

https://dspace.org/

Occupational Stress and Burnout among Clinical Officers at Public Hospitals in Malawi: Impact Shifting to the General Public

Chinguwo, Paliani

2023-08
University of the Witwatersrand, Johannesburg
https://hdl.handle.net/10539/39894

Chinguwo, Paliani. (2023). Occupational Stress and Burnout among Clinical Officers at Public Hospitals in Malawi: Impact Shifting to the General Public. [PhD thesis, University of the Witwatersrand, Johannesburg]. WIReDSpace. https://hdl.handle.net/10539/39894

Downloaded from a DSpace repository. https://dspace.org/



DOCTORAL (PhD.) THESIS

Occupational Stress and Burnout among Clinical Officers at Public Hospitals in Malawi: Impact Shifting to the General Public

Paliani Chinguwo

E-mail : palianic2011@gmail.com

Supervisors:

Dr Rajohane Matshiditsho (late), Dr Ben Scully & Prof. Bridget Kenny

Submitted to the Faculty of Humanities at the University of Witwatersrand, in

fulfilment of the requirements of a doctoral degree (PhD) in Sociology

10 August 2023

Table of contents

Page

Declaration ... vi
Abstract ... vii
Dedication ... ix
Acknowledgements ... x
List of abbreviations & acronyms ... xi
List of Figures ... xii
List of tables ... xiii

Chapter 1 ... **1**
Introduction ... **1**
1.1. Background ... 1
1.2. Problem statement ... 3
1.2.1. Aim of the study ... 5
1.3. Rationale for choice of a country and subjects ... 7
1.4. Overview of the methodology ... 8
1.5. Significance of the study ... 9
1.6. Location and structure of the thesis ... 14
1.7. Summary ... 17

Chapter 2 ... **18**
Setting the context ... **18**
2.1. Introduction ... 18
2.2. Socio-economic context ... 18
2.3. Administrative context ... 19
2.4. The architecture of healthcare services in Malawi ... 23
2.4.1. The organisation of healthcare services ... 23
2.4.2. Location of clinical officers in healthcare service delivery ... 25
2.4.3. Social dialogue in the health sector ... 28
2.5. Summary ... 30

Chapter 3 ... **32**
Literature review ... **32**
3.1. Introduction ... 32
3.2. The conceptualisation of occupational safety & health ... 32
3.2.1. Evolution of Occupational safety and health ... 34
3.3. Occupational stress and burnout among health workers ... 41
3.3.1. Contributing factors to occupational stress and burnout ... 42
3.3.2. Consequences of occupational stress and burnout ... 50
3.4. Psychosocial risk management ... 51
3.4.1. ILO guidelines on OSH management systems ... 52
3.4.2. Framework for risk assessment of psychosocial hazards ... 52
3.5. Narrow framing of OSH in Malawi ... 54
3.5.1. Clinical officers in Malawi ... 55
3.6. Theoretical framework ... 58
3.6.1. Attribution theory ... 59

3.6.2. Job demands-resources (JD-R) model 64
3.6.3. Fundamental cause theory 66
3.7. Summary 67
Chapter 4 69
Methodology 69
4.1. Introduction 69
4.2. Research Philosophy 69
4.2.1. Interpretivism 69
4.2.2. Philosophical assumptions 70
4.3. Research approach 72
4.4. Research design 73
4.4.1. Qualitative explanatory approach 73
4.4.2. Research strategy 73
4.4.3. Time horizon 74
4.5. Methods of data collection 74
4.5.1. Virtual interviews 75
4.5.2. Virtual focus group discussions 77
4.5.3. Document analysis 77
4.5.4. Advantages of positionality 78
4.6. Study sites 79
4.7. Study sample 81
4.7.1. Sampling procedures 82
4.7.2. Sample limitations 84
4.8. Methods of data analysis 87
4.8.1. Thematic analysis 87
4.8.2. Reliability and validity 88
4.9. Ethical considerations 90
4.10. Summary 92
Chapter 5 93
Occupational stress and burnout at public hospitals before COVID-19 pandemic 93
5.1. Introduction 93
5.2. Excessive workload and long hours of work 94
5.2.1. Impact on occupational stress and burnout 96
5.3. Poor inter-professional relations 99
5.3.1. Impact on occupational stress and burnout 104
5.4. Discussion 105
5.4.1. Excessive workloads and long hours of work 105
5.4.2. Inter-professional conflicts 113
5.5. Summary 116
Chapter 6 117
Restructuring in the health sector before the COVID-19 pandemic emerged 117
6.1. Introduction 117
6.2. Restructuring 117
6.2.1. Decentralisation 118

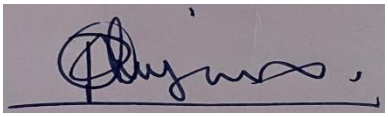
6.2.2. Emergency Human Resources Programme 120
6.2.3. Functional reviews 124
6.3. Impact on occupational stress and burnout 127
6.4. Discussion 136
6.4.1. Power 136
6.4.2. Identity crisis 140
6.4.3. Task shifting: source of occupational stress 142
6.5. Summary 143
Chapter 7 144
Occupational stress and burnout at public hospitals during the COVID-19 pandemic 144
7.1. Introduction 144
7.2. National COVID-19 responses 145
7.2.1. Re-organisation of work at public hospitals 148
7.3. Impact on occupational stress and burnout 152
7.4. Discussion 166
7.4.1. Mentally unprepared to respond to the COVID-19 pandemic 166
7.4.2. Reorganisation of work at public hospitals 167
7.4.3. Shortcuts on health and safety requirements 168
7.5. Summary 170
Chapter 8 171
Policy and theoretical perspectives on occupational stress & burnout at public hospitals 171
8.1. Introduction 171
8.2. Occupational safety and health (OSH) management system 172
8.2.1. Policy 174
8.2.2. Organising 176
8.2.3. Planning & implementation 177
8.2.4. Evaluation 177
8.3. Discussion 178
8.3.1. Poor safety culture 178
8.3.2. Framework for a comprehensive OSH Policy 179
8.3.3. Mental health policy 182
8.3.4. Application of theory 183
8.4. Summary 190
Chapter 9 191
Impacts of occupational stress & burnout on clinical officers and health outcomes 191
9.1. Introduction 191
9.2. Impact of occupational stress and burnout 191
9.2.1. Psychological consequences 192
9.2.2. Social Consequences 197
9.2.3. Physical consequences 199
9.2.4. Economic consequences 200
9.3. Discussion 201
9.3.1. Poor quality of life 201

9.3.2. Job disengagement 202
9.3.3. Cholera outbreak amidst COVID-19 pandemic 205
9.4. Impact shifting to the general public 207
9.4.1. Patient Satisfaction 207
9.4.2. Application of the fundamental cause theory 215
9.5. Summary 220
Chapter 10 221
Conclusion and Recommendations 221
10.1. Introduction 221
10.2. Policy interventions 221
10.2.1. Task shifting 221
10.2.2. Other policy interventions 223
10.3. Impact shifting 224
10.4. Study limitations 226
10.5. Recommendations 227
10.5.1. Research level 228
10.5.2. Policy level 228
10.5.3. Practical level 229
10.6. Summary 230
Appendix 1: Guide for a semi-structured interview 232
Appendix 2: Guide for focus group discussion 233
Appendix 3: Participant Information Sheet 234
Appendix 4: Informed Consent Form 237
References 238

Declaration

I declare that this is my unaided work submitted to the Faculty of Humanities, University of the Witwatersrand for the Doctor of Philosophy degree (Sociology). It has not been submitted before for examination in any other university.

Signed



10 August 2023

Abstract

In Malawi, there is a cadre of mid-level health workers called *clinical officers* who undertake duties conventionally designated for medical doctors in the wake of an acute shortage of the latter. The use of clinical officers as substitutes for medical doctors is one example of a strategy called *task shifting* that is implemented as a temporary remedy for the shortage of human resources in healthcare. This is a study on the experiences of clinical officers with occupational stress and burnout 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.

One shortcoming of the framing of occupational safety and health in Malawi is the narrow scope and coverage of the regulation on occupational safety and health. This narrow scope of the regulation of occupational safety and health is limited to physical, chemical, and biological hazards. The psychosocial hazards are therefore neglected by the regulation on occupational safety and health. Another shortcoming of the framing of occupational safety and health in Malawi is that the coverage of the regulation on occupational safety and health exempts service sectors like healthcare. This exemption, therefore, gives the impression that healthcare in Malawi is immune to occupational safety and health hazards.

This study challenges the narrow scope and coverage of the regulation on occupational safety and health in Malawi that neglects psychosocial hazards and exempts healthcare. The overall aim of the study was to expose the impacts on public health that can be associated with the neglect of psychosocial hazards and the exclusion of healthcare from the regulation of occupational safety and health. This study demonstrates that there are psychosocial hazards at public hospitals that predispose clinical officers to occupational stress and burnout. These are excessive workload, long hours of work, poor interprofessional relations, restructuring, COVID-19 responses, and the absence of occupational and safety management systems. The study further illustrates that psychosocial hazards at public hospitals are a breeding ground for various health problems among clinical officers that emanate from occupational stress and burnout.

