How Functional Reviews in the Health Sector Exacerbated Occupational Stress Among Clinical Officers at Public Hospitals in Malawi

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Abstract

Malawi has a cadre of mid-level health professionals called clinical officers. In the wake of an acute shortage of medical doctors, clinical officers perform tasks conventionally designated for medical doctors. This paper seeks to explain how implementing some functional reviews in the health sector exacerbated occupational stress among clinical officers at public hospitals in Malawi. The study adopted a qualitative research design with a case study as a research strategy. The study was conducted at four district hospitals and one central hospital, all of which are state-owned in Malawi. The paper argues that implementing some functional reviews increased the risks of occupational stress among clinical officers at public hospitals. The paper demonstrates that implementing some functional reviews has aggravated occupational stress among clinical officers at public hospitals. The paper concludes that the implementation of some functional reviews has perpetuated interprofessional conflicts between clinical officers and medical doctors as well as forms of occupational violence by doctors against clinical officers. The paper further argues that interprofessional conflicts and occupational violence are ultimately drivers of occupational stress among clinical officers. Finally, the paper recommends that a psychosocial risk assessment should be conducted to avoid or minimise the risks of occupational stress and burnout among clinical officers posed by implementing functional reviews in the health sector.

Keywords: clinical officers; psychosocial hazards; occupational stress and burnout; restructuring, functional reviews.





1. Introduction

Since the 1970s, developing countries have been putting efforts into implementing systemic reforms towards improving the performance of the public sector (Wescott, 1999, Durevall, 2001, Atkinson, 1995, Chiweza, 2010). In this paper, such systemic reforms are referred to as *restructuring*. Restructuring is defined as "...not simply public sector change... it incapsulates sustained, purposeful change to improve the efficiency, equity and effectiveness of the public sector or some combination of those" (Atkinson, 1995). Hence, the proponents of restructuring argue that the logic behind implementing restructuring in the public sector is to improve efficiency, effectiveness and accountability in terms of service delivery (Tetřevová, 2007, Riany et al., 2012, Young, 2002, Durevall, 2001, Wescott, 1999).

Within the framework of restructuring the public sector, decentralisation and functional reviews are some of the most common health sector reforms being implemented in developing countries (Mosca, 2006, Sumah et al., 2016, Lakshminarayanan, 2003, Atkinson, 1995). Decentralisation is sometimes described as a fourfold typology: delegation, deconcentration, devolution, and privatisation (Mosca, 2006, Sumah et al., 2016). "Delegation transfers responsibility to lower organisational levels; deconcentration to lower administrative levels; devolution implies transferring authority to a lower political level; and privatisation takes place when tasks are transferred from public into private ownership" (Sumah et al., 2016). Conducting functional reviews within government ministries is one way of improving the effectiveness of service delivery in the public sector (Wescott, 1999, Bennell, 1994, Tunčikienė et al., 2013, Durevall, 2001). Functional reviews within ministries can cover a wide range of benchmarks, such as an evaluation of organisational structures, establishment and staffing levels, management systems, and systemic and structural restrictions (Wescott, 1999, Bennell, 1994, Durevall, 2001). Functional reviews are also utilised to identify key obstacles in the effectiveness and efficiency of staffing (Bennell, 1994, Durevall, 2001).

Restructuring is associated with mental disorders among workers, such as occupational stress (OS). For instance, restructuring can

disrupt interprofessional relations and transform the work routine and the demands placed on individuals (Bourbonnais et al., 2005a). Ultimately, the disruption of interprofessional relations and the transformation of work routines may sometimes become sources of OS in the workplace (Bourbonnais et al., 2005a, Ganster and Rosen, 2013). Against this background, this paper seeks to demonstrate how disruption of interprofessional relations and transformation of work routine (ibid.) as a result of functional reviews, contributed to OS among clinical officers (COs). This paper argues that the implementation of some functional reviews in the health sector increased the risks of OS among COs at public hospitals in Malawi. Using the case of COs and with the aid of the job demand-resource (JD-R) model, this paper explores how the implementation of some functional reviews in the health sector exacerbated OS among COs at public hospitals. The key research question that this paper sought to interrogate was as follows: "Can functional reviews in the health sector become sources of occupational stress (OS) among clinical officers (COs) at public hospitals in Malawi?"

Since the main aim of the study was to explore the practical experiences of COs with the implementation of functional reviews $vis-\dot{a}-vis$ OS, which were anticipated to be subjective in nature, a qualitative research design was deemed most appropriate for the study.

The outline of the paper is as follows: the paper begins with an overview of the literature on the contextual background of functional reviews in light of changes in the workplace and the connection between such changes and OS among health workers; the organisation of healthcare services in Malawi; position of COs in health service delivery in Malawi; theoretical framework; and contribution of the study. Thereafter, the paper discusses the methodology of the study, which is followed by a presentation of the results. Finally, the paper articulates the interpretation of the results and then highlights the limitations of the study and practical recommendations.

2. Contextual background

Organisation of Healthcare Services

Healthcare services in Malawi are provided through three subsectors. The three subsectors are: the public at free of charge, private forprofit, and private not-for-profit (Malawi Government, 2017). The public subsector is the major healthcare service provider that includes all health facilities under the Ministry of Health, district, town and city councils, Ministry of Defence, Ministry of Internal Affairs and Homeland Security (Police and Prisons) and the Ministry of Natural Resources, Energy and Mining (ibid.). The private for-profit subsector includes all privately owned health facilities, while the private notfor-profit subsector comprises health facilities owned by faith-based institutions, nongovernmental organisations (NGOs), and statutory corporations (ibid.). The major faith-based provider is a group of mission hospitals called the Christian Health Association of Malawi (CHAM)¹, which accounts for approximately 29 percent of all health services (ibid.). Linked to each other through a referral system, the healthcare services in Malawi are organised at four levels as follows:

- **1. community level** provided by community health workers (e.g., health surveillance assistants), health posts, dispensaries, village clinics, and maternity clinics;
- **2. primary level** provided by health centres and community hospitals;
- **3. secondary level** consisting of state-owned hospitals and CHAM hospitals at the district level; and
- **4. tertiary level** consisting of five state-owned central hospitals located in the four major cities of Blantyre, Zomba, Lilongwe, and Mzuzu (Malawi Government, 2017, Malawi Government, 2018a).

