adequate pharmaceutical care and must be upheld by pharmacists no matter what the pharmacy is categorised as.

For all the different facets of pharmacy, plans must be put in place to help deal with issues related to the disclosing of false information. Section 9B of the Act states that employees who intentionally disclose information knowing that it has no factual basis with the intention to cause harm to the individual named in the disclosure can be liable to conviction if found guilty and this can result in them either paying a fine, being sentenced to imprisonment for a period of not more than 2 years or getting both a fine and a prison term [49]. The SAPC also have disciplinary measures put in place for pharmacists that have been found to act in a manner that brings the profession in disrepute as well as those found to be guilty of misconduct and a criminal offense. The reason disciplinary action would be taken in this case is because these offenses disregard the honour and dignity of the pharmacy profession, a code of conduct Pharmacists should always aim to uphold [25]. The disciplinary action can range from a fine, temporary removal from the registry of pharmacy personnel, a permanent removal from registry of pharmacy personnel as well as opening a case against the individual with the South African Police Service (SAPS), leading to imprisonment. The SAPC also has a register on its website where pharmacists that have been found guilty of any grievances are listed. Pharmacy staff should be made aware of this section of the Act as it protects them against false disclosures being made against them [23,62].

Over the course of the COVID19 pandemic, there were disagreements about the management of the pandemic and a call for holistic approach to the national approach to dealing with the pandemic has been suggested [63]. This stresses the need for the ongoing engagement about the constraints in the healthcare system and thus the prevention of the whistleblowing or the need for it. Whistle blowers cases from South Africa, which have re-ignited in the context of the COVID19 pandemic even though indirectly, include

those a prominent university in the country. The institution has put in robust ethical mechanisms for whistleblowing. These include the independent operation of a whistle-blower hotline which has been operated by an outside company, which accredited by a business ethics body [64]. Whistleblowing guidelines issued by the university in question clearly indicate that the mechanism should only be used for reporting genuine cases of unethical conduct and not personal grievances [65]. However, the case makes whistle blowing and its significant clear in the context of South Africa and the disaster management is linked to the overall well0being of the society and links to the country.

Conclusion:

Pharmacy in South Africa is a dynamic profession and many challenges arise daily. Complexity of the profession and the pressures on the pharmacist as healthcare providers pose new challenges on the ethical and personal conduct of pharmacists. Under such conditions, whistleblowing might be an option for pharmacists to raise awareness about the problems in healthcare provision in the country. Whistleblower protection legislation and the labour legislation provide protection for whistleblowers after they make a protected disclosure. However, recent examples from South Africa indicate that approach to whistle blowers is still complicated and their roles, as agents of changes and the improvement of healthcare are not necessarily understood by the country. More efforts and awareness must be raised about the problems facing pharmacists.

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