These health problems include emotional and cognitive effects; injuries; high blood pressure (hypertension); muscle tension or pain; and severe headaches. These health problems negatively affect the quality of life among clinical officers and their performance on the job. The study, therefore, concludes that occupational stress and burnout among clinical officers ultimately affect health outcomes in the broader population. For instance, the study demonstrates how the consequences of OS and burnout among clinical officers are consequently externalised to patients and the general public through the poor quality of healthcare services. In this study, the externalisation of the negative effects of occupational stress and burnout on clinical officers to the patients and the general public, is referred to as *impact shifting.*

This study conceptualises and proposes a theoretical framework for analysing occupational safety and health in Malawi, with a particular focus on psychosocial hazards at public hospitals. The theoretical framework comprises three theoretical perspectives, namely: attribution theory, job demands-resources model, and fundamental cause theory. This study, therefore, offers a theoretical foundation and empirical evidence drawn from the experiences of clinical officers with occupational stress and burnout. The theoretical foundation and empirical evidence can inform the reframing of the scope and coverage of the regulation on occupational safety and health. Finally, this study also conceptualises and proposes a framework for the formulation of a comprehensive policy on occupational safety and health for public health facilities in the context of Malawi.

Keywords: clinical officers; occupational stress; burnout; occupational safety and health; psychosocial hazards; public hospitals, Malawi.

Dedication

Those who have physically departed, to whom I invariably pay homage as my African ancestors at the family, community, national and racial levels. Never did I cease to feel their spiritual presence throughout this arduous PhD journey;

Those who have contributed various efforts to the struggle for the emancipation of the exploited, downtrodden, and marginalised;

My three sons: Alinafe, Kondwani, and Chifunilo, please consider this an inspiration in your academic endeavours!

Acknowledgements

This doctoral (PhD) project was first conceived in 2017 following spectacular sheds of inspiration from two distinguished academics who served as mentors to me, namely: Prof. Musa Dube (University of Botswana) and Prof. Trywell Kalusopa (University of Namibia). From the beginning to the end of my doctoral work, I received academic supervision (both formally and informally) from a variety of scholars, for which I am grateful. These are Prof. Bridget Kenny, Dr Ben Scully, and the late Dr Rajohane Matshiditsho (University of Witwatersrand); Dr Kaelo Molefhe and Dr Thekiso Molokwane (University of Botswana); Dr Bernadette O'Hare (St. Andrews University); and Prof. Adamson Muula (Kamuzu University of Health Sciences).

I should also make mention of other scholars who provided valuable ideas towards my doctoral work, to whom I am also thankful:

1. Three examiners of my doctoral thesis i.e., Prof. Alexandar Gallas (Kassel University), Prof. Siphelo Ngcwangu (University of Johannesburg) and Dr. Kezia Lewins (Wits University);
2. Two readers of my doctoral proposal i.e., Dr D. Moyo and Dr. T. Sefalafala (Wits University);
3. Head of Department, lecturers and postgraduate students in the Sociology Department (Wits University) who participated in the departmental seminar held on 22 October 2020 during which I presented my doctoral proposal.

I am also grateful to the five individuals who provided their services as research assistants. These are: Yobe Saka, Matsiame Mafa, Emmanuel Katema, Anna Kazembe, and Chifuno Mlambe. I also acknowledge the valuable advice at a technical level that I consistently sought from a health researcher in Malawi called Peter Makaula.

I am appreciative of the financial assistance I received from LO/Norge, Rutgers University's Center for Global Work and Employment (CGWE) and the Board of African Studies as well as the technical and moral support from the Physician Assistants Union of Malawi (PAUM) and Lost History Foundation (LHF), without which it would have been difficult for me to conduct the study smoothly and complete it as I did.

I am also grateful to the respondents for agreeing to take part in my study and for providing the valuable data that I requested. More importantly, I thank the management of Queen Elizabeth Central Hospital, Chikwawa District Hospital, Mulanje District Hospital, Balaka District Hospital, and Nkhatabay District Hospital for responding promptly and positively to my request to conduct a study at their respective hospitals.

Finally, I must mention that I have been assisted by many persons and institutions in conceptualising doctoral research, fetching relevant literature, organising the ethics applications, gathering data, IT services, tips, stationery, logistics, fund raising among others. Such assistance came in various forms, like voluntary service, material and financial support, and otherwise. For reasons of space, I cannot give a detailed acknowledgement in this regard. To all those whose names are not mentioned on this page, I offer my sincere apologies. I hope they will understand that I am nonetheless grateful to them for their assistance towards my doctoral work.

List of abbreviations & acronyms

BHP	Basic Health Package
BHP+	Basic Health Package Plus
BSc	Bachelor of Science
CHAM	Christian Health Association of Malawi
CO	Clinical Officers
CoTU	COVID-19 Treatment Unit
DHMT	District Health Management Team
EHP	Essential Health Package
EHRP	Emergency Human Resources Programme
GNT	Government Negotiating Team
HRHC	Human Resources for Health Coalition
IFIs	International Financial Institutions
ILO	International Labour Organisation
IMF	International Monetary Fund
IPCP	Interprofessional Collaborative Practice
JD-R	Job Demands-Resources
LICs	Low Income Countries
NGOs	Non-Governmental Organisations
NONM	National Organisation of Nurses and midwives of Malawi
OS	Occupational Stress
PAUM	Physician Assistants Union of Malawi
PCR	Polymerase Chain Reaction
PPE	Personal Protective Equipment
SAPs	Structural Adjustment Programmes
SPSS	Statistical Package for Social Sciences
TB	Tuberculosis
ToRs	Terms of References
UCAHP	Union for Clinicians and Allied Health Professionals
URL	Uniform Resource Locators
WHO	World Health Organisation

List of Figures

Page

Figure 1-1: Conceptual framework of burnout 2
Figure 2-1: Key findings 7
Figure 3-2: Administrative map of Malawi 20
Figure 4-3: Evolution of occupational safety & health in Europe and North America 35
Figure 5-3: Evolution of occupational safety & health in Malawi 38
Figure 6-3: Ratified ILO conventions on occupational safety & health 39
Figure 7-3: Framework for a risk assessment on psychosocial hazards 53
Figure 8-3: Theoretical framework on occupational safety & health 59
Figure 9-4: Gantt chart for data collection and analysis 75
Figure 10-4: Trustworthiness & authenticity 89
Figure 11-5: Sources of occupational stress & burnout before the COVID-19 pandemic 93
Figure 12-6: Three forms of restructuring in the health sector 118
Figure 13-6: Structure of a district council 119
Figure 14-6: Prof. Felix Salaniponi graduated from the second cohort of locally trained clinical officers 121
Figure 15-6: License for practice as a clinical officer issued to a diploma holder 128
Figure 16-6: How restructuring negatively affects occupational stress and burnout 142
Figure 17-7: Amendments to Corona virus prevention, containment and management rules by November 2021. 147
Figure 18-7: Daily confirmed new COVID-19 cases & deaths per million people during 1st & 2nd waves 155
Figure 19-7: Outside the COVID-19 Treatment Unit, Kamuzu Central Hospital on 18 Jan 2021. 157
Figure 20-7: Daily confirmed new COVID-19 cases & deaths per million people (Nov 2021-April 2022). 161
Figure 21-8: Elements of OSH management system 174
Figure 22-8: Proposed elements of a comprehensive OSH policy 182
Figure 23-8: Conceptual framework on job demands among clinical officers 189
Figure 24-9: Impact of occupational stress & burnout on clinical officers. 192
Figure 25-9: Job disengagement causing stress and burnout on fellow clinical officers 203
Figure 26-9: Inside a Cholera Treatment Unit in Blantyre 206
Figure 27-9: Conceptual framework on occupational stress & burnout and patient satisfaction 208

List of tables

Page

Table 1-2: Regions and districts of Malawi 19
Table 2-2: Profiles of 5 districts where study sites are located 22
Table 3-2: Organisations of health workers in Malawi 28
Table 4-3: Occupational accidents reported in Malawi (2015-2020) 55
Table 5-3: Attributions for occupational accidents, injuries & diseases by workers and managers 62
Table 6-4: Sample size 76
Table 7-5: Vacancy rates for clinical officers at the 5 public hospitals 94
Table 8-6: Increase of health professionals in public & CHAM facilities (2004-2009) 123
Table 9-9 Types of medical errors and mistakes 195

Chapter 1

Introduction

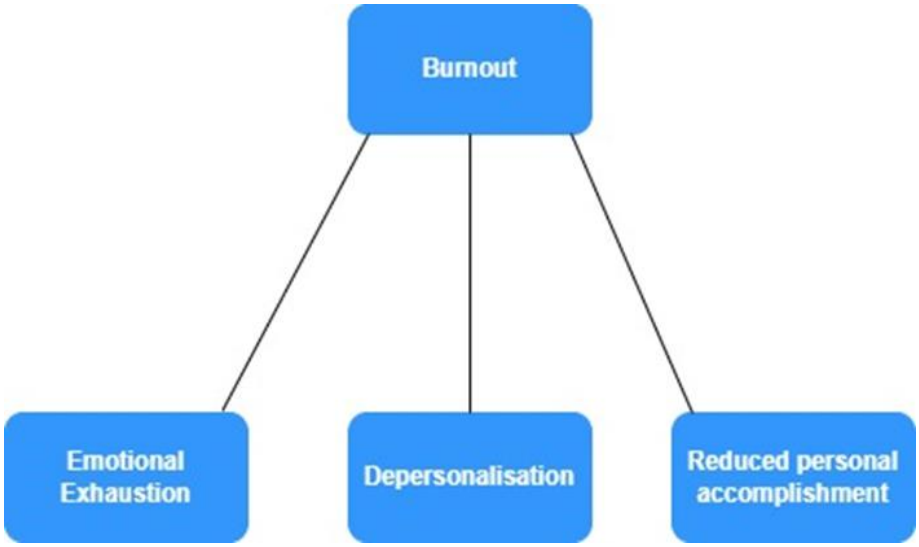
1.1. Background

As a trade union activist, one shortcoming I discovered in the framing of occupational safety and health (OSH) in Malawi is the narrow scope and coverage of OSH regulation. This narrow scope of OSH regulation is confined to physical, chemical, and biological hazards. As a result, OSH regulation in Malawi neglects psychosocial hazards. However, in other parts of the world like Europe and North America, the framing of OSH evolved from such a narrow scope to incorporate psychosocial hazards (Eddington, 2006; European Commission, 2011; Väänänen et al., 2012). Another shortcoming of the framing of OSH in Malawi that I also discovered is that the coverage of OSH regulation exempts service sectors like healthcare. This exemption, therefore, gives the impression that healthcare in Malawi is immune to OSH hazards.