¹ Mission hospitals are owned by Christian religious denominations such as Roman Catholics, Presbyterians, Seventh Day Adventists, Anglicans, etc. Other religious faiths like Islam also operate health facilities outside CHAM.

More recent statistics of the health workforce in Malawi are reported in a survey on human resources for health in Africa that was conducted by the World Health Organization (2021). This survey showed that out of 47 African countries, only four, namely, Seychelles, Namibia, Mauritius, and South Africa, had a density of medical doctors, nurses, and midwives per 1000 population that reached or exceeded the sustainable development goals (SDG) density threshold of 4.45 health professionals per 1000 population. In contrast, Malawi is among the 16 (out of 47) countries in Africa reporting the lowest densities that fall within the range of 0–1 health professional per 1,000 population (World Health Organization, 2021).

Position of Clinical Officers

Clinical officers (COs) are a cadre of mid-level health professionals in Malawi who serve as substitutes for medical doctors in the wake of an acute shortage of the latter (Bradley and McAuliffe, 2009, Chilopora et al., 2007, Gajewski et al., 2019, Grimes et al., 2014, Jiskoot, 2008, Mkandawire et al., 2008). Upon completion of O-Level education, candidates for the CO position are trained locally at Malawi College of Health Sciences for a three-year diploma course in anatomy, physiology, pharmacology, paediatrics, medicine, surgery, obstetrics and gynaecology (Chilopora et al., 2007, Gajewski et al., 2019, Jiskoot, 2008, Mkandawire et al., 2008, Muula, 2009, Grimes et al., 2014, Bradley and McAuliffe, 2009, McAuliffe et al., 2009a).

After completing a 12-month internship at a central or district hospital, trainees for the CO position are licenced to practice independently at secondary and tertiary levels of health service delivery (Chilopora et al., 2007, Gajewski et al., 2019, Mkandawire et al., 2008, Muula, 2009, McAuliffe et al., 2009b, Bradley and McAuliffe, 2009, McAuliffe et al., 2009a). At hospitals, COs are deployed to various departments/units depending on the areas in which they specialised during their training. At the district and central hospitals, the COs provide various services, including orthopaedics, physiotherapy, HIV/AIDS and TB treatment, family planning, paediatrics, surgery, radiology, pharmacy, laboratory, and antenatal services. As of 1980, when the first locally trained COs

started to practice, there was a handful of medical doctors in Malawi (Muula, 2009, Thetard and Macheso, 2004). Most of these medical doctors were expatriates practicing in Malawi for fixed periods of time (Palmer, 2006). For almost two decades after 1980, most of the administrative and clinical tasks conventionally designated for medical doctors were performed by COs (Broadhead and Muula, 2002, Muula et al., 2016, Thetard and Macheso, 2004).

Stress and Restructuring

The Occupational Safety and Health Administration (2014) describes hospitals as workplaces characterised by high levels of stress. Dousin et al. (2019), Shanafelt and Noseworthy (2017), Bellagamba et al. (2015), Ilić et al. (2017) and Baylina et al. (2018) concur that working conditions at health facilities are inherently stressful. There are negative effects of OS and burnout on health workers. OS and burnout negatively affect the quality of personal life of the health workers themselves and their performance on the job (Gosseries et al., 2012, Goetz et al., 2015). OS and burnout "can reduce the enjoyment in life, cause hypertension, cardiac problems, reduce immunity, contribute to substance abuse, lead to frustration, irritability and reduce the overall status of mental and physical wellbeing" (Bhatia et al., 2010). OS and burnout are also associated with gastric complaints, nervous disturbances, chronic fatigue, headaches, sleep disorders, breast cancer, stroke, and increased consumption of tranquillisers and sleeping tablets (Lin et al., 2014, Pikó, 1999, Rivera et al., 2020, Wichert, 2002).

Changes in the workplace – such as the implementation of functional reviews, increased overtime work, and shift work – are associated with high levels of OS and burnout among health workers (Mathisen et al., 2017, Day et al., 2017). However, changes in the workplace are inevitable (Day et al., 2017, Leka and Lavicoli, 2017). A study on nurses conducted by Hertting et al. (2004) established that fundamental changes in the workplace through restructuring are connected with persistent mistrust towards management and doctors, which became a significant source of stress among nurses in Sweden. Quinlan and Bohle (2009), Bourbonnais et al. (2005b)

and Kalimo et al. (2003) identified an association between job insecurity and changes in the workplace, with significant adverse effects on workers' safety and health. In this regard, Loewenson (2001) argues that such adverse effects may be underreported due to job insecurity coupled with high labour turnover that results from the reorganisation of work. Wichert (2002) demonstrates that there was a negative effect of job uncertainty and work intensification on psychological wellbeing.

Dragano et al. (2005) conclude that there is a synergistic effect caused by simultaneous exposure to fundamental changes in organisations and an increase in work-related stress. For instance, Harney et al. (2018) confirm that restructuring is positively related to work intensity, which ultimately has a negative impact on the psychosocial wellbeing of workers, i.e., exhaustion and stress. Furthermore, restructuring can disrupt interprofessional relations, transform the work routine and the demands on workers, and ultimately trigger OS (Bourbonnais et al., 2005a, Ganster and Rosen, 2013). Against this backdrop, there is a tendency for workers to express negative attitudes towards restructuring efforts (Kivimäki et al., 2000). Such pessimism and negativity may lead to mistakes by health workers while on duty (Jones and Arana, 1996).

