Can professionalizing dispensers reduce intra-professional tensions and raise pharmacy team performance?

JIMMY S. MWAWAKA

Hospital & Clinical Research Pharmacist, Kenya.

Pharmacy practice change is facilitated by delegation, teamwork, leadership and reorganization of personnel structure and roles. The international pharmaceutical federation (FIP) recommends that society should have access to appropriately trained pharmaceutical personnel. Three cadres form the pharmacy workforce: pharmacists, technicians and pharmacy assistants or dispensers. Globally, the training, regulation, scope, and status of technicians and dispensers vary. Role tensions exist between pharmacists and technicians which impact both workplace behaviour and performance. Literature on role expansion for pharmacy technicians excludes (reference to) the contribution of the pharmacy assistant or dispenser. Unlike the technician, the dispenser largely lacks professional recognition. But overlaps between the roles of the technician and dispenser can occur leading to further tensions in the pharmacy workplace. 'Unhealthy'' intra-professional conflicts obstruct the pharmacist practice envisioned by the WHO 7-star pharmacist. A solution that brings together the 3 cadres in joint or shared action is desirable. Social theory suggests that inter-cadre conflicts could be both necessary and inevitable. Being political nature, the tensions can be moderated by a ''political settlement''. The present paper is a reconstruction of and reflection of the author's journey in building a harmonious pharmacy workforce. Professionalizing the dispenser cadre restructures the hierarchy of the pharmacy workforce leading to harmony which in turn improves organizational performance. Lessons learned from this case can be applied to resolve workplace tensions in other settings.

Key words: pharmacy practice, workplace change, pharmacy technicians, dispensers, intra-professional harmony, pharmacy workforce

Introduction

The present paper is about a practice (real world) problem whose emergence in the workplace triggers the formulation of a unique solution. This article is a reconstruction of and reflection on one pharmacist's journey in building a harmonious workforce at a

pharmacy practice site. The purpose of this case study is to describe and explain the phenomenon. The focus is on intra-professional tensions in the pharmacy workforce and the author's experience with these tensions. This work provides insights for resolving these tensions. Staged in the context of contemporary pharmacy practice, this work uses social theory to make sense of the journey travelled, and to account for the outcomes and lessons learned. The author reconstructs a story of events in which the author is a stakeholder, actor, participant, or target. Written in the third person, the paper reviews decisions, and actions as well as consequences.

Concepts

Three cadres work in the pharmacy workplace: pharmacists, a mid-level cadre, and auxiliaries or assistants. For purposes of this paper the title of ''dispenser'' is used to refer to pharmacy assistants or other pharmacy auxiliary staff while the term ''technician'' refers to holders of the diploma ''licensed by the regulator to practice as pharmaceutical technologists''. 'Professionalization'' is the process by which a craft is transformed into a learned occupation or craft with the status of a profession. To date the term has been applied largely to pharmacists. It is good practice to ensure team members are neither underqualified nor overqualified for the tasks assigned to them. This maxim captures the concepts of productivity and efficiency. The two concepts are concerned with optimization of resource use to maximise outputs. Performance is a broader term and comprises both productivity and efficiency.

''Task-shifting'' is a strategy of public health practice wherein health professionals delegate professional activities and responsibilities to lower-level cadres within their hierarchy. This measure is taken, usually in low- and medium-income countries (LMICs), to remedy shortages of the substantive professional.

Pharmacy practice

Pharmaceutical personnel

The international pharmaceutical federation (FIP) recommends that, as Good Pharmacy Practice (GPP) in developing countries, all people should progressively have:-
(1) access to community health worker(CHW) with pharmaceutical training (2)access to a person with pharmaceutical knowledge beyond that of CHW (3) access to qualified

pharmacy technician (5) access to a pharmacy technician working under the direct supervision of a pharmacist (6)direct access to qualified pharmacist(Stone, 1997).