In this doctoral (PhD) research, I challenge the narrow scope and coverage of OSH regulation in Malawi that neglects psychosocial hazards and exempts healthcare. Using the experiences of clinical officers (COs) at Malawi's public hospitals, I build a case that occupational stress (OS) is a serious public health problem such that psychosocial hazards should become integral to OSH regulation. Drawing from Tan (1991), psychosocial hazards are aspects of the design and management of the work that may exacerbate the risk of work-related stress or contribute to psychological and physical harm. OS refers to "harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker" (National Institute for Occupational Safety and Health, 1999, p. 2). The European Agency for Safety and Health at Work (2009, p. 14) substantiated that "work-related stress is experienced when the demands of the work environment exceed the workers' ability to cope with (or control) them." According to Mijakoski et al. (2015), burnout is characterised by a sustained OS among health workers. The authors further explain that, among others, burnout manifests itself through extreme feelings of exhaustion, frustration, anger, and cynicism, as well as ineffectiveness and failure.

Maslach and Jackson (1981) and Maslach et al. (1997) elaborated that burnout is characterised by three main categories of symptoms namely: emotional exhaustion, depersonalization, and reduced personal accomplishment as shown in Figure 1-1 (below).

Figure 1-1: Conceptual framework of burnout



Adapted from Maslach and Jackson (1981) and Maslach et al. (1997)

Emotional exhaustion is a “state of feeling emotionally worn-out and drained as a result of accumulated stress from your personal or work life, or a combination of both” (Fan et al., 2023, p. 2). Those who experience emotional exhaustion tend to feel helpless and out of control (Maslach & Jackson, 1981; Maslach et al., 1997). Such feelings of disconnectedness or detachment from one's body, thoughts or environment is what other scholars refer to as depersonalization (Phillips et al., 2001). Reduced personal accomplishment is a propensity for individuals to appraise themselves poorly and a pervasive sense that they are no longer performing relevant and vital tasks (Skaalvik & Skaalvik, 2009). At the workplace, depersonalization involves doubting the value of one’s tasks or duties. Emotional exhaustion, depersonalization, and reduced personal accomplishment can be manifested through disruptions or breakdowns of memory, consciousness, awareness, concentration, identity, perception, and feelings of frustration, anger, depression, and resentment among others (Maslach & Jackson, 1981; Maslach et al., 1997; Skaalvik & Skaalvik, 2009; Phillips et al., 2001; Fan et al., 2023). These symptoms can ultimately interfere with an individual’s general functioning in all sphere of life including personal life and work activities (Maslach & Jackson, 1981; Maslach et al., 1997; Skaalvik & Skaalvik, 2009; Phillips et al., 2001; Fan et al., 2023). Throughout this

thesis, I refer to emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout.

1.2. Problem statement

Wherever healthcare is practiced, OSH hazards are inevitable (Gestal, 1987). Among the OSH hazards associated with healthcare are those that cause or exacerbate OS and burnout, which are particularly referred to as psychosocial hazards (d'Ettorre & Greco, 2015; Salilih & Abajobir, 2014). Orji et al. (2002) highlighted a hospital staff paradox. The authors argued that while the hospital staff is primarily responsible for taking care of the health of others, sometimes the hospital staff neglects itself, and in other instances, it is neglected by policymakers when it comes to OSH. For instance, a law that regulates OSH in Malawi is called the Occupational Safety, Health, and Welfare Act of 1997 (Malawi Government, 1997). Malawi also has a national programme on OSH that is derived from the Act (Malawi Government, 2012). The scope and coverage of the OSH Act and OSH national programme neglect psychosocial hazards and further exempt service sectors like health care. As such, OSH hazards and incidents like accidents, injuries, stress, and other occupational illnesses at health facilities are not monitored, assessed, or reported by the state through the Ministry of Labour (Malawi Government, 2018b). However, the reality is that health workers in Malawi are susceptible to OSH hazards like workers in other sectors that are covered by OSH regulation, i.e., construction and manufacturing.

In Malawi, the psychosocial hazards among health workers are partly associated with donor support. Besides domestic revenues, the health sector in Malawi is also financed by funds from international donors (Borghi et al., 2018; Malawi Government, 2017a, 2018b). The funds from international donors, which constitute 80 per cent of total expenditure on health, are targeted at treating various illnesses (Kim et al., 2019). “The disease-specific donor funding often neglects the basic primary health care systems and human resources that are the essential foundation required to achieve optimal health outcomes” (Kim et al., 2019, p. 9). As such, the number of health workers on the government payroll continues to be insufficient in the health sector (Bradley et al., 2015; Mangham, 2007; Palmer, 2006). To overcome the severe lack of health professionals, various fundamental changes in working arrangements have been implemented at public hospitals in Malawi (Bradley & McAuliffe, 2009; Mangham,

2007). These fundamental changes include increased workloads, longer hours of work (beyond the regular eight-hour shift), limiting of "off-duty" time, more frequent night shifts, multi-tasking with little or no supervision, and required support (Bradley & McAuliffe, 2009; Mangham, 2007). As I demonstrate in Chapter 7, the emergence of COVID-19 pandemic, intensified the fundamental changes at the public hospitals in terms of excessive workloads and longer hours of work among clinical officers (COs). As health workers in Malawi strive to cope with the fundamental changes at the workplace, they encounter OS and burnout (Gondwe & Brysiewicz, 2008).

Given the high population coupled with rising pressure on health systems, Malawi has the world's second-lowest number of medical doctors per capita, such that there is an insufficient number of medical doctors at public hospitals (Dovlo, 2004; Gajewski et al., 2019). In response to the critical shortage of qualified medical doctors, in 1976, the Ministry of Health introduced a mid-level cadre of health workers called COs to undertake duties conventionally performed by medical doctors (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014; Jiskoot, 2008; Mkandawire et al., 2008). Though the COs are employed as substitutes for qualified doctors, the period of training for COs is shorter than that for medical doctors, i.e., 4 years and 7 years, respectively (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014; Jiskoot, 2008; Mkandawire et al., 2008). Upon "completion of the training, COs face a difficult job: they must work as medical doctors in the hospitals, but they lack sufficient knowledge and skills" (Jiskoot, 2008, p. 74). For instance, COs are provided with fewer and less expensive diagnostic tests and equipment for their work (Dovlo, 2004).

Furthermore, COs also do not receive recognition, respect, and necessary support from doctors and health administrators (McAuliffe, Manafa, et al., 2009). "Recent research indicates that these cadres are becoming demotivated due to poor career development and promotion prospects and a lack of positive supervision, feedback, and recognition, which leave them feeling unsupported and undervalued" (McAuliffe, Manafa, et al., 2009, p. 81). Subsequently, there have emerged tensions, frustrations, and conflicts between COs on the one hand and medical doctors on the other (Bradley & McAuliffe, 2009; McAuliffe, Bowie, et al., 2009). Such tensions, frustrations, and interprofessional conflicts provide fertile grounds for poor psychosocial welfare among

health workers (Bendix, 2019; Töyry, 2005). In the context of Malawi, tensions, frustrations, and inter-professional conflicts between COs and medical doctors (Bradley & McAuliffe, 2009; McAuliffe, Bowie, et al., 2009) may pose a predisposition to mental illnesses among COs such as OS and burnout. The problem of my study is therefore the narrow scope and coverage of OSH regulation in Malawi, which neglects psychosocial hazards and excludes healthcare.

1.2.1. Aim of the study

I embarked on this study to expose the impacts on public health that can be associated with the neglect of psychosocial hazards and the exclusion of healthcare from the regulation of OSH.

1.2.1.1. Research questions

The central research question for my study was:

- Are clinical officers (COs) at public hospitals in Malawi predisposed to occupational stress (OS) and burnout?

In particular, I examined the following four sub-research questions:

1. What are the sources of occupational stress (OS) and burnout among clinical officers (COs) at Malawi's public hospitals?
2. Are there workplace policies that address occupational stress (OS) and burnout among clinical officers (COs) at Malawi's public hospitals?
3. How did the COVID-19 pandemic contribute to occupational stress (OS) and burnout among clinical officers (COs) at Malawi's public hospitals?
4. Are there consequences of occupational stress (OS) and burnout among clinical officers (COs) at Malawi's public hospitals?

1.2.1.2. Overview of findings

The narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like healthcare pose several assumptions. In this thesis, I demonstrate that these assumptions are harmful to health workers in general and COs in particular. Among others, the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like healthcare give the impression that:

1. Psychosocial hazards do not exist at the workplaces in Malawi;

2. If at all psychosocial hazards do exist at the workplace, they do not pose a critical problem that would warrant policy intervention at both the workplace and national levels;
3. Hospitals as spaces through which healthcare services are delivered are immune to OSH hazards, hence the exemption of healthcare in OSH regulation.