Functional Reviews in Malawi's Health Sector

One critical aspect of restructuring in Malawi's public sector since the 1990s has been the implementation of functional reviews within government ministries (Durevall, 2001, Chiweza, 2010). In Malawi's health sector, the planning and implementation of functional reviews are coordinated by the Human Resource Planning Section of the Department of Human Resource Management & Development at the Ministry of Health (Malawi Government, 2020, Malawi Government, 2011). The functional reviews are conceived as efforts to establish new structures and functions in the architecture of health service delivery that reflect current needs while shedding some responsibilities that may no longer be relevant (Malawi Government, 2018b, Malawi Government, 2018a, Malawi Government, 2020). The Health Sector Strategic Plan for Malawi (2011–2016) stipulated a series of functional

reviews for the health sector, some of which were conducted by 2017 (Malawi Government, 2011). The Ministry of Health had planned to complete reviews of functional and governance structures in the health sector by 30 June 2021 (Malawi Government, 2018b, Malawi Government, 2018a, Malawi Government, 2020).

Theoretical Framework: Job Demands-Resources (JD-R) Model

In this paper, the job demands-resources (JD-R) model is used to explain OS among COs in the wake of implementing functional reviews in the health sector. The JD-R model describes work conditions that are associated with burnout and motivation (Hu et al., 2018, Demerouti et al., 2001). According to Zablah et al. (2012), Hall et al. (2010) and Hall et al. (2013), the JD-R model is a dualprocess framework on how burnout and engagement are influenced by the interaction of job demands and job resources. Job demands are "physical, social, or organisational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs" (Demerouti et al., 2001). Job resources are "physical, psychological, social, or organisational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reducing job demands at the associated physiological and psychological costs; (c) stimulate personal growth and development" (Demerouti et al., 2001).

Job demands are considered contributing factors for mental illnesses such as OS and burnout, while job resources tend to minimise OS and burnout (Zablah et al., 2012, Demerouti et al., 2001, Hall et al., 2013, Hu et al., 2018). In contrast, job resources are contributing factors for engagement on the job, while job demands reduce one's engagement on the job ((Zablah et al., 2012, Demerouti et al., 2001, Hall et al., 2013, Hu et al., 2018).

This paper demonstrates that functional reviews being implemented in the health sector constitute additional job demands that contribute to OS among COs at public hospitals. Ultimately, the implementation of functional reviews in the health sector as additional job demands may inhibit COs' engagement on the job.

In this paper, the researcher has exercised the flexibility to apply the JD-R model in a hospital setting in Malawi. Hence, this paper has identified functional reviews as job demands that may interact with job resources at public hospitals in the course of *task shifting* to influence OS and burnout among COs.

Contribution of the Study

A search of the literature on COs that was conducted in this study indicates that there is a handful of nonclinical articles on mid-level health workers in general that are available. These articles were published over seven years ago. Nevertheless, these articles provide important insights related to the work environment for mid-level health workers on which implications on safety and health can be drawn (Bradley et al., 2015, Bradley and McAuliffe, 2009, Dovlo, 2004, Kalata et al., 2013, McAuliffe et al., 2009a, McAuliffe et al., 2009b). Although these articles on mid-level health workers provide some insights related to the work environment for COs and implications for safety and health, there is one shortcoming inherent in these articles. These papers on mid-level health workers did not specifically target COs. The subjects of these studies were COs, medical assistants, technicians, nurses, and midwives, which collectively constitute mid-level health workers in Malawi. The COs, medical assistants, technicians, nurses, and midwives have distinct experiences in terms of work conditions and ramifications for safety and health. It is therefore critical for further research to be conducted on each category of the mid-level health workers to explore peculiar and deeper knowledge of their respective work environment vis-àvis safety and health. This paper attempts to fill this gap.

Despite the limitations (highlighted later), this paper contributes to the emerging evidence supporting the connection between OS and restructuring in the workplace. In particular, this paper adds new information with reference to psychosocial hazards confronting health workers in the wake of implementing functional reviews. This new information can further be explored by other researchers and policymakers to improve the quality of healthcare at public hospitals in Malawi and beyond.

3. Methodology

This study adopted a qualitative explanatory research design with a case study as a research strategy. The research was conducted at the following five district hospitals and one central hospital, all of which are state-owned in Malawi: Mulanje District Hospital, Chikwawa District Hospital, Balaka District Hospital, Nkhatabay District Hospital, and Queen Elizabeth Central Hospital in Blantyre. A total of 1,045 constituted the source population (N) of COs employed in the public sector, while 152 constituted the study population (Np) of COs at the four district hospitals and one central hospital. Finally, for the interviews and focus group discussions targeting COs, 25 people (five from each hospital) were recruited as respondents.

Three methods of qualitative data collection were used, namely semistructured interviews, focus group discussions, and document analysis. Due to the COVID-19 protocols, semistructured interviews and focus group discussions were conducted virtually. In addition to the five COs from different departments at each of the five public hospitals, one immediate supervisor or hospital administrator from each hospital was selected for the semistructured interviews. Finally, five semistructured interviews were also conducted with five key informants outside the public hospitals as follows: a policy specialist at the Ministry of Health (1); an official from the Physician Assistants Union of Malawi (PAUM)² (1); retired COs (2); and an occupational health physician (1).

As shown in Table 1, in total, 35 semistructured interviews were conducted virtually with COs at the five public hospitals and key informants outside the public hospitals. Furthermore, at each of the five public hospitals, one focus group discussion was virtually conducted with at least four COs representing different departments or units. In total, five focus group discussions were conducted with COs.