Pharmacist

The 7 -star pharmacist model of pharmacy practice proposed by the world health organization (WHO) envisions the pharmacist as a care provider, leader, decision maker, manager, life-long learner (and researcher), educator, and communicator. Assuring pharmacist productivity consists in (1) identifying critical activities that require pharmacist input and involvement, and (2) supporting the pharmacist to perform the said critical activities. The pharmacist needs support to realise this mandate. The Basel Statements are made up of 19 over-arching and governance statements and provides guidelines on 7 themes or areas of hospital pharmacy practice:-procurement, influences on prescribing ,preparation and delivery of medicines, administration, monitoring of medicine use, Human Resources ,Training & Development (HRTD).Whilst professional satisfaction is a recognized motivator of pharmacy practice change, change is facilitated by delegation, teamwork, leadership and reorganization of personnel structure and roles(Roberts et al., 2005).To attain the level productivity envisaged by both the WHO 7-Star pharmacist and the Basel Statements, a well-trained support staff is the required support. A pharmacist with a well-trained support team can focus on planning, organizing, directing, and controlling. The law requires the pharmacist to supervise several drug related activities. In all practice settings, pharmacists have a controlling role in assuring the quality of both products and services (Van De Pol et al., 2019).This quality includes all efforts to efficiently deliver products and services that meet customer requirements, and assure patient safety while ensuring compliance with service and industry requirements and benchmarks.

Pharmacy support staff

Pharmacy practice change is facilitated by delegation, teamwork, leadership and reorganization of personnel structure and roles. Delegating non-critical activities to trained technicians spares pharmacist time for critical roles(Myers, 2011). Literature on role expansion for pharmacy technicians excludes the contribution of the pharmacy assistant or

dispenser. It is the position of this paper that there are certain professional tasks that are best undertaken by pharmacists as opposed to technicians or dispensers; there are certain pharmacy tasks that pharmacists should delegate (Bradley et al., 2013).But there are pharmacy tasks that can be shared in the spirit of team-work and joint action. Attempts have been made to determine risk levels for professional pharmacist activities delegated to technicians (Johnston et al., 2010; Ness et al., 1994) .Conflicts have been known to occur between pharmacists and other pharmacy staff (P. A. M. Gregory & Austin, 2017).Overlaps between the roles of the technician and dispenser can occur leading to further tensions in the pharmacy workplace. Gregory & Austin found that role misunderstanding and threats to self-identity were at the root of the conflict. The authors concluded that conflict had the potential to undermine patient safety and was a critical issue that calls for comprehensive interventions. In spite of concerted efforts to increase the scope of the technician, there is evidence that regulated technicians operate ''below their license''(Jetha et al., 2020). Pharmacists and pharmacy technicians have differing views on the capacity and competence of technicians. The training, regulation, scope, and status of pharmacy support staff varies from one country to another (Koehler & Brown, 2017). Gregory and Austin (2020) examined the professional identity of the licensed pharmacy technician. Their work reveals that technician identity is dependent on and impacted by the attitudes of pharmacists towards technicians (P. Gregory & Austin, 2020).Thus technicians and other support staff should ideally work under the supervision of pharmacists as suggested by FIP.

Regulation of pharmacy support staff

The General Pharmaceutical Council of UK (2023) regulates the training and scope of practice of pharmacy technicians. The Council recognizes the role of pharmacy support staff who must work under the supervision of pharmacists and technicians in accordance with prescribed standards of pharmacy practice. The South African Pharmacy Council (2023) regulates 10 categories of Registered Persons including pharmacy owners and two levels of pharmacist's assistants (Boschmans et al., 2015).The purpose of the recognition is to regulate their scope of practice-pharmacy support staff are obligated to work under pharmacist supervision (Republic of South Africa, 2011). It is the position of the author that this guarantees complete control of the pharmacy sector-every person with a stake in pharmacy is enjoined to maintain prescribed standards or risk loss of status.

In sub-Saharan Africa task shifting in healthcare has been successful (Fulton et al., 2011).The national Guidelines for the conduct of clinical trials in Kenya, permit a pharmacist to delegate certain activities to a dependent non-pharmacist.

History of pharmacy support workforce in Kenya

By law, the terms ''technologist'' and ''officer'' are reserved for diploma holders while the term ''technician '' is the usual title for certificate holders. For purposes of this paper the term ''technician'' will refer to holders of the diploma ''licensed by the regulator to practice as pharmaceutical technologists''. Initially, trained to serve in public hospitals, these mid-level professionals now work in all sectors. They go through a 3 or 4-year diploma training that includes supervised internship in industrial, hospital, and community pharmacy.
The Kenyan pharmacy technician (formerly recognized as enrolled pharmaceutical technologist) has been in existence since 1927.The cadre has evolved through the years-previous titles include compounders, dispensers, and pharmacy assistants. Local training of technicians preceded that of pharmacists who were initially mostly expatriates or foreign trained(Republic of Kenya ministry of medical services and ministry of public health and sanitation, 2012).