In this thesis, I challenge these three implicit assumptions using empirical evidence drawn from the practical experiences of the COs at public hospitals with OS and burnout. In particular, I challenge the implicit assumptions by first demonstrating that there are psychosocial hazards at public hospitals that predispose COs to OS and burnout. I argue that contrary to three implicit assumptions posed by the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like health care, there is a myriad of psychosocial hazards at public hospitals. As shown in Figure 2-1 (below), the findings of my study show that psychosocial hazards at public hospitals include excessive workload, long hours of work, poor interprofessional relations, restructuring, COVID-19 responses, and the absence of OSH management systems. I divide these psychosocial hazards into two categories. The first category consists of psychosocial hazards from the confines of the workplace: excessive workload, long hours of work, poor interprofessional relations, and the absence of OSH management systems. The psychosocial hazards from outside the workplace, such as restructuring and COVID-19 responses, fall in the second category.

Furthermore, in this thesis my focus is two fold. Firstly, I illustrate how psychosocial hazards (shown in Figure 2-1) cause and aggravate OS and burnout among COs at public hospitals. Within this first fold, I argue that before and during the COVID-19 pandemic, there was a combination of psychosocial hazards (shown in Figure 2-1) that caused and increased the risks of OS and burnout among COs at public hospitals. Secondly, I demonstrate how OS and burnout among COs contribute to psychological, social, physical, and economic consequences, as highlighted in Figure 2-1 (below).

Figure 2-1: Key findings



In the second fold, I articulate two key arguments. Firstly, I argue that psychosocial hazards at public hospitals as shown in Figure 2-1 (above), are a breeding ground for various health problems that emanate from OS and burnout among COs. Among others, these health problems are manifested through the psychological and physical consequences of OS and burnout as shown in Figure 2-1. Secondly, I argue that the consequences of OS and burnout among COs ultimately affect health outcomes in the wider population. Hence, there is an externalisation of the negative effects of occupational stress and burnout among COs to the patients and general public, which I refer to as *impact shifting.*

1.3. Rationale for choice of a country and subjects

Besides that it would be far much convenient in terms of cost and access for me to conduct the PhD research in Malawi which is my home country, there was another reason that compelled me to choose Malawi. Malawi is one of the low-income countries (LICs) which are confronted by the world's most pronounced crisis as far as the human resources for health are concerned (Callaghan et al., 2010; Lehmann et al., 2009; Okyere et al., 2017; Sabet Sarvestani et al., 2021). Against this backdrop, *task shifting* is practiced as a solution to address the limited available human resources for the delivery of healthcare services in LICs such as Malawi (Okyere et al., 2017; Sabet Sarvestani et al., 2021). *Task shifting* is defined as “a strategy where non-qualified (or less qualified) health workers are given responsibilities normally performed by highly qualified and highly skilled health professionals” (Muula, 2016, p. 26). For instance, in Malawi, Mozambique and Tanzania, 90 per cent of complex tasks conventionally performed by physicians such as emergency obstetric operations, are delegated to non-physician and mid-level health workers (Okyere et al., 2017). In my PhD research, Malawi represents LICs that are implementing *task shifting* as one

strategy of delegating specific tasks conventionally designated for medical doctors to mid-level health workers who are less specialised such as COs.

Lastly, while *tasking shifting* is accepted as a viable response to the acute shortage of human resources for health (Okyere et al., 2017; Sabet Sarvestani et al., 2021), there are growing debates on the expediency, efficacy and modalities of task shifting in LICs (Lehmann et al., 2009). In an effort to contribute to the broader debates on expediency, efficacy and modalities of *task shifting*, I selected COs to constitute an ideal case study on *task shifting* within the confines of OSH.

1.4. Overview of the 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: Mulanje District Hospital, Chikwawa District Hospital, Balaka District Hospital, Nkhatabay District Hospital, and Queen Elizabeth Central Hospital in Blantyre. I discovered that there were approximately 152 COs employed at these four district hospitals and 1 central hospital. Out of 152 COs, I recruited 25 (5 at each hospital) to participate in the study.

Three methods of qualitative data collection were used, namely: semi-structured interviews, focus group discussions, and document analysis. I developed the doctoral research proposal and ethics clearance applications during the COVID-19 pandemic. Both the proposal and ethics clearance applications were approved amidst the pandemic. Due to the COVID-19 protocols imposed by the university ethics committees, I was compelled to conduct the semi-structured interviews and focus group discussions virtually. In addition to the 5 COs from different departments at each of the five district hospitals, 1 immediate COs' supervisor from each hospital was selected for the semi-structured interviews. Finally, six semi-structured interviews were also conducted with six key informants outside the public hospitals, as follows:

1. Policy specialist at Ministry of Health (1);
2. An official from the Medical Council of Malawi (1);
3. An official from a trade union representing COs (1);
4. Occupational health physician (1)
5. Retired COs (2).

In total, 36 semi-structured interviews were conducted with COs at the five public hospitals and key informants outside the public hospitals. In addition, at each of the five public hospitals, one focus group discussion was held with 4-5 COs representing various departments or units. In total, five focus group discussions were conducted with COs. The five hospitals were chosen as study sites using convenience sampling based on the hospital's conditions for granting study permissions. However, at each hospital, I used purposive sampling to recruit the COs, immediate supervisors for COs, and key informants as respondents.

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 programme 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 by the hospital administration. The thematic analysis of the transcriptions and documents involved creating codes, revising the codes, identifying recurring themes, and merging the themes where necessary (Maguire & Delahunt, 2017).

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 an interview or focus group discussion. The study was approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand and the Committee on Research Ethics in the Social Sciences and Humanities at the National Commission for Science and Technology in Malawi.

1.5. Significance of the study

The importance of this study can be demonstrated on two fronts: theoretical and practical/policy. One weakness I identified with the literature on OSH for mid-level health workers in Malawi is a lack of theoretical analysis. As I demonstrate in Chapter 3 (a literature review), the articles on OSH among mid-level health workers (including those targeting COs) that I reviewed, are devoid of a theoretical lens. I argue that scholarly literature on aspects of OSH without an analysis grounded in theory, is

intellectually inadequate. Various theories should be drawn in scholarly work to enrich an understanding of workplace safety and health (DeHury & Kumar, 2019).

There are practical implications for the lack of theoretical perspectives when discussing OSH among health workers in Malawi. The lack of a theoretical lens entails insufficient scientific knowledge of OSH conditions that would appropriately inform the formulation and implementation of the workplace and national policies towards the effective delivery of healthcare services (World Health Organization, 2007a). For instance, there is an acknowledgement by the Ministry of Health that “in the health sector (Malawi), essential safety measures and workforce protection policies are often overlooked” (Malawi Government, 2018b, p. 85). This might reflect a paucity of research grounded in the theory that should have illuminated the actual situation of OSH in the health sector and the practical OSH interventions that are required.

I attempted to address the intrinsic deficiency in the theoretical analysis as far as research on OSH for health workers in Malawi is concerned, by exploring different social theories. In this thesis, I propose a theoretical framework for analysing OSH in Malawi with a particular focus on psychosocial hazards at public hospitals, both of which are neglected and exempt from OSH regulation. As I discuss in greater detail in Chapter 3 (literature review), the theoretical framework that I propose is made up of three theoretical perspectives: attribution theory, the job demands-resources (JD-R) model, and the fundamental cause theory. In Chapter 3, I establish that attribution theory as advanced by Gyekye (2010), is narrowly confined to OSH hazards for which employers have a primary responsibility to intervene. Hence, Gyekye (2010) did not go beyond the workplace environment in his analysis of attributions for occupational accidents, injuries and diseases. Using empirical evidence from COs' practical experiences with OS and burnout, I show in this thesis that it is possible for employees and managers to attribute factors from outside of the work environment when making causal explanations of OS and burnout. Hence, in this thesis, I apply attribution theory beyond the confines of the workplace.

Drawing from Gyekye (2010), in Chapter 3 I discuss biases and errors in light of attribution theory. From the literature, I highlight five attribution biases and errors: fundamental attribution error, optimism bias, self-serving bias, false consensus effect,

and actor-observer bias, as conceptualised by Ross (1977), Caponecchia (2010), Shepperd et al. (2008), Mullen et al. (1985), and Malle (2006), respectively. Having established that it is possible to attribute OS and burnout to factors beyond the workplace, I add that it is also possible to commit the error or bias of ignoring factors beyond the workplace. I coin this attribution error or bias as *work environment bias*, which I have defined in Chapter 8. Hence my significant contribution to scholarship at the theoretical level is the generation of evidence that allows me to broaden the application of attribution theory beyond the workplace, then coin and add the *work environment bias* to the list of attribution biases and errors. In Chapter 3, I further discuss that the JD-R model offers a broad scope and flexibility such that it applies to different work settings (Schaufeli & Taris, 2014). Hence, my other significant contribution to scholarship at a theoretical level is the flexibility that I exercise to apply the JD-R model to a hospital setting in Malawi. As I elaborate in chapters 8–11, I identified specific job demands and job resources at public hospitals in Malawi that interact to influence OS and burnout among COs.

While the studies on OSH among mid-level health workers in Malawi I reviewed in Chapter 3 shed light on the impact of OS and burnout on the quality of healthcare, they do not illustrate how OS and burnout affect the quality of healthcare services. Neither do these studies shed light on the impact of OS and burnout on the health well-being of the mid-level health workers themselves, as illustrated by the global literature, i.e., gastric complaints, nervous disturbances, chronic fatigue, headaches, sleep disorders, breast cancer, stroke, and increased consumption of tranquillizers and sleeping tablets (Lin et al., 2014; Pikó, 1999; Rivera et al., 2020; Wichert, 2002). In Chapter 9, I provide empirical evidence to illustrate the impact of OS and burnout on the quality of life of the COs themselves. In Chapter 9, I also provide empirical evidence to demonstrate how OS and burnout among COs negatively affect the quality of healthcare services at public hospitals and ultimately health outcomes. Against this backdrop, I develop a concept that I call *impact shifting*. I use this concept in Chapter 9 to argue that the consequences of OS and burnout are not confined to individual COs. I demonstrate in Chapter 9 that the negative effects of OS and burnout among COs are consequently externalised to the general public through the poor quality of health services rendered by COs.