Convenience sampling was used to select the five hospitals as study sites depending on the hospital's conditions set for study

² Physician Assistants Union of Malawi (PAUM) is a trade union that represents clinical officers (COs) in Malawi. It was formed in 2018 as an association and registered as a trade union in 2020.

permissions to be granted. At each hospital, convenience sampling was also used to recruit the COs into the study. A method of data analysis called thematic analysis was adopted. This method involved the transcription of the virtual interviews and focus group discussions that had been recorded. A computer software called Atlas.ti version 9 was used to conduct thematic analysis on the transcriptions as well as the relevant documents that were gathered. These documents included statements, reports, and memos by the Physician Assistants Union of Malawi (PAUM); policy documents, reports, and statements issued by the Ministry of Health; and reports, memos, and charts provided by the hospital administrators. The thematic analysis of the transcriptions and documents involved creating codes, revising the codes, identifying recurring themes, and merging the themes where necessary (Maguire and Delahunt, 2017).

Table 1: Semistructured interviews

Interviewees	Number of interviews at each hospital	Total number of interviews
Clinical officers from different departments/units	5	25
Immediate supervisors/ hospital administrators	1	5
Key informants		5
TOTAL	6	35

Informed consent and voluntary participation were mandatory for every respondent. Since data collection was conducted virtually, informed consent was obtained orally and captured in the audio recording before the commencement of a particular interview or focus group discussion. The study was approved by the Committee on Research Ethics in the Social Sciences and Humanities at the National Commission for Science and Technology (NCST) in Malawi (Registration No: P 08/21/598) and the Human Research Ethics Committee (Medical) of the University of the Witwatersrand (Registration No: M 210558).

4. Results

During interviews with COs and key informants, focus group discussions with Cos, as well as document analysis, it was established that there had been functional reviews in the health sector since the 1970s. The implementation of functional reviews entailed reconfigurations of some structures and the creation of new positions and functions in the health sector, among others. Some of the functional reviews implemented in the health sector are associated with increased risks of OS among COs at public hospitals.



Figure 1: Summary of study results

Figure 1 (above) summarises the results of the study. As shown in Figure 1, some functional reviews implemented in the health sector since the 1970s have caused feelings of frustration, depression, fear, anxiety, low self-worth, resentment, and anger among COs at public hospitals. Such feelings ultimately triggered or exacerbated OS among COs.

Creation of a 'Clinical Officer' Position

A new position in the health sector called the *clinical officer* was created in 1976. This was a result of functional reviews that had been conducted in the wake of an acute shortage of medical doctors (Chilopora et al., 2007, Gajewski et al., 2019, Jiskoot, 2008, Mkandawire et al., 2008, Muula, 2009, Grimes et al., 2014, Bradley and McAuliffe, 2009, McAuliffe et al., 2009a). The introduction of clinical officers (COs) in the architecture of healthcare service delivery is a good example of *task shifting*. *Task shifting* is "a

strategy where nonqualified (or less qualified) health workers are given responsibilities normally performed by highly qualified and highly skilled health professionals" (Muula, 2016). The COs were therefore meant to be less qualified health professionals who would be recruited to serve as substitutes for medical doctors (Chilopora et al., 2007, Gajewski et al., 2019, Jiskoot, 2008, Mkandawire et al., 2008, Muula, 2009, Grimes et al., 2014, Bradley and McAuliffe, 2009, McAuliffe et al., 2009a). As of 1980, when the first locally trained COs started to practice after a four-year training (including a 12-month internship at a hospital), there was a handful of medical doctors in Malawi (Muula, 2009, Thetard and Macheso, 2004). Most of these medical doctors were expatriates practicing in Malawi for fixed periods (Palmer, 2006).

I can recall that when the 21 of us were licenced to practice as clinical officers in 1980, there were approximately 15 (or fewer) qualified medical doctors in Malawi, including specialist doctors. Most of these were foreign nationals (Interview, retired clinical officer 01).

In 1991, upon the opening of the University of Malawi's³ College of Medicine⁴, the country started to train medical doctors locally (Broadhead and Muula, 2002, Muula et al., 2016). This meant that until 1991, there was no educational institution in Malawi where one could receive the requisite training and acquire a qualification as a medical doctor. Since 1980, most of the administrative and clinical tasks conventionally designated for medical doctors were performed by COs as substitutes for medical doctors (Broadhead and Muula, 2002, Muula et al., 2016, Thetard and Macheso, 2004). The situation started to change within a few years after the establishment of the College of Medicine in 1991. By 2002, 168 medical doctors had graduated from the College of Medicine in a space of ten years (Broadhead and Muula, 2002, Muula et al., 2016). A total of 112 of the 168 were then working in the country, while 43 were pursuing various postgraduate studies abroad and expected to serve at public

³ The University of Malawi was established in 1965.

⁴ In 2021, the College of Medicine and Kamuzu College of Nursing broke away from the University of Malawi and merged to form the Kamuzu University of Health Sciences.

hospitals in Malawi immediately after completion of their further studies (Broadhead and Muula, 2002). Most of the locally trained medical doctors were offered jobs in the health sector soon after graduating from the College of Medicine or institutions of higher learning abroad. Most of these positions had been held by COs since 1980, in the wake of an acute shortage of medical doctors in the country.

The increasing number of locally trained medical doctors available for employment in the health sector gradually emerged as a source of tensions, rivalries, and conflicts between medical doctors and COs. Such tensions, rivalries, and conflicts led to sour interprofessional relations between doctors and COs, particularly as more doctors started to take over some key positions previously occupied by COs. During the interviews and focus group discussions with COs, there was a general feeling among COs that medical doctors were generally favoured at the expense of COs.

One of the issues that, as a trade union representing clinical officers, we continue to engage the Ministry of Health to address is differential treatment. We have cases of clinical officers and doctors possessing the same highest qualifications, i.e., bachelor's degree or postgraduate qualification. A medical doctor will be given more incentives, such as accommodations and transportation. However, a clinical officer will be denied such incentives. Doctors will be given a higher grade of service, while a clinical officer possessing a bachelor's degree or master's degree, such as a medical doctor, will be given a lower grade. Unfortunately, the key decision–making offices where we submit our grievances at the Ministry are occupied by medical doctors who are beneficiaries in this vice while we are the victims (Interview, key informant, president of PAUM).