Kenya has some of the best trained pharmacy technicians in the world. Their curriculum covers a proportion of the biomedical, pharmaceutical, social, economic, and clinical sciences covered by trainee pharmacists. The professional diploma may lead to progression to an 18-month higher national diploma or admission to 4/5-year undergraduate pharmacy degrees. Upon enrolment (not registration) technicians may be licensed to work in any pharmacy practice setting but may only assume lead responsibility for services in community pharmacy. In practice, technicians may work as superintendents of hospital-owned pharmacies which are essentially hospital-based community pharmacies (Republic of Kenya parliament of Kenya, 2002). In 2012 ratio of technicians to pharmacists was about 1:1(Republic of Kenya ministry of medical services and ministry of public health and sanitation, 2012).In 2013,70% of all registered pharmacists worked in hospitals and the public health system, making the technician the *de-facto community pharmacist* . This means that many technicians work without the direction, supervision of a pharmacist.

There is no formal recognition of pharmacy assistants or pharmacy assistant training programmes. In the late 1990s, some Government, and private colleges created a short-lived 1-year certificate programme for pharmacy assistants and dispensers. Much older hospital dispenser programmes run by faith-based hospital organizations have also fizzled out. This cadre of trained pharmacy support personnel did not gain formal recognition and the term ''pharmacy technician'' does not exist in Kenya. For purposes of this article the title of ''dispenser'' is used to refer to pharmacy assistants or other pharmacy auxiliary staff.

Pharmacist-technician tensions in Kenya

*Intra-professional t*ensions between pharmacists and technicians is an old global problem (Sanford et al., 1984). From literature, causes of this animosity include, lack of role clarity, hegemony of the pharmacist, jealousy ,pharmacist self-centredness(Molzon, 1990) ,phobia , anxiety over perceived inadequate competence of the technologist(Whitney Jr, 1992) ; pharmacists' fear of loss of control, fear of failing to conform to global practice standards, lack of respect and courtesy; and perceived lack of career opportunities for both the pharmacist and the technologist. Since the early 1990s Kenyan pharmacists and technicians have had interprofessional feuds. Aggressions and counter-aggressions between pharmacists and technicians have sustained this struggle for the last 3 decades. It seems the situation has been escalating. In July 1991, Kenya had only 1137 pharmacists on its gazetted register (Republic of Kenya, 1991). At some point ,around 1990, the struggle culminated in the transient birth of a curious cadre known as ''diploma pharmacists.'' This resulted in a court case. The feud escalated with the technicians forming the Kenya Pharmaceutical Association-in Kenya, pharmacists are members of the Pharmaceutical Society of Kenya. These feuds are far from over: using their numbers, technicians have used the political process to advance their interests. The technicians have been socialized to believe that they are ''pharmacists by another name'' (Mutethia, 2021) .Pharmacists are also socialized to be suspicious of technologists .Researchers on pharmacy-based public health initiatives have made little effort to consider or investigate distinctions between the two cadres (Gonsalves et al., 2019). About 3 years ago, technicians lobbied parliament to (make amendments to the Pharmacy and Poisons' Act) to increase the ratio of technologist to pharmacist membership to about 1:1.Thanks to the same political process draft legislation have proposed creating greater roles for technicians in industry, wholesale distributorship and

hospital (Omboki, 2018). In the 2014 draft, Parliament (with the support of the regulator) proposed the term ''pharmacy practitioner'' as a common terminology for both pharmacists and technicians. Pharmacists were indignant at this suggestion, and made it clear to Parliament that the appellation was unacceptable. On the hand, the technicians were resentful of the suggestion to phase out the diploma-trained ''pharmaceutical technologist'' in favour of a certificate-trained ''pharmacy technician''.

In Kenya, pharmacists dominate the industry, hospital, and health system pharmacy. The wars between pharmacists and technicians are incited by and managed by parties external to pharmacy. External forces have been acting in concert to *reset* practice standards. These forces include the pharmaceutical industry, pharmacy businesses, employers, the Government, politicians, and other health professionals. The court case cited above was occasioned by the decision of the chairman of the PPB to ''license technicians to practise as pharmacists''. The chairman was the Director of Medical Services (read physician) and his action was triggered by a presidential decree to make the technicians available to the private sector. A 1994 policy recommendation to replace the 3 year technologist programme with a lower cadre -a 2 year diploma-to be known as a pharmacy technician was resisted(Republic of Kenya ministry of medical services and ministry of public health and sanitation, 2012). The technicians seem to outdo the pharmacists in lobbying parliamentarians. PSK has already voiced its opposition to the proposal. It is the author's perspective that these forces have been using the pharmacy technician to distract the pharmacist from pursuing the bigger agenda of pharmaceutical care. They have been trying to substitute pharmacists with technicians and other professionals (Kinuthia et al., 2022). The external forces are now clamouring for an ''all inclusive'' FDA to replace the pharmacy and Poisons' Board which has hitherto been a pharmacy-only affair.'' All amendments to the law are initiated or processed by politicians through the departmental House Committee for Health which is invariably chaired by a physician legislator.