The second front of significance for my study lies on the practical and policy levels for three reasons. Firstly, Eddington (2006) argued that it is unethical for a society to ignore OSH hazards among health workers and continue to exploit them while inflicting injuries, illnesses, trauma, pain, and possibly death on them. Hence, the narrow scope and coverage of OSH regulation in Malawi that neglects psychosocial hazards and exempts services such as health care should be considered unethical. On a positive note, there are drafting and consultation processes on OSH policy instruments currently underway in Malawi. For instance, there are drafting processes to develop a Bill of Parliament on occupational health services called the *Occupational Health Centre Act of 2023*. The aim of the Bill is to ensure the availability of high-quality occupational health services in the country. The Bill proposes the following:

1. establishment of an Occupational Health Center as a tertiary-level facility for the diagnosis and management of occupational diseases;
2. legal framework for the sustainability of occupational health services by implementing the requirement for employers to cover costs for occupational medical examinations;
3. model for the management of an Occupational Health Center as a cost recovery institution with the potential to make profits in the foreseeable future through the fees collected from the services provided.

As stipulated by the Malawi Government (2011a) and Malawi Government (2020a), national consultation processes are also being conducted on the drafting of a national OSH policy, a national OSH action plan, and a national OSH information and documentation system. Furthermore, the OSH Act of 1997, the national programme on OSH (2011–2016), and the OSH profile (2009) are currently under review (Malawi Government, 2020a). These drafting and consultation processes on the above-mentioned OSH policy instruments[1] can be considered critical developments in the evolution of OSH in Malawi. There is room, in the wake of ongoing drafting and consultation processes on OSH policy instruments, to expand the scope and coverage of OSH regulation along two postulations drawn from this doctoral thesis:

1. Expanding the scope of OSH regulation to incorporate psychosocial hazards;

[1] The consultations and drafting processes on these OSH policy instruments, were still underway at the time I finally submitted this thesis to the university.

2. Extending the coverage of OSH regulation to incorporate healthcare as a sector that is also prone to OSH hazards like other sectors.

Hence, my study comes at a critical juncture to offer a theoretical foundation and empirical evidence drawn from COs' practical experiences on OS and burnout to inform the reframing of OSH towards achieving the two goals highlighted above.

The second reason for the significance of my study at the practical and policy levels relates to the non-existence of OSH policy at public hospitals. I discovered that there was no comprehensive OSH policy at the public hospitals that guided hospitals to eliminate or minimise risks to health and safety. Against this backdrop, my significant contribution at both the policy and practical levels is the conceptualization of a framework for a comprehensive OSH policy for public hospitals (Chapter 8). This framework proposes that a comprehensive OSH policy for public hospitals should be aimed at protecting the safety and health of the hospital staff by preventing injuries, ill health, diseases, and incidents related to various categories of OSH hazards in compliance with OSH statutes and ILO conventions on OSH ratified by the Malawi Government. The framework further recommends that, among others, a comprehensive OSH policy should make provisions for regularly conducting OSH risk assessments, providing adequate resources for implementing OSH policy and providing regular training on OSH targeting all hospital staff.

The third reason for the significance of my study at the practical and policy levels relates to paucity of studies on OSH in least developing countries such as Malawi. Despite the increasing interest in OSH, studies on OSH particularly those that target health workers in least developing countries are scarce (Tait et al., 2018). According to Rantanen et al. (2004), only 5 per cent of research on OSH is conducted in the least developing countries, despite that this is where 80 per cent of the world's working population is found. Against this backdrop, OSH regulatory frameworks in the least developing countries, often rely on research from developed countries that may not be applicable to the local contexts in the least developing countries (London & Kisting, 2017).

There are practical implications of little or no research on OSH particularly targeting health workers in developing countries like Malawi. Little or no research entails insufficient scientific knowledge of OSH conditions that would appropriately inform the

formulation and implementation of workplace and national policies towards the effective delivery of healthcare services (World Health Organization, 2007). For instance, there is an acknowledgement that “in the health sector (Malawi), essential safety measures and workforce protection policies are often overlooked” (Malawi Government, 2018, p. 85). This is typically a reflection of paucity of research on OSH that should shed light on the actual situation of OSH in the health sector and appropriate OSH interventions that are required.

1.6. Location and structure of the thesis

The broader topic of my doctoral study is OSH. OSH encompasses a wide range of disciplines such as medicine, physics, chemistry, engineering, economics, law, sociology, public administration among others (Alli, 2008). In this thesis, I analyse the conditions and dimensions of work performed by the COs in a hospital setting as far as OS and burnout are concerned. As shown in Figure 2-1 (above), I particularly examine the relations between COs and medical doctors and the influence of other phenomena like restructuring and the COVID-19 pandemic on the work, leisure, health and well-being of the COs. In this thesis, I also articulate how health problems emanating from OS and burnout among COs ultimately influence the health in the wider population. Against this backdrop, I place this thesis in two sub-fields of sociology namely: sociology of health and sociology of work.

I have organised this thesis into 10 chapters as follows:

Chapter 1- Introduction

In this chapter, I introduce the key components of the study. I define OS and burnout, highlight the problem statement, aim of the study, research questions, summary of findings, an overview of the methodology, the significance of the study, and how the thesis is organised.

Chapter 2- Setting the context

In this chapter, I present background information about Malawi. This background information provides a broader context within which the study was conducted, such as the socio-economic and administrative contexts of Malawi. Finally, I highlight the architecture of healthcare service delivery to illustrate the location of COs in the provision of healthcare services in Malawi.

Chapter 3- Literature review

In this chapter, I present a review of the literature on OSH. I discuss the definition of OSH, how OSH has evolved in Europe and North America through three phases that culminated in the recognition of psychosocial hazards as integral to OSH theory and practice, sources and consequences of OS and burnout among health workers. I also illustrate the narrow scope and coverage of OSH regulation in Malawi, which neglects psychosocial hazards and excludes healthcare. I further review the literature related to OSH, focusing on mid-level health workers in Malawi (including COs). Finally, I discuss the theoretical framework that I have developed for the study.

Chapter 4- Methodology

In this chapter, I present the methodology that I used in the study. I discuss the research philosophy, research approach, and research strategy underpinning my study. I further demonstrate why a qualitative research design involving a combination of three methods of data collection—interviews, focus group discussions, and document analysis—was deemed appropriate for my study. I also discuss sampling procedures, reliability and validity, and how the data collected was organised and analysed. Finally, I highlight the ethical considerations that guided the conduct of my study.

Chapter 5- Occupational stress and burnout at public hospitals before the COVID-19 pandemic

In this chapter, I begin to challenge three implicit implications posed by the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like healthcare. I demonstrate that before the COVID-19 emerged, there were psychosocial hazards from the confines of the workplace that predisposed COs to OS and burnout. The psychosocial hazards I discuss in this chapter are excessive workloads, long hours of work, and poor interprofessional relations.

Chapter 6- Restructuring in the health sector before the COVID-19 pandemic emerged

In this chapter, I continue to challenge three implicit implications posed by the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like healthcare. I argue that before the COVID-19 pandemic emerged, restructuring was a psychosocial hazard from outside the workplace that

COs at public hospitals grappled with. I demonstrate that, among others, restructuring in the health sector manifested itself through the introduction of new processes on the job, new working procedures, new tasks, and revised organisational structures.

Chapter 7- Occupational stress and burnout at public hospitals during the COVID-19 pandemic

In this chapter, I continue to challenge three implicit implications posed by the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like healthcare. I argue that COVID-19 responses were psychosocial hazards from outside the workplace that predisposed health workers in general and COs in particular to OS and burnout. Among others, COVID-19 responses were manifested through the introduction of new processes on the job, new working procedures, and new tasks at public hospitals.

Chapter 8- Policy and theoretical perspectives on occupational stress & burnout at public hospitals

This chapter continues challenging the three implicit consequences of OSH regulation's narrow scope and coverage that neglects psychosocial hazards and exempts services such as healthcare. In this chapter, I demonstrate that at the five public hospitals, there were no organisational efforts to regularly identify OSH hazards. I contend that the lack of such organisational efforts indicates a poor safety culture in public hospitals. I draw a connection between poor safety culture at the policy level and OS or burnout among the COs. Finally, building on the discussions of chapters 5–8, I use a theoretical lens to enrich the understanding of OS and burnout among the COs at public hospitals.

Chapter 9- Impacts of occupational stress & burnout on clinical officers and health outcomes

This chapter also continues challenging the three implicit consequences of OSH regulation's narrow scope and coverage that neglects psychosocial hazards and exempts services such as healthcare, In this chapter, I draw a connection between OS and burnout with the quality of life among COs. I postulate that OS and burnout among COs at public hospitals negatively affect the COs' quality of life and job performance. I also demonstrate that the poor quality of healthcare services provided

by the COs leads to poor health among the masses. I further argue that psychosocial hazards at public hospitals are a breeding ground for health problems among COs through OS and burnout, which ultimately impinge the health of the wider population.