During interviews, COs indicated that senior management positions at the district or central hospital level and the Ministry of Health were dominated by medical doctors. This was corroborated by the president of PAUM, who spoke as a key informant on behalf of COs. Among others, such top positions that we highlighted as being dominantly occupied by medical doctors include the following: director of social and health services, district medical officer, director or deputy director of the central hospitals, and director or

deputy director at the Ministry of Health headquarters. Other top positions include managers for various programmes in the Ministry of Health, such as the National Tuberculosis (TB) Control Program. The president of PAUM, on behalf of Cos, also bemoaned that some COs had acquired adequate work experience and higher educational qualifications suitable for such high positions, e.g., postgraduate degrees, including PhDs. However, according to PAUM, the suitably qualified COs were deliberately sidelined as far as appointments to such high positions were concerned.

The interprofessional conflicts between COs and doctors emanating from *task shifting* led to OS in two ways. Firstly, the interprofessional conflicts provided fertile ground for deep–seated frustration, anger, and resentment among COs against medical doctors. Ultimately, such deep–seated frustration, anger, and resentment exacerbated OS. In addition, interprofessional conflicts also resulted in a lack of support, respect, understanding, and empathy between COs and doctors. During interviews, COs expressed that when interacting with medical doctors, they would develop feelings of low self–worth, fear, anxiety, depression, and insecurity due to poor interprofessional relations. Such deep feelings ultimately cause or aggravate OS among COs. This was corroborated by a retired CO who was a key informant and graduated from the first cohort of locally trained COs:

I can tell you that it is not only too much workload that contributes to stress and burnout among clinical officers. The stress and burnout that clinical officers suffer also come from prolonged frustrations, anxieties and depression arising from several issues, such as poor relations between clinical officers and other cadres, particularly medical doctors. Such grievances about poor relations may have nothing to do with the workloads that clinical officers are subjected to (Interview, retired clinical officer o1).

Secondly, during interviews and focus group discussions, COs reported experiencing occupational violence in the form of verbal aggression and bullying from medical doctors and nurses due to the lower qualifications and clinical competencies of COs. The verbal aggression and bullying by medical doctors against COs manifested through insults, shouting, and outbursts, sometimes over unfounded

accusations. The COs further testified that such verbal aggression and bullying made them feel intimidated, offended, and less valued by the medical doctors. Subsequently, this caused prolonged feelings of frustration, anger, resentment, and alienation among COs. Ultimately, such prolonged feelings became sources of OS among COs.

Unfair Distribution of Tasks

The unfair distribution of tasks was another grievance that COs raised as a contributing factor to interprofessional conflicts with medical doctors in the course of *task shifting*. During interviews and focus group discussions, COs mentioned that at district hospitals, a handful of medical doctors available were often preoccupied with administrative tasks other than clinical duties. This was corroborated by a respondent who was a medical doctor and then served as a supervisor for COs. Two key informants also corroborated this observation. As such, COs were performing most of the clinical duties, some of which were supposed to be undertaken by the few medical doctors at the hospital. As a result, there was growing frustration and resentment among COs over the unfair distribution of clinical tasks at the district hospitals between COs and medical doctors. The COs mentioned that frustration and resentment ultimately exacerbated OS and burnout among COs.

You know, we still have an acute shortage of doctors at our hospital. We need more doctors. However, the handful of doctors we have here at the hospital are not performing the clinical duties as expected. It is mostly us, the clinical officers who do much of the clinical duties which these few doctors here were supposed to be performing. That leaves us with too much work to do. In the end, this triggers stress and burnout. Instead, these few doctors here are preoccupied with administrative tasks at this hospital, that is what all they do here. We have been raising this as an issue of concern. Unfortunately, our superiors where we take these concerns happen to be the same doctors we complain against over unfair distribution of tasks (Focus group discussion 04B).

Interprofessional conflicts between COs and medical doctors were also associated with training and qualifications between the two cadres. One undergoes a five-year Bachelor of Science (BSc) degree course

to qualify as a medical doctor followed by an 18-month internship at the central hospital, while COs as substitutes for medical doctors are trained for three years at the diploma level followed by a 12-month internship (Chilopora et al., 2007, Gajewski et al., 2019, Jiskoot, 2008, Mkandawire et al., 2008, Muula, 2009, Grimes et al., 2014, Bradley and McAuliffe, 2009, McAuliffe et al., 2009a). During interviews and focus group discussions, COs expressed that despite a shorter period of training and a lower qualification, their clinical performance was as good as that of medical doctors. Despite this, COs highlighted that medical doctors regarded them as far less competent in performing the tasks conventionally designated for medical doctors. However, COs had been independently performing the conventional tasks for doctors at public hospitals for decades when there was an acute shortage of doctors in the country. Against this backdrop, COs testified that they sometimes experienced negative attitudes from medical doctors at both district and central hospitals over COs' qualifications and clinical competency. For instance, some COs felt that as a result, there was insufficient recognition and support from medical doctors as supervisors of COs. The verbal aggression, lack of recognition, and lack of support were cited by COs as drivers of OS and burnout, among others.

Creation of a 'Clinical Technician' Position

From 2016–2017, a series of functional reviews were conducted in the health sector that, among others, recommended the creation of a new position called the *clinical technician* (Malawi Government, 2017, Malawi Government, 2018b). The creation of this new position resulted in a split of health workers in the position of CO. The COs who held a university degree maintained their label of *clinical officer*, while the identity of COs possessing diploma qualifications became *clinical technicians* according to the revised nomenclature of the Ministry of Health (Malawi Government, 2018b). While the designation of COs holding diplomas was downgraded to a clinical technician, their working conditions, including emoluments, were not disparaged.