The feud between the pharmacists and technicians is an impediment to good pharmacy practice. To realise their potential, pharmacists should collaborate with both technicians and dispensers. More creative use of pharmacy technicians could free pharmacists to undertake more cognitive tasks(Kalman et al., 1992). A 2022 study showed that job resources (job control, time spent in various work activities, and social support) were

associated with a reduction in burnout and an increase in professional fulfilment of American community pharmacists (Fadare et al., 2022). It has been suggested that pharmacists should collaborate in all settings and that pharmacist roles should be complementary to the roles of other professionals (Mwawaka, 2023).

ABC

ABC is a pharmacy practice site within a hospital and clinical research environment. The functions of the pharmacy at ABC include clinical research, pharmaceutical supply and logistics, product custody and distribution, medicine use counselling, pharmaceutical care, pharmaceutical advisory services, pharmacy compounding, project planning and management, quality assurance, compliance, and external liaison. The author joined ABC in August 2009.In early 2010, the author and management upgraded two long-serving pharmacy assistants to dispensing clerks. The author would eventually work *behind the scenes* to have all the assistants assume the new title. The pharmacy function has been one of the least resourced in the clinical services department. There was a general under-appreciation of pharmacy's contribution to research. For instance, at a sister clinical site, the site pharmacist -who was the only pharmacy professional-had to delegate his work to physicians, physician associates and nurses whenever he had to be away. Clearly there was risk that, if unchecked, this could render the pharmaceutical function redundant. Thus, pharmacy as a profession was struggling for space among other disciplines in ABC. There was an urgent need to preserve this pharmacy position and grow ''the pharmacy space'' in the organization.

Resource scarcity: There has always been a scarcity of both pharmacists and technicians at ABC. Prior to 2006, pharmacy services at ABC were traditionally run by the dispensers. The necessity for a pharmacist was created by sponsors. As at end 2011, the staff establishment for the site was 1 pharmacist ,1 technologist and 3 pharmacy assistants. With time the site acquired 2 more dispensers through intra-departmental ''horizontal promotions''. At this point in time, the technologist was the principal assistant to the pharmacist whose role, to the extent of the delegation, mirrored that of the pharmacist.

Requests, for pharmacists and/or technicians were declined. Reasons for the refusal were lack of both justification and budgetary support for the ''extra positions''. It is the author's opinion that the organization had an imperfect conception of the place of pharmacy and its

3 cadres within the department, division, and organization. Of interest, it seemed, the organization deemed the pharmacy assistants -the oldest cadre-to be the de-facto technicians while the technicians were ''alternative pharmacists''. There was thus pressure to sell and see the pharmacy technician -to the organization, sponsors, and trial monitors-as a ''pharmacist designee''. This thinking was to be challenged in 2017 by the Guidelines for the conduct of clinical research which created a regulatory demand for study pharmacists. The guidelines withdrew the ''legitimacy'' of the technicians-it lumped technicians, dispensers and ''other staff'' in a single category of pharmacy support staff.

Pharmacy wars: Due to some fortuitous events, during 2016-2022, pharmacy technician numbers rose from 2 to 7. Although, employed to serve on trials, these technicians were based in pharmacy. Naturally they were assimilated into the pharmacy pool. This created immediate challenges. As the number of technicians started growing, the dispensers became agitated. They resented the technicians for earning more for doing the ''same'' job, they were vociferous about the ''unusual'' dispensing mistakes made by the novice technicians. Compared to the dispensers, the technicians were also more culturally and demographically diverse. The technicians themselves became restless. Technicians turned to the pharmacist to validate them as trained professionals. They sought to have certain roles withdrawn from the dispensers (and transferred to both them and the pharmacists). They were adamant that ABC should phase-out the dispensers. Thus, the pharmacist was now fighting wars within and outside pharmacy.

Pharmacy group identity: There were 4 different generations of workers: the founders, those who transferred into the dispenser role from other functions, the early pharmacist and technologists and the late arrivals. Further, one pharmacist, and 6 (of the 7 technicians) were *outsiders* seconded to pharmacy by some of our customers. Thus ABC had 4 different professional groups from 4 different generations. A new group identity was needed.

Research questions.