Chapter 10- Conclusion and Recommendations

In this chapter, I present the overall conclusion of the study drawn from the discussions in chapters 5–9. Thereafter, I highlight key recommendations at the research level derived from the limitations that I identified with my study. I also provide actionable recommendations at policy and practical levels for the consideration by the government, health workers (including the COs) and other stakeholders.

1.7. Summary

In this chapter, I presented a definition of OS and then unpacked the concept of burnout. I also discussed the background, problem statement, aim of the study, a summary of findings, an overview of the methodology, and significance of the study. Under the significance of the study, I demonstrated how the study contributes to the theory, policy, and practice of OSH in Malawi. In this chapter, I further presented how this thesis is organised in terms of chapters. In the next chapter, I highlight a broader context for Malawi within which I conducted the study.

Chapter 2

Setting the context

2.1. Introduction

In this chapter, I present background information about Malawi. This background information provides a broader context for the study. Firstly, in this chapter, I highlight the socio-economic and administrative contexts of Malawi. Thereafter, I narrow the focus to the architecture of health service delivery to illustrate the location of clinical officers (COs) in the provision of healthcare in Malawi.

2.2. Socio-economic context

Malawi is a landmass in Southern Africa measuring 118,484 square kilometres, of which 29,600 square kilometres are covered by water (Malawi Government, 2017a). Malawi shares international boundaries with Zambia, Mozambique, and Tanzania, as shown in Figure 3-2 (below). The territory was first declared a British Central African Protectorate in 1891 before being renamed Nyasaland Protectorate on 6 July 1907. On 6 July 1964, Nyasaland became an independent country known as Malawi under a prime minister called Dr Kamuzu Banda, who was a medical doctor by profession.

Malawi is a low-income country whose gross domestic product (GDP) per capita is estimated at USD 637 (World Bank, 2020). The total population of Malawi is 17.6 million, of which 84 per cent lives in rural areas (National Statistical Office, 2019). The country registers a population density of 186 persons per square kilometre, which is considered one of the highest in Southern Africa (National Statistical Office, 2019; World Health Organization, 2017). The mortality rate for the under-five population (per 1,000 live births) is 38.6 per cent, while life expectancy is estimated at 64.7 years (United Nations Development Programme, 2020; World Bank, 2020). Malawi's human development index (HDI) value for 2019 was 0.483, which is position 174 out of 189 (United Nations Development Programme, 2020). Against this backdrop, about 52.6 per cent of Malawi's population is multidimensionally poor, while 28.5 per cent is classified as vulnerable to multidimensional poverty (United Nations Development Programme, 2020).

2.3. Administrative context

Malawi is divided into three provinces which are called regions namely: northern region, central region and southern region (Malawi Government, 2017a). The three regions are divided into 28 districts as shown in Table 1-2 below.

Table 1-2: Regions and districts of Malawi

Region	Districts
Northern	6 districts: Chitipa, Karonga, Likoma, Mzimba, Nkhata Bay, and Rumphi.
Central	9 districts: Dedza, Dowa, Kasungu, Lilongwe, Mchinji, Nkhotakota, Ntcheu, Ntchisi, and Salima
Southern	13 districts: Balaka, Blantyre, Chikwawa, Chiradzulu, Machinga, Mangochi, Mulanje, Mwanza, Nsanje, Thyolo, Phalombe, Zomba, and Neno.

Traditional authorities (TAs) are sub-divisions of districts, which are composed of villages under the jurisdiction of local leaders called chiefs (Malawi Government, 2017a). Furthermore, each district is composed of constituencies that members of parliament (MPs) represent in the national assembly (Malawi Government, 1998b, 2013, 2017a). A constituency in each district, is composed of wards that are each represented by a member of the district council called a councillor (Malawi Government, 1998b, 2013).

Figure 3-2: Administrative map of Malawi



Source: Nations online (N/A). https://www.nationsonline.org/oneworld/map/malawi-administrative-map.htm

As shown in Figure 3-2, there are four cities located in each of the four districts, namely: the city of Mzuzu (located in the Mzimba district) in the northern region; the city of Lilongwe, which is also the capital city, located in the central region; the city of Zomba (the former capital city until 1975); and the city of Blantyre, which is located in

the southern region. Each of the 28 districts except Blantyre, Zomba, Lilongwe, and Likoma has at least one district hospital that is owned by the state. Furthermore, there is a state-owned central hospital in each of the four cities. However, the city of Zomba has two central hospitals, i.e., a general hospital and a mental hospital. The central and district hospitals offer an extensive variety of preventive and curative services such as anaesthesia, ear, nose, and throat (ENT), orthopaedics, outpatients, admissions, HIV/AIDS and TB treatment, pharmacy, family planning, paediatrics, physiotherapy, surgery, radiology, laboratory, maternity, and antenatal care.

Out of the 28 districts, I conducted the study in five districts, as shown in Table 2-2 below. These districts are Nkhatabay, Blantyre, Chikwawa, Mulanje, and Balaka. Out of the five districts, Blantyre is designated as a city with increasing rates of urbanization, while the rest of the districts are classified as rural areas (National Statistical Office, 2019). This is why, among the five districts, Blantyre has the highest proportion of the total population in the country despite constituting the lowest percentage of the country's total land mass, as shown in Table 2-2. Furthermore, being an urban area, Blantyre has more privately-owned clinics and hospitals than the other four districts as shown in Table 2-2.

The central hospital in Blantyre, as indicated in Table 2-2, is called Queen Elizabeth Central Hospital. It serves as a referral health facility for the district hospitals in the southern region, such as Mulanje, Chikwawa, and Balaka, among others (Malawi Government, 2018a). The district hospitals are used as referral health facilities for the village clinics, health posts, dispensaries, and other health facilities that are located in a particular district, as shown in Table 2-2. Most of the village clinics, health posts, and dispensaries at the district level are owned by the state.

Table 2-2: Profiles of 5 districts where study sites are located

Name of District	Location	Land mass (square km)	Population (a s percentage of Malawi's total population)	State-owned district hospital (s)	Other health facilities
Nkhatabay	Located along a lakeshore in northern region	4,182 (4% of Malawi's total land mass)	1.6	- 1 district hospital - 1 rural hospital	- 212 health posts - 142 village clinics - 3 dispensaries - 18 health centres[2]
Blantyre	Located in southern region. Categorised as a city	2,012 (1.7% of Malawi's total land mass)	7.2	- No district hospital - 1 central hospital	- 28 health centres - 129 under 5 clinics - 140 private clinics - 6 private hospitals - 1 CHAM hospital
Chikwawa	- Located in southern region. - Shares boundaries with Mozambique on western side and Blantyre in North East	4,755 (5% of Malawi's total land mass)	3.2	- 1 district hospital - 1 rural hospital	- 30 health posts - 154 village clinics - 5 dispensaries owned by parastatals - 15 health centres - 1 CHAM hospital
Mulanje	- Located in southern region - Shares boundary with Mozambique on southern side	2,056 (2.2% of Malawi's total land mass)	3.9	1 district hospital	- 190 health posts - 21 health centres - 28 private clinics (most of them owned by tea estate companies) - 1 CHAM hospital
Balaka	- Located in southern region - Previously a portion of Machinga district until 6 June 1998	2,193 (2.4% of Malawi's total land mass)	1.5	1 district hospital	- 95 village clinics - 260 under 5 clinics - 4 dispensaries - 12 health centres[3]

Sources: Nkhatabay District Council (2020), Mulanje District Council (2017), National Statistical Office (2019), Blantyre District Council (2018), Chikwawa District Council (2020), Balaka District Council (2018b), Balaka District Council (2018a).

[2] 2 are owned by CHAM while 1 is privately owned.

[3] 6 are owned by CHAM while 2 are privately owned

2.4. The architecture of healthcare services in Malawi

In this section, I shed light on the architecture of health service delivery in Malawi with two intentions. The first intention is to illustrate how healthcare is delivered in Malawi. The second intention is to illustrate the location of clinical officers (COs) in the provision of healthcare in Malawi.

2.4.1. The organisation of healthcare services

Healthcare in Malawi is provided through three sub-sectors. The three sub-sectors are the public (free), private (for-profit), and private (not-for-profit) sectors (Malawi Government, 2017a). The public sub-sector is the major healthcare provider and includes all health facilities owned by government ministries, district, town, and city councils (Malawi Government, 2017a). The private for-profit sub-sector includes all privately-owned health facilities, while the private not-for-profit sub-sector comprises health facilities owned by faith-based institutions, non-governmental organisations (NGOs), and statutory corporations (Malawi Government, 2017a). The major faith-based provider is a grouping of mission hospitals called the Christian Health Association of Malawi (CHAM), which accounts for approximately 29 per cent of all health services (ibid). According to the Malawi Government (2017a), healthcare in Malawi is organised at four levels that are interconnected as follows:

i. Community level- provided by community health workers (e.g. health surveillance assistants), health posts, dispensaries, village clinics, and maternity clinics;
ii. Primary level- provided by health centres and community hospitals;
iii. Secondary level- consists of state-owned hospitals and CHAM hospitals at the district level;
iv. The tertiary level- consists of 5 state-owned central hospitals located in the four major cities of Blantyre, Zomba, Lilongwe and Mzuzu.

The community, primary, and secondary levels (across the three sub-sectors of health service delivery) fall within the district health system under the jurisdiction of the local councils. At the district level, health services are coordinated by a District Health Management Team (Borghi et al., 2018; Bulthuis et al., 2021; Malawi Government, 2017a). The District Health Management Team (DHMT) is based at the district hospital. Block grants emanating from domestic sources, i.e., tax revenue, and from external sources in the form of general budget support are annually allocated to the districts by the Ministry of Finance to cater for district-level health activities (Borghi et

al., 2018). In addition, international cooperating partners collectively contribute separate funds into one basket called Sector Wide Approach (SWAP) to financially support health services at the district level, among others (Borghi et al., 2018; Malawi Government, 2017a, 2018b). The district hospital attends to cases referred from health facilities at the community and primary levels within a particular district.