The separation of these cadres and starting to call degree holders clinical officers while those with diploma clinical technicians, in my view, is problematic and unnecessary. Because when you look at the nature of their work itself, you will find that technically it is almost the same. There is little difference between the work being performed by the so-called clinical officer and clinical technician. They may have different educational qualifications, but the truth of the matter is that they all belong to the same cadre of health professionals. Take, for example, nurses: a nurse is a nurse although some have degrees in nursing, while others possess diplomas in nursing. The bottom line is that they are all called nurses. Why should the story be different with clinical officers? (Interview, retired clinical officer 01).

However, the Medical Council of Malawi, which regulates the training and practice of the medical profession (Malawi Government, 1987), did not have in its registry a position called a *clinical technician*. The Medical Council of Malawi continued to issue practicing licences to individuals under the category of a *clinical officer* whether one possessed a diploma or degree. In other words, while the Ministry of Health revoked the designation of a *clinical officer* from diploma holders and started to classify them as a *clinical technician*, the Medical Council of Malawi still recognised them as *clinical officers*. Figure 2 (below) shows a practicing licence for an individual whose highest educational qualification was a diploma. The holder of the licence shown in Figure 2 (below) still used the licence to practice as a legally registered *clinical officer*. This was despite being categorised differently by the employer (Ministry of Health).



Figure 2: Licence for practice as a clinical officer issued to a diploma holder. Source: Medical Council of Malawi (2019)

The unbundling of the CO position was implemented by the Ministry of Health without prior consultations with the COs, besides contravening the classification by the Medical Council of Malawi in accordance with the provision of the law (Physician Assistants Union of Malawi, 1 September 2020). The COs who possessed diploma qualifications regarded the unbundling as a demotion when some of them were eagerly anticipating promotions for long service. This was corroborated by the president of PAUM as a key informant who spoke on behalf of the COs:

For those of us holding diploma, the Ministry of Health now calls us clinical technicians. It is only when you acquire a degree that the Ministry will refer you us a clinical officer. This is like a divide-and-rule tactic by the employer against our cadre. This new designation of clinical technician makes some of us feel it is a demotion and it is demoralising and frustrating to say the truth. In the end, as you report for duties every day you become stressed (Interview, 05/CO/05).

The president of PAUM confirmed that the designation of *clinical* technician eventually caused deep-seated disenchantment,

frustration, and depression with functional reviews in the health sector. Such deep-seated disenchantment, frustration, and depression were associated with the escalation of OS among COs. The president of PAUM further mentioned that the COs who held degrees demonstrated solidarity with fellow COs holding diplomas in protesting against the unbundling of the CO position. The common concern among COs holding diplomas and degrees was that they were not duly consulted by the Ministry of Health before the implementation of the unbundling of the CO position. As such, they found it challenging to cooperate in the implementation of a decision that top management in the Ministry of Health took unilaterally without consultation with the COs as concerned parties.

The new position of the clinical technician was introduced without seeking the views of the concerned COs. This decision to introduce a new position of clinical technician sounds demeaning. Our stance as a trade union that is endorsed by both COs with diplomas and those with degrees is that this position of clinical technician should be discarded immediately and revert to the original name of the clinical officer. Then, we can have a new position called an associate clinical officer to refer to those holding diplomas who can then ascend to a full clinical officer upon upgrading qualifications to the degree level. Just like at universities where they have an associate lecturer who later becomes a full lecturer after satisfying certain academic requirements. At universities, they also have an associate professor who eventually ascends to full professor, that is what we have been advising our bosses at the Ministry of Health. However, they have not dared to consider our submission on this matter (Interview, key informant, president of PAUM).

Other Functional Reviews

Due to budgetary constraints confronted by central and district hospitals to effectively deliver healthcare amidst ever-increasing demand, optional paying wings are being established at central hospitals and five out of 29 district hospitals (Malawi Government, 2020). This is aimed at mobilising financial resources for health services at public hospitals (Malawi Government, 2020). 30 June 2021 was set as a deadline to complete the establishment of optional

paying wings at all central hospitals and the five district hospitals that were selected (*ibid.*). Among the central hospitals and five selected district hospitals are three hospitals: Queen Elizabeth Central Hospital, Nkhatabay District Hospital and Mulanje District Hospital (*ibid.*). These three hospitals were study sites for this study.

Some reviews have been going on in the health sector and right here at our hospital. We hear about proposals to change some of our roles and responsibilities, including how this hospital should run and be managed. This makes us feel worried and anxious that perhaps one day, we may wake up to hear that the positions of clinical officer and clinical technician have been scraped off just us it happened when they suddenly declared without consultation that all of us with diplomas were no longer clinical officers. That atmosphere causes fear, and it is stressful as you work when you think about what might happen tomorrow with our jobs here (Interview, 05/CO/02).

Different health facilities are at different stages of functional reviews. While some health facilities are in the planning stage of functional reviews, others have completed the functional reviews. According to Malawi Government (2020), by the deadline of 30 June 2020, functional reviews of health facilities had been completed for Lilongwe's district council and five central hospitals, while the reviews were still in the pipeline for health facilities in other district councils. With regard to the introduction of optional paying wards, only five out of the 29 district hospitals had been selected to commence the implementation of this particular reform by 30 June 2021 (Malawi Government, 2020). According to some COs, such disparities in functional reviews have intensified their fears and anxieties about what will happen to their roles and responsibilities after functional reviews are completed. This was corroborated by the president of PAUM as a key informant who spoke on behalf of COs. The PAUM president indicated that functional reviews may culminate in additional tasks on COs' job descriptions, while their emoluments remain static. Hence, COs further feared that the problem of excessive workloads and long hours of work would be intensified by the implementation of some functional reviews. During the interviews

and focus group discussions, COs associated such heightened fears and anxieties with the exacerbation of OS.