Shortage of pharmacists and technicians, intra-professional wars, lack of clear group identity, and politics were the key problems facing the pharmacy team at ABC. To address these problems, at least 4 questions required to be explored: -

1. How could one create, justify, and sustain effective demand for each of the 3 pharmacy cadres?
2. How could inter-dependence amongst the 3 cadres of pharmacy in the clinical research and the hospital practice environments be achieved?
3. How could each of the cadres be supported for optimal productivity?
4. How could the efficiency of the pharmacy unit in an institution be enhanced?

Significance

1. Pharmacists have a professional obligation to use their position and capabilities to ensure productivity of their team members and efficiency of their units. It is important that pharmacists take the lead in managing tensions amongst team-members (Zellmer et al., 2017).It is their business to identify and address bottle necks to productivity and efficiency.

2.The tensions between pharmacists and the technicians constitute a long-standing bottle neck to the realization of the full potential of the pharmacists and the pharmacy profession. the feud between Kenyan pharmacists and pharmacy technicians remains unresolved, has assumed a political character, and is escalating. The tensions are now ''unhealthy''.

3.Globally, intra-professional tensions in the pharmacy workforce will likely become more significant as more countries implement licensure /regulation of technicians.

4.The Kenyan pharmacy technician is relatively well- trained. It is critical that this cadre's potential is harnessed.

5.Despite their experience and on-the-job training, dispensers are not recognized as skilled manpower let alone health professionals. Thus, dispensers are an underused pharmacy resource.

Action: problem investigation, solution specification, development, and implementation.

Problem investigation: analysis, insights, and options

1. The hostility experienced in my workplace emanates from the real world of interprofessional tensions between pharmacists and technicians. A more fundamental cause of the tension between pharmacists and technicians is lack of professional leadership. This is the root cause. Some explanation is needed: pharmacists ought to have set the bar much higher, the pharmacists should have unified the cultures of the two ''professions''.

2. Diversity: pharmacists and technicians belong to two distinct groups with different professional cultures. Pharmacy dispensers do not have a professional guild-they derive their identity and culture from the workplace and the workforce itself.

3.The growing number of technicians posed new problems: dispensers became a minority, the new technicians pushed pharmacy dispensers away from the pharmacist and ''elite work''. A new layer of supervisors was created, the boundaries between professional staff and other staff became clearer, and a professional hierarchy emerged. The hierarchy so created became an issue for contention.

4. There is war-pharmacists are fighting to preserve the status quo while technicians want to change it. Technicians fight through parliament while pharmacists get their way through the PPB. The war is fought through the two professional guilds. This war also plays out in the hiring of pharmacy professionals in the public sector. The two cadres belong to two different trade unions which means that the two groups are unlikely to collaborate in industrial action to safeguard or improve their welfare(https://tinyurl.com/48b53w7y). It is

5. The pharmacy team was made up of diverse groups. There were instances of political behaviour- dispensers rejecting the technicians, technicians advocating for elimination of the dispensers, technicians seeking to build alliances with the pharmacists, the pharmacists distributing power and influence to the 2 support cadres, etc. Of note, the technicians' resolve was emboldened by their numbers and the lack of pharmacists. Technicians wanted to have a say in the role of the dispensers; the dispensers did not want to do more than they were paid for but were keen on having a job description that captured the value of their work. On a higher level of analysis, both pharmacists and technicians have been employing political means to advance their sectarian interests.

Solution specification

Given the prevailing pharmacist and technician deficit, delegation was inevitable. There was need to delegate extensively but creatively. Effective task shifting requires planning, support and transparency (Schalkwyk et al., 2020).

The deployment and use of dispensers had to be structured.

Keeping pharmacy work within the pharmacy space should be a strategic objective of the profession: the choice between the pharmacist delegating to a pharmacy dispenser or

technician as opposed to another professional was an easy one to make.
Staff should be empowered to do their work. Thus, delegation would have to accord with the law, and good regulatory practices to ensure quality and patient safety. Such delegation should enhance productivity and team efficiency.

Solution development and implementation

The first step was to identify activities that require pharmacist input. The next step was to specify activities that, reasonably, could be delegated to technicians. The third step was to institute measures to maximise supervision of both technicians and dispensers.
It is necessary to integrate dispensers into the pharmacy profession. It is also critical to redefine the role of the technician vis-à-vis those of the pharmacist and dispenser.
This paper describes a process of incremental team building and development undertaken, over a period of 3 years, with a view to enhancing team productivity and efficiency: -.