The tertiary level is managed by the central government through the Ministry of Health (Malawi Government, 2017a, 2018a). The central hospitals also serve as both primary and secondary healthcare facilities due to the lack of district hospitals in the four cities where the central hospitals are located (Malawi Government, 2018a). Various non-governmental organisations (NGOs) and institutions of higher learning also use the central hospitals for training and research (ibid.). However, there have been reforms to transfer the management of central hospitals to boards of trustees (Malawi Government, 2018a). The reforms are currently ongoing.

From 2004 to 2016, the Essential Health Package (EHP) was a policy framework that guided the free provision of healthcare across the four levels of health service delivery (Malawi Government, 2017a, 2017c). When there was no state-owned health facility within a 5-kilometre radius, the Ministry of Health contracted with CHAM to provide free healthcare via service level agreements (ibid.). Following an evaluation, in 2017 the EHP was collapsed into two: the Basic Healthcare Package (BHP) and the Basic Health Care Package plus (BHP+) (Malawi Government, 2017a). The BPH performs the functions of the EHP, i.e., offering guidance on interventions delivered without charge to the general public, while the BHP+ provides indications for priority areas in case the BHP is expanded given the availability of financial resources (ibid).

Across the public sub-sector and CHAM facilities, there are a total of 37,926 health professionals who are employed out of a total of 62,269 established positions (Malawi Government, 2018b). The statistics show that at health facilities owned by the state, there are 0.21 medical doctors per 10,000 population, 3.44 nurses per 10,000 population, and 0.82 COs per 10,000 of population (Malawi Government, 2018c). According to the World Health Organization (2006), a country with less than 25 health professionals (i.e., doctors, nurses, and others) per 10,000 population cannot achieve adequate coverage of critical primary health care interventions.

More recent statistics on the health workforce in Malawi were reported in a survey on the human resources for health in Africa that was conducted by the World Health Organisation (2021). This survey showed that out of 47 African countries, only 4, namely: Seychelles, Namibia, Mauritius, and South Africa, had a density of doctors, nurses, and midwives per 1,000 population that reached or exceeded the Sustainable Development Goals (SDG) threshold of 4.45 health professionals per 1,000 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 1000 population (World Health Organisation, 2021). The acute shortage of health professionals therefore partly explains why Malawi is confronted with a growing burden in efforts to provide healthcare to the general public. Among others, such a burden is manifested through the high prevalence of communicable diseases, high incidences of maternal and child health problems, and an increasing burden of non-communicable diseases (Malawi Government, 2017a; World Health Organisation, 2017).

2.4.2. Location of clinical officers in healthcare service delivery

Before the opening of the University of Malawi's College of Medicine in 1991, young Malawians were studying medicine in Southern Rhodesia (now Zimbabwe), Northern Rhodesia (now Zambia), North America, and Europe (Broadhead & Muula, 2002; Muula et al., 2016). Upon qualifying as doctors abroad, most of them either never returned at all or took years to come and practise medicine in Malawi (Broadhead & Muula, 2002). They working conditions abroad were generally perceived to be far much better than in Nyasaland under colonial rule and later Malawi under a tyrannical one-party state. Given the rapidly growing population and rising healthcare demands, there was a severe shortage of medical doctors at the secondary and tertiary levels of health service delivery by 1970 (Broadhead & Muula, 2002; Dovlo, 2004; Gajewski et al., 2019). In response to this critical shortage, in 1976, the Ministry of Health introduced a cadre of mid-level health professionals called COs as substitutes for medical doctors (Muula, 2009; Thetard & Macheso, 2004).

"As you may know already, Dr Daniel Malikebu and Dr Kamuzu Banda were the first two people from this country to qualify as medical doctors in 1917 and 1937 respectively. They both studied at Meharry Medical College in Nashville, Tennessee (USA). The former took almost a decade to return home to practice. The latter returned home 20 years after he

qualified as a medical doctor in the USA. That continued to be the trend with many others who eventually left this country to study medicine abroad. They took long to return home to practice while some of them decided to remain abroad for good when their expertise was greatly needed in this country. Until 1991, we never had a medical school in the country to produce medical doctors locally. So, there was a crisis of shortage of medical doctors in the country. Until late 1976 when clinical officers emerged on the scene as substitutes for medical doctors. These clinical officers were introduced as a temporal solution to this crisis" (Conversation, external referee- public health researcher).

Following completion of O' level education, candidates for CO positions are trained locally at Malawi College of Health Sciences for a 3-year diploma course in anatomy, physiology, pharmacology, paediatrics, medicine, surgery, obstetrics, and gynaecology (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014). The Malawi College of Health Sciences was established on 21 June 1996, following a merger of three training institutions, namely the Lilongwe School of Health Sciences, the Medical Assistants Training School, and the Zomba School of Nursing (Malawi College of Health Sciences, 2022). Before this merger, the COs were trained at the Lilongwe School of Health Sciences, which opened its doors on 12 July 1976, under the name *Medical Auxiliary Training School* (Malawi College of Health Sciences, 2022).

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 (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; McAuliffe, Bowie, et al., 2009; McAuliffe, Manafa, et al., 2009; Mkandawire et al., 2008; Muula, 2009). At the hospitals, the COs are deployed to various departments and units depending on the areas in which they specialised during their training. Some hospitals have a system called *rotation* whereby hospital staff, including COs, are sometimes shuffled to other departments or units. At the district and central hospitals, the COs provide various services, including orthopaedics, physiotherapy, HIV/Aids and TB treatment, family planning, paediatric surgery, radiology, pharmacy, laboratory, and antenatal care.

The first cohort of locally trained COs commenced clinical practice in 1980 upon completion of a 3-year training course and 12-month internship (Thetard & Macheso, 2004). Before this cohort was enrolled in 1976 for CO training locally, there was another group that had been dispatched for clinical training in France. When trainees from this cohort returned to Malawi after completing their training in France, they became the first COs in 1976. Some of them were immediately deployed as lecturers at the Medical Auxiliary Training School, which had just been established in the same year. Until a few years after the opening of the College of Medicine in 1991, most of the doctors at public hospitals were expatriates on fixed contracts deployed by Malawi's cooperating partners (Palmer, 2006).

"There were 42 in the first cohort of locally trained clinical officers in 1976. But only 21 of us completed the training. In 1980, 21 of us were immediately dispatched to work in district hospitals across the country. I was sent to Nsanje District Hospital where I worked for 2 and half years before being deployed to teach subsequent cohorts of clinical officers at the Medical Auxiliary Training School. In the districts, we could independently perform all sorts of duties that were supposed to be undertaken by medical doctors. By then, there were a handful of doctors at public hospitals who were mostly expatriates" (Interview, retired clinical officer 01).

Over the years, skill development programmes have been introduced for COs to upgrade from diploma level to bachelor of science (BSc) level in various disciplines (Gajewski et al., 2019). One such programme is the Clinical Officer Surgical Training (COST) Africa Project (2011–2016), through which a BSc course in general surgery was offered at the College of Medicine (Gajewski et al., 2019). The first cohort under this programme included 17 COs drawn from 8 district hospitals who were trained in common emergency and elective procedures (Gajewski et al., 2019). There is no government sponsored programme or initiative to upskill COs to become qualified medical doctors.

The public sub-sector employs 1,045 COs out of 2,935 established positions, while a total of 266 COs out of 1,021 established positions work in CHAM facilities (Malawi Government, 2018c). While some COs are deployed to central hospitals, a bulk of them work at the secondary level of health service delivery, such as state-owned

district hospitals and hospitals run by CHAM (Gajewski et al., 2019; Muula, 2009; Thetard & Macheso, 2004). Since the inception of CO training in Malawi in 1976, some COs have eventually proceeded to obtain postgraduate qualifications in various disciplines, such as master and doctoral (PhD) degrees. The list of such COs includes names like Prof. Felix Salaniponi, Dr Leslie Phiri, Dr Biswick Mwale, Dr David Mtotha, Dr Wilfred Chalamira Nkhoma, Mr Raphael Piringu, Mr Edwin Nkhono, Mr Alan Macheso, and Hon. Yusuf Mwawa.

2.4.3. Social dialogue in the health sector

In the health sector, there are three main categories of employers. The first one is the government which is the employer of health workers in state-owned health facilities. The second category of employers is CHAM which brings together all employers of health facilities owned by church institutions. The other main category of employers in the health sector comprises owners of profit and non-profit making health facilities or firms. The health workers in Malawi belong to various organisations as shown in Table 3-2.