5. Discussion

This section discusses the interpretation of the results on how implementation of some functional reviews increased the risk of OS among COs at the five public hospitals. This section also demonstrates at conceptual, empirical, and theoretical levels how the results of the study relate to the literature.

Fundamental Changes from Functional Reviews

Day et al. (2017), Mathisen et al. (2017) and Hertting et al. (2004) argue that workplace changes may involve adjustments in employment circumstances, relocation, and even job loss due to staff shortages, work overload, long hours, and multitasking. The authors further associated changes at the workplace with increased OS among health workers. This is consistent with the results of the study. The results of the study show that changes in the health sector following functional reviews heightened fears and anxieties among some COs about what would finally become of their roles and responsibilities. Such heightened fears and anxieties over functional reviews exacerbated OS among COs.

Acquisition and Loss of Power *vis-à-vis* **Identity Crises.** The implementation of functional reviews in the health sector can be associated with power in terms of acquisition and loss. Power can be viewed as a process that continuously evolves such that among others, it involves acquisition and loss (Anderson and Brion, 2014, Li et al., 2017). In terms of acquisition, Anderson and Brion (2014) argue that individuals perceived to possess superior competence and expertise are accorded power over others. In 1980, graduates among the first cohort of locally trained COs were allocated various key positions of power in the health sector when the number of doctors was negligible and predominantly composed of expatriates. For over two decades after 1980, most district hospitals have not had qualified doctors (Dovlo, 2004). At such district hospitals, COs

were the available health professionals perceived to possess superior competence in clinical practice. Hence, COs occupied key positions of power as substitutes for medical doctors in the course of *task shifting*.

According to Anderson and Brion (2014), contextual factors beyond the control of those holding power may lead to the loss of power. Among others, the implementation of some functional reviews for which COs had no control gradually culminated in the slipping of power from COs to doctors. This is the power that the COs had acquired and maintained since the 1980s. The slipping of power is a situation against which COs feel disenchanted, frustrated, and depressed. This explains why COs feel that doctors currently dominate the key positions of power in the health sector at the expense of COs and other health workers. They feel that, due to the doctors' domination of key positions of power, suitably qualified COs are deliberately sidelined in regard to appointments to such key positions of power in the health sector. This paves the way for doctors who dominate key positions of power to impose certain decisions, such as unbundling of the CO position, despite resistance from COs. Such feelings of disenchantment, frustration, and depression lead to OS among COs.

Sour Interprofessional Relations. *Task shifting* that involves the use of COs and substitutes for medical doctors has also brought about sour interprofessional relations between COs and medical doctors. According to Ogbonnaya et al. (2007), one contributing factor to interprofessional conflicts is the unequal relationships between professionals in healthcare teams. Unequal relationships are manifested through differences in educational backgrounds and work experiences and unequal responsibility and authority (Ogbonnaya et al., 2007). A study by Omisore et al. (2017) found that fierce contestation over positions of authority was one of the reasons for interprofessional conflicts among health workers in Nigeria. In this study, by Omisore et al. (2017), three-quarters of doctors felt that teams and overall management at the hospitals should be headed by doctors only, while 90 percent of other health workers perceived the doctors' propositions unacceptable. Contestation for positions of

authority is a source of rivalry and conflicts between medical doctors and other health workers in Nigeria (Omisore et al., 2017).

The architecture for health care service delivery in Malawi places medical doctors at the helm of clinical practice (Malawi Government, 2017, Malawi Government, 2018b). As such, medical doctors occupy a preeminent position in the entire healthcare service delivery. This is why doctors enjoy higher degrees of autonomy, responsibility, authority, and social status than other health workers, such as COs. The results of the study reveal that COs perceive higher degrees of autonomy, responsibility, authority, and social status among doctors as manifestations of nepotism in favour of doctors. In response, the COs react with feelings of frustration and resentment against medical doctors, culminating in the heightening of rivalry and conflicts between doctors and COs. This supports a study by Omisore et al. (2017) in which 70 percent of the respondents perceived interprofessional rivalry as a leading cause of conflicts among health workers in Nigeria.

The results of the study also reveal deep-seated frustrations and resentment among COs that senior management positions at the district or central hospital level and the Ministry of Health are dominated by medical doctors. The COs confirmed that suitably qualified COs were deliberately sidelined as far as appointments to such management positions were concerned. The results of the study highlight the perceived dominance of top managerial positions by medical doctors as a source of interprofessional conflict between medical doctors and COs. This also supports a study by Omisore et al. (2017), which established that contestation over positions of authority was one of the reasons for interprofessional conflicts among health workers in Nigeria.

Interprofessional conflicts hinder the supervision and support that COs require from doctors as their superiors. As a result, COs experience frustration, depression, and anxiety due to poor supervision and support by their superiors. The results of the study further show that ultimately, such frustration, depression, and anxiety lead to OS among COs. This qualifies McAuliffe et al. (2009b), who found that COs did not receive recognition, respect,

and necessary support from doctors and health administrators. Due to sour interprofessional relations between doctors and COs, COs were made to feel unsupported and undervalued (McAuliffe et al., 2009b). The results of the study also support Dovlo (2004), who discovered that mid-level health workers in Malawi did not receive recognition, respect, and necessary support from supervisors and workmates. The results of the study further qualify the finding by Bradley and McAuliffe (2009) and McAuliffe et al. (2009a) that there were tensions, frustrations, and other interprofessional conflicts at hospitals between COs on the one hand and medical doctors on the other hand.

According to Nwobodo et al. (2022), interprofessional conflicts among health workers can involve abusive language (yelling, threats, vulgarity), blame, and disruptive conduct. This is consistent with the results of the study on poor interprofessional relations and occupational violence. The results of the study indicate that COs experienced violence in the form of verbal aggression and bullying from medical doctors because of their lower qualifications and clinical competence. The verbal aggression and bullying by medical doctors against COs were also manifested through insults, shouting, and outbursts.