Phase 1: With 1 pharmacist and 5 more technologists on board, it became possible to transfer some roles and tasks from both the dispensers and the principal pharmacist to the technologists. Further, the principal pharmacist was able to share or even transfer part of his responsibilities to the second pharmacist. SOPs and job descriptions to support rational division of labour were created. Specifically, a hierarchy- with pharmacists being accountable for the performance of the pharmacy service- was created. Pharmacists would lead teams, provide technical, clinical and pharmaceutical advice, support project planning, provide external liaison make professional decisions, create product specifications, set quality standards, policy ,SOPS, resources and tools to be used by the other staff; technicians would implement decisions made by pharmacists ,provide product information, supervise dispensers and ensure compliance with set standards; and the dispensers would perform standardized or less critical tasks including clerical and office operations according to SOPs and as directed. Technicians would originate documents and records which would then be reviewed and/or approved by the pharmacists. The 3 cadres would work together to facilitate the orientation and training of new staff, students, and pre-licensure interns.

Phase 2: To ensure patient safety and to optimise productivity, staffing thresholds for pharmacists and technicians were set: a pharmacist would be responsible for no more than 4 vaccine trials, and a pharmacy technician would support no more than 2 trials of any kind.

Minimum pharmacy staffing requirements for clinical trial projects were defined and some technicians supported to ''specialise'' in a responsibility or two: champions were designated for inventory management, supply chain, cold-chain management, quality assurance, staff coordination and welfare, induction & training, etc. Where there were overlaps, the SOPs and job descriptions clarify decision-making authority and reporting / communication channels. Hierarchies based on seniority emerged amongst each support cadre.

Phase 3: Lastly to leverage on the diversity, efforts were made to support the workplace culture based a group identity. Through a participatory process, a mission statement for the clinical research pharmacy was developed. Next, the infrastructure for internal communication was improved: -

- Group email address: the group email would be used by other departments to exchange information with pharmacy team members.

- A rota for regular bimonthly meetings: at each general meeting updates would be provided on ongoing and planned clinical research-related activities; during the training meeting, a pharm-tech or pharmacist would be required to provide group training on some aspect of the unit's work. Both the email and the meetings created awareness and transparency on what key team-members do outside the pharmacy. This helped to flatten the hierarchy, and to foster a sense of team pride and solidarity amongst the 3 cadres.

Innovation

In response to a shortage of technicians and pharmacists, ABC conferred professional status to a hitherto unrecognized cadre. This created a third professional group (dispensing clerk or dispenser) in a workplace dominated by 2 warring cadres-pharmacists and technicians. The response of the middle cadre, the technicians, uncovered a second war front. To calm the storm, the author engaged a gradual process of rational labour division and culture-building amongst the 3 cadres. The process addressed adherence to standards, customer interest, the mission of the unit, the need for inter-dependence, the value of each cadre, and the imperative to optimise the use of skill and manpower. The innovation increased teamwork, team spirit and harmony, productivity, efficiency, and patient safety. The process generated lessons that can be applied in other settings.

Outcomes

***Pharmacist*:** This innovation spares pharmacist time for the most critical of things including patient care, problem-solving, protocol development, trial project planning and management, pharmaceutical due diligence, sponsor engagement and liaison with regulatory authorities.

Technicians and dispensers: With both the technicians and dispensers working as pharmacist extenders with limited authority; each cadre works at the top of its ''license''; all cadres are interdependent; multiple staff collaborate on each project. The innovation addresses the role of the dispenser, and the challenges of pharmacy intra-professional tensions and workplace politics; it fosters a pharmacy group identity, consolidates pharmacy space.

***Workforce*:** There is role clarity. The innovation simplifies work and optimises supervision and training. The pharmacy has transformed into a virtual service organization for the delivery of pharmacy work. The team has expanded its reach to ensure adequate ''pharmacy cover'': for instance, a pharmacy vaccine team made up of pharmacists and technicians allows a single pharmacist to provide oversight for multiple trials, simultaneously.

Organization: The foregoing has benefits for the organization: - the staff are more focussed and own their roles- there is team-ownership of results; there is reduction of employee stress, and of patient safety risk. An integrated pharmacy team supports optimal use of pharmacist time and skill leading to enhanced productivity and efficiency. This ensures that the organization gets value for money.

Profession: The innovation has made pharmacy more visible within the organization. The innovation facilitates departmental workload analysis and workforce rationalization.

Discussion

Pharmacy requires introspection and dialogue on the need for the 3 cadres to work together in a single setting. A genuine concern for pharmacist and technician productivity will demand a solution that brings together the 3 cadres in joint or shared action.

The innovation confirms that all the 3 pharmacy cadres are essential in ensuring productivity and efficiency.

Lessons learned.

Conflict can create opportunities for learning and innovation:- .

Lesson 1: Pharmacy is under constant political tension. Getting space and resources for pharmacy in a multi-disciplinary organization is a political struggle. External ''hostility '' towards pharmacy helped the unit to pull-together and to consolidate its identity (professional space). The team understood that the innovation would increase the effectiveness of pharmacy.

Lesson 2: Being able to notice, uncover and leverage on opportunities was key in the actions of the author in creating the transformation reported in this paper. ''Policy entrepreneurs'' (or pharmacy leaders) should be on the lookout for ''policy-making windows'' or opportunities (Brouwer & Huitema, 2018). Some of such opportunities include what is referred to in this article as ''fortuitous events''. They are fortuitous because they did not result from the author's own efforts. For example, there were team members who aspired to or embraced ''pharmaceutical excellence'', managers who had worked in the Northern Hemisphere where clinical pharmacists play a prominent role in hospital care, and project leaders who agreed to second their staff to the pharmacy team.

Lessons 3: There is a professional role for dispensers; pharmacy technicians and dispensers have the capacity to act professionally. The three cadres appreciate the need to work safely, collaboratively, and within their own scope.

Mechanism of success

In therapeutics, knowledge of the mechanism by which a medicinal product or therapy brings about its effect(s) is essential for validating an intervention. It seems several factors contribute to the success of the present intervention: -

*leadership***:** Leadership from pharmacists will create value for both the profession and the consumer. One of the functions of the 7-star pharmacist is leadership. Avolio and Gardner comment on the construct of authentic leadership : '' we believe authentic leadership can make a fundamental difference in organizations by helping people find meaning and connection at work through greater self-awareness; by restoring and building optimism,

confidence and hope; by promoting transparent relationships and decision making that builds trust and commitment among followers; and by fostering inclusive structures and positive ethical climates,"(Avolio & Gardner, 2005). Authentic leadership is characterised by self-awareness, balance, transparency, and sense of morality. The author, being aware of the moral obligation to protect patient safety, initiated and undertook transparent action to address team challenges in a fair manner.

Right organizational context: An interaction between need, challenges, opportunity, individuals, and organization gave rise to the innovation.

Participatory process: Consultations with the cadres on the proposed job descriptions primed the ground for success. During the process of job evaluation each cadre negotiated a ''strong job description'' that truly reflected its worth and contested perceived unfavourable outcomes. There was comprise: each cadre had to give up some role or responsibility. The process thus helped the cadres to confront the tensions amongst them and attain closure. At the end of the process, each cadre, owned and cherished their negotiated place at the table.

Long-term benefits for stakeholders: The innovation held the promise of resolving a big problem facing the pharmacy unit at ABC .All the 3 parties stood to gain from the arrangement:- 1) to enhance his own visibility , the Head Pharmacist needed a back-up pharmacist; pharmacists embraced the other cadres as pharmacist -extenders, 2) the pharmacists helped to secure the place of the technician 3) the dispensers gained professional status.

Meeting higher needs: The innovation created job resources: the dispensers freed the technicians to perform supervisory work; each cadre realised workload reductions. As expected, every team member now had the opportunity to do meaningful work (Napier et al., 2018).

Perceptions and attitudes: the innovation redefined roles and scopes leading to heightened stakes: dispensers had to prove themselves to technicians; technicians had to demonstrate competence to both pharmacists and dispensers; pharmacists had to supervise more empowered subordinates. Changes occurred in perception of self and others for the 3 cadres. This shifted attitudes towards increased professionalism.

Redistribution of power: the innovation empowers and supports each cadre. It transfers some power from one cadre to another. Redistribution of power creates a new hierarchy

that guarantees support for each role.

Re-enforcement: Inter-dependence creates respect. Thus, every team- member had the knowledge, confidence, and support to do their best. The resultant increase in team spirit and staff morale created positive reinforcement.

Novelty

The simplicity of the proposal is striking - professionalise the dispenser, integrate the dispenser, re-align the technician, redefine the hierarchy, attain a new equilibrium. At the author's previous worksite (community pharmacy chain) having the 3 cadres, technicians were deployed as substitute pharmacists supervised by a chief pharmacist. In public health system facilities, there is an apparent division of labour: whereas technicians work at all levels of the system, pharmacists do not work in facilities ranked lower than level 4 (Republic of Kenya ministry of Health, 2006). Thus, there are many establishments in which technicians work without pharmacist supervision.