Additional Job Demands

Drawing from the JD-R model, this paper argues that in the course of implementing functional reviews, some changes emerge at public hospitals that require COs to put in extra effort to adapt. One example of such changes is the creation of a new position called 'clinical techinician', as illustrated in the previous section. Such changes constitute additional job demands. In attempts to adapt to the additional job demands at public hospitals in light of the implementation of functional reviews, COs encounter OS amidst inadequate job resources. Ultimately, such situations exacerbate OS and burnout among COs.

In the course of *task shifting*, COs' experience sour interprofessional relations with doctors and insufficient supervision and support from doctors. Interprofessional conflicts, insufficient supervision and

occupational violence, and loss of power are examples of additional job demands that COs grapple with in the wake of the implementation of some functional reviews. The job resources would be adequate supervision and support as well as good interprofessional relations with doctors, among others. Adequacy of these job resources can minimise OS and burnout among COs. If incidences of OS and burnout are minimised by adequate job resources, engagement on the job among COs can be enhanced. A drastic increase in these job demands (such as functional reviews) can aggravate OS and burnout among COs, leading to disengagement from the job.

However, COs are generally faced with situations in which job resources are perpetually inadequate while job demands are high at public hospitals. Amidst inadequate job resources, COs struggle to cope with high job demands. Subsequently, such a struggle to cope with high job demands aggravates OS and burnout, which negatively affect COs' attitudes on the job. Ultimately, the negative attitudes on the job, aggravated by OS and burnout among COs, may result in disengagement from the job.

6. Study Limitations

There are three limitations to this paper. Firstly, this paper is confined to explain how the implementation of functional reviews increased the risk of OS among COs at public hospitals in Malawi. However, there could be other factors that also trigger and exacerbate OS at public hospitals, such as work overload and long hours of work. Secondly, this paper used one theoretical perspective called the JD-R model to explain OS and burnout among COs. However, there could be other theories, such as attribution theory, that can also be applied to explain OS and burnout at public hospitals. Finally, this paper is drawn from a qualitative study, which by design could not illustrate the extent of OS among COs. Hence, the analysis in this paper is based on experiences of OS and burnout among COs. There are, however, tools for quantifying burnout, such as the Maslach Burnout Inventory (MBI), Tedium Measure, and Burnout Measure (Schaufeli and Taris, 2014). Future research should therefore consider interrogating other contributing factors to OS and burnout among health workers beyond

the implementation of functional reviews, broadening the scope by applying other theoretical perspectives in addition to the JD-R model and using quantitative data collection tools to measure burnout.

Nonetheless, the study's subjects were not ordinary people. They were health professionals active in general clinical practice that also dealt with mental health problems. While their perceptions of OS and burnout were based on personal experiences as observers or current or previous victims of OS and burnout, they shared their realities from informed positions as experts in clinical practice. Their submissions concerning the realities of OS and burnout enhanced the authenticity and trustworthiness of the study.

7. Conclusion and Practical Recommendations

This paper has demonstrated that the implementation of some functional reviews in the health sector aggravated OS among COs at public hospitals. For instance, the implementation of functional reviews led to the loss of power among COs, while doctors simultaneously acquired power. The process of losing power among COs amidst the implementation of functional reviews ultimately increased the risks of OS among COs. The implementation of functional reviews in the health sector also provided fertile ground for interprofessional conflicts between COs and doctors, and forms of occupational violence by doctors against COs. All these factors resulted in sour interprofessional relations between COs and doctors that caused deep-seated feelings of disenchantment, frustrations, resentment, depression, and anxiety, being undervalued and unsupported among COs. Such feelings ultimately exacerbated OS among COs in the course of task shifting. When implementing functional reviews in the health sector, the psychosocial wellbeing of health workers should also be regarded as critically important. Hence, at a practical level, the following key recommendations are proposed:

1. The Ministry of Health, in consultations with employers and workers in the health sector and other relevant stakeholders, should lead in regularly conducting a psychosocial risk assessment

- on functional reviews being formulated and implemented in the health sector;
- 2. Functional reviews formulated and implemented in the health sector should incorporate specific interventions on how to avoid or reduce psychosocial hazards in the course of implementing functional reviews; and
- 3. The Ministry of Health in consultations with employers in the health sector and trade unions/associations representing health workers and other relevant stakeholders should develop a curriculum and training programmes on intra/interprofessional conflicts for health workers aimed at promoting interprofessional collaborative practice (IPCP), eradicating stereotypes against other cadres, and inculcating a spirit of mutual respect and teamwork.

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Semi-Structured Interviews

Interview, key informant, president of PAUM. 10 November 2021.

Interview, retired clinical officer 01. 16 August 2022.

Interview, 05/CO/02. 14 December 2021.

Interview, 05/CO/05. 2 January 2022.

Focus Group Discussions

Focus group discussion, 04B, 13 December 2021.

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Conflict of interest disclosure

I declare that there are no known competing financial interests or personal relationships that influenced this work.

Data availability

Data for this study can be made available by the author with permission from the University of Witwatersrand.

Ethics approval

This study was approved by the Committee on Research Ethics in the Social Sciences & Humanities in Malawi (Reg. No: P.08/21/598) and the Human Research Ethics Committee (Medical) at the University Witwatersrand, South Africa (Reg. No: M210558).

Subjects' consent

Every respondent was required to give informed consent and voluntarily participate in the study. Informed consent was verbally obtained and recorded.

About the author

Paliani Chinguwo is a labour specialist who has closely worked with trade unions for over 15 years at the national (Malawi) and international (Southern Africa/Africa Union) levels. He is currently a post-doctoral fellow on the *Health Workforce in South Africa* at the School of Public Health, University of Witwatersrand (South Africa).

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