The scope of dispensing privileges of the dispensers under discussion is much wider than that of the technicians and the 2 levels of dispensers obtaining in the Republic of South Africa. Another distinction is that the immediate supervisor of the dispenser may be a technician rather than the pharmacist. This is to be contrasted with the South African set-up in which community pharmacy dispensers (pharmacist assistants) are supervised directly by the pharmacist.

This innovation creates inter-dependencies and supports each cadre to work safely. Interdependence proceeds from the premise pharmacists and technicians need to delegate to be productive and effective; whilst technicians and dispensers need the guidance, supervision, and support of the pharmacist to ensure patient safety and compliance with good practice. Interdependence emphasizes the supervisory functions of both pharmacists and technicians. Pharmacists would share responsibility with associates in performing common work activities.

The pharmacist could direct, supervise and review work performed by sub-ordinates either directly or indirectly through delegated subordinates and /or by use of information communication technology.

Theory development

According to Bolman and Deal(Bolman L.G & Deal T.E, 2017),organizations consist of people, structures, politics, and symbolism. The 4 elements form a complex mesh. The central features of the political frame are power, conflict, competition, and organizational politics. Groups in an organization seek to develop agenda and build power bases. They project their activities as advocacy.

The pharmaceutical industry in Kenya is dominated by pharmacists who are a minority group. Critical theory informs us that the intra-professional feuds in pharmacy are class struggles for control of power and resources. According to Critical Theory, bridging the practice gap between pharmacists and pharmacy support staff cannot serve the best interests of pharmacists and pharmacy. Seen through the lens of Conflict Theory, the intra-professional tensions are a class struggle created by inequitable access to power and resources. Conflict theory teaches that social classes within groups are both inevitable and necessary. Thus, the tensions between pharmacists and technicians are political cannot be eradicated. There is need to acknowledge and manage the tensions i.e., work with the tensions. The tensions create opportunities for a ''political settlement'' which settlement consists in redistributing power between technicians and others. The marginalization of pharmacy technicians and pharmacy assistants is reduced by ''adopting'' pharmacy support staff as pharmacy professionals. This adoption re-orders the conflicts. The settlement creates and maintains an equilibrium of ''law and order'' in the pharmacy group: formalizing the supervisory authority of the technician over the dispenser addresses ''role misunderstanding and threats to self-identity''(Gregory & Austin).The arrangement confirms, even *dramatizes*, the leadership position and statutory authority of the pharmacist. The resulting ''law and order '' is a command structure which creates interdependences as suggested by Mwawaka (2023).

Implications for pharmacy

Pharmacy requires introspection and dialogue on the need for the 3 cadres to work together in a single setting. A genuine concern for pharmacist and technician productivity will demand a solution that brings together the 3 cadres in joint or shared action- pharmacists should be accountable while the other pharmacy cadres remain responsible for critical processes in pharmacy practice. -

Being victims of professional marginalization themselves, pharmacists should be morally obligated to optimise deployment and use of other cadres in the pharmacy workforce.
-This work suggests how the 3 cadres ought to interact amongst themselves: the 3 cadres belong to a single profession and are *interdependent*. The equilibrium generated by the integration of dispensers will likely have influences upon further development of the 3 cadres. -
Leadership from pharmacists will create value for both the profession and the consumer.

Summary

A system to help the team to work harmoniously, productively, and efficiently was devised based on the following tenets: -

- Inter-cadre tensions in the workforce are of a political nature. Resolution of these tensions ensures optimal use of professionals, time, and skill. This leads to enhanced team productivity, and patient safety.
- Pharmacists need to embrace both technicians and dispensers as legitimate professionals.
- Professionalizing the dispenser cadre relieved tensions between pharmacists and pharmacy paraprofessional staff. This consists in the redistribution of power amongst the 3 professional cadres to create new command structure and inter-dependencies.

Change occurred incrementally over time. A suitable organizational context, a participatory process, long-term benefits, meeting higher needs and re-enforcement contributed to the success of the innovation.

- The present case study aligns with Bolman and Deal's model, Conflict Theory and Critical Theory.
- Lessons learned can be applied in other settings**.**

Conclusions

There is a professional role for dispensers. Professionalizing the dispenser moderates inter-cadre tensions between pharmacists and technicians, and between technicians and dispensers. This serves the best interests of the consumer and the profession. The innovation works because all parties gain from the resultant arrangement. It ensures that

the organization gets value for money. This approach can resolve inter-cadre tensions in other settings.

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Notes on contributors

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