Table 3-2: Organisations of health workers in Malawi

No.	Name of organisation	Acronym	Nature of the organisation
1.	Physicians' Assistants Union of Malawi	PAUM	Trade union
2.	National Organization of Nurses and Midwives of Malawi	NONM	Trade union
3.	Medical Doctors Union of Malawi	MDUM	Trade union
4.	Malawi Association of Medical Laboratory Scientist	MAMLS	Association
5.	Concerned Unemployed Nurses and Midwives	CUNM	Association
6.	Association of Malawian Midwives	AMAMI	Association
7.	Radiographers Association of Malawi	RAM	Association
8.	Malawi Association of Obstetric Clinical Officers	MAOCO	Association
9.	Society of Medical Doctors in Malawi	SMD	Association
10.	Malawi Environmental Health Association	MEHA	Association
11.	Anaesthesia Association of Malawi	AAM	Association
12.	Pharmaceutical Society of Malawi	PHASOM	Association
13.	Physiotherapy Association of Malawi	PAM	Association
14.	Malawi Orthopaedic Association of Malawi	MOA	Association
15.	Optometry Association of Malawi	OAM	Association

As shown in Table 3-2, among the organisations representing health workers in Malawi, only 3 are recognised as trade unions, namely: the National Organization of Nurses and Midwives of Malawi (NONM); the Medical Doctors Union of Malawi (MDUM); and the Physicians' Assistants Union of Malawi (PAUM). The organisations shown in Table 3-2, together with patients' interest bodies, constitute a network called

the Human Resources for Health Coalition (HRHC). The HRHC was established in 2009 as an initiative of NONM. HRHC is a platform for health workers to collectively engage with employers on various issues of concern in the health sector, including working conditions. Except for the five organisations for doctors, nurses, and midwives (numbers 2, 3, 5, 6, and 9) and the Malawi Environmental Health Association, as shown in Table 3-2, the rest of the organisations have COs among their respective memberships.

Social dialogue in the health sector encapsulates all types of engagement involving representatives of health sector employers and employees on matters of common concern. The main partners in social dialogue in the health sector are public authorities as both regulators and employers, including CHAM, employers of profit and non-profit making health facilities, and organisations representing health workers. Social dialogue in the health sector is mainly bipartite between employers and health workers, which sometimes includes other patient interest groups. Social dialogue in the health sector is conducted at the health facility, sub-sectoral, and sectoral levels. Social dialogue at the health facility level is confined to issues at that particular workplace. While social dialogue on issues concerning a sub-sector, i.e., public free-of-charge and private not-for-profit sub-sectors, is held at the sub-sectoral level. Engagement with employers for profit and non-profit making health facilities occurs at the workplace level with a specific employer. There are also engagements between representatives of employers and health workers that are held at the sectoral level, thus involving employers from the sub-sectors of health service delivery.

In addition, social dialogue in the health sector takes three forms as follows:

i. Negotiations: representatives of employers in the health sector and health workers engage each other at the workplace, sub-sectoral and sectoral levels to agree on matters of mutual interest. Mainly representatives of health workers put forward proposals on issues of common interest for the employer to either accept the proposals or counter with alternative positions.
ii. Consultations: These are situations in which representatives of employers in the health sector and health workers at the workplace, sub-sectoral and sectoral levels engage to exchange views and insights on several issues. Both parties engage and listen to each other on various issues of concern.

iii. Information sharing: These are situations in which representatives of employers and health workers at the workplace, sub-sectoral and sectoral levels interact not necessarily to discuss matters or agree on specific actions, but rather to exchange information on which negotiations and consultations can be based.

PAUM is a trade union that represents COs, medical assistants, and dental therapists in Malawi. It was formed as an association in 2018 and later registered as a trade union in 2020. Out of 6,000 potential members, PAUM has recruited about 800, of whom approximately 80 per cent are COs. PAUM approaches employers in three ways. Firstly, as a member of HRHC, PAUM participates in negotiations, consultations, and information sharing with the government and CHAM through HRHC on issues of common interest among health workers. On specific issues concerning COs, medical assistants, and dental therapists, PAUM engages bilaterally with the government and CHAM, respectively. Thirdly, PAUM engages bilaterally with employers of profit and non-profit making health facilities on specific issues concerning its members at these facilities. In addition, there is a social dialogue platform for the civil service called the Government Negotiating Team (GNT). Through GNT, two trade unions that organise civil servants, namely: the Civil Servants Trade Union and the Teachers Union of Malawi, negotiate with the government as the employer. In 2019, PAUM was invited to participate in the negotiations at the GNT, whose agenda included item (s) concerning the welfare of health workers in the public sector. In the course of data collection in late 2021, another trade union for the COs called the Union for Clinicians and Allied Health Professionals (UCAHP) was registered by the Ministry of Labour. I came to know about the existence of this trade union after I had already completed the data collection. In chapters 5–7, I highlight how PAUM and HRHC have intervened on various issues related to OSH in the health sector.

2.5. Summary

Malawi is composed of three provinces which are called *regions*. These are the northern region, the central region, and the southern region. The three regions are divided into 28 districts. Each district except Blantyre, Lilongwe, Zomba, and Likoma has a state-owned district hospital representing the secondary level of health service delivery. In each of the four cities of Blantyre, Zomba, Lilongwe, and Mzuzu, there is a central hospital that falls within a tertiary level of health service delivery. I conducted

the study in five of the 28 districts, namely: Nkhatabay, Blantyre, Chikwawa, Mulanje, and Balaka. In 1976, a cadre of mid-level health professionals called COs was introduced in an attempt to address a critical shortage of medical doctors in the country. A bulk of COs work at the secondary level of health service delivery. The statistics show that even the number of COs serving as substitutes for medical doctors is insufficient to meet the human resource needs of public health. In the next chapter, I review the literature on OSH and psychosocial hazards among health workers as well as studies that have been conducted on COs.

Chapter 3

Literature review

3.1. Introduction

In this chapter, I present a review of the literature on occupational safety and health (OSH). I first discuss the definition of OSH. Then, I illustrate how OSH has evolved in Europe and North America through three periods that culminated in the recognition of psychosocial hazards as integral to the theory and practice of OSH. Next, I illustrate that the evolution of OSH in Malawi remains in an era during which psychosocial hazards are not a priority of OSH regulation. In this chapter, I also discuss the sources and consequences of OS and burnout among health workers. Thereafter, I illustrate the narrow scope and coverage of OSH regulation in Malawi that neglects psychosocial hazards and excludes healthcare. Then, I demonstrate that the available studies on mid-level health workers in Malawi, such as clinical officers (COs), give limited attention to OSH hazards. Finally, I discuss a theoretical framework that I designed for the study with two intentions. The first intention is to explain how OSH hazards can be associated with OS and burnout among health workers in general and COs in particular. The second intention is to provide a framework for analysis to challenge the narrow scope and coverage of OSH that neglects psychosocial hazards and excludes healthcare in the application of OSH regulation.

3.2. The conceptualisation of occupational safety & health

There are various definitions of occupational safety and health (OSH). In this section, I highlight how OSH is broadly conceptualised. Correll (2021) defined OSH as a field of public health that studies the incidences, causes, and trends of diseases, injuries, and well-being at the workplace. According to the World Health Organisation (1995, p. 3), “OSH should aim at: the promotion and maintenance of the highest degree of physical, mental, and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the workers in an occupational environment adapted to their physiological and psychological capabilities.” The International Labour Organisation (2011, p. 1) endorses the World Health Organisation’s encapsulation of OSH by defining it as “a discipline dealing with the prevention of work-related injuries

and diseases as well as the protection and promotion of the health of workers. OSH aims to improve working conditions and the environment... to promote and maintain the highest level of physical and mental health and social well-being among workers in all occupations." Among the basic principles of OSH is that “work should take place in a safe and healthy work environment; conditions of work should be consistent with the workers' well-being and human dignity; work should offer real possibilities for personal achievement, self-fulfilment, and self-service to society” (Alli, 2008, p. 17).

OSH is not only about the physical health of the workers but also the psychological, social, and behavioural aspects of personal life such as mental well-being, sufficient income, motivation, satisfaction, etc (Danna & Griffin, 1999). The International Labour Organisation's (ILO) 2019 Centenary Declaration on the *Future of Work* reaffirms the ILO’s founding vision of social justice, democracy, and universal peace through the concerted action of governments, workers, and employers (International Labour Organisation, 2019a). Among others, the Centenary Declaration specifically calls upon the ILO to ensure that "all workers should enjoy adequate protection under the decent work agenda, taking into account safety and health at work" (International Labour Organisation, 2019a, p. 5).

Drawing from Tan (1991); Kumar et al. (2014); Mehrdad et al. (2012); and Ross (1994), OSH hazards can be classified into five major categories as follows:

a) Biological hazards: various infectious diseases such as HIV/AIDS, Tuberculosis (TB), COVID-19 pandemic;
b) Physical hazards: sprains, injuries, violence, radiation;
c) Chemical hazards: certain classes of chemicals, liquids or gases that pose potential harm;
d) Ergonomic hazards: an environment that poses potential harm to one’s musculoskeletal system e.g., repetitive motion, vibration, awkward postures, extreme temperatures, inappropriate tools, excessive force;
e) Psychosocial hazards: various factors that cause or may lead to mental stress and burnout.

Psychosocial hazards have become more prevalent and a growing concern for working populations globally (International Labour Organisation, 2019b; Schuller, 2019). Nevertheless, the focus on OSH interventions in many countries remains

confined to chemical, biological, and physical hazards, thereby neglecting psychosocial and ergonomic hazards (International Labour Organisation, 1212, 2019b). This, therefore, supports the observation by the World Health Organisation (2007b) that the causes and consequences of psychosocial hazards remain poorly understood in some countries. Later in this chapter, I illustrate that Malawi is among the countries where psychosocial hazards are not a priority in OSH regulation. Hence, the psychosocial hazards, particularly in healthcare, are insufficiently interrogated. This is a knowledge gap that I am filling with this study. Throughout this thesis, I refer to psychosocial hazards as aspects of work design and management that may increase the likelihood of work-related stress or contribute to psychological and physical harm (Tan, 1991).

3.2.1. Evolution of Occupational safety and health

The framing of OSH evolves continuously in response to socio-economic, political, and technological factors (Alli, 2008; Eddington, 2006). In this sub-section, I highlight how the framing of OSH has evolved in Europe, North America, and Malawi.

3.2.1.1. Europe and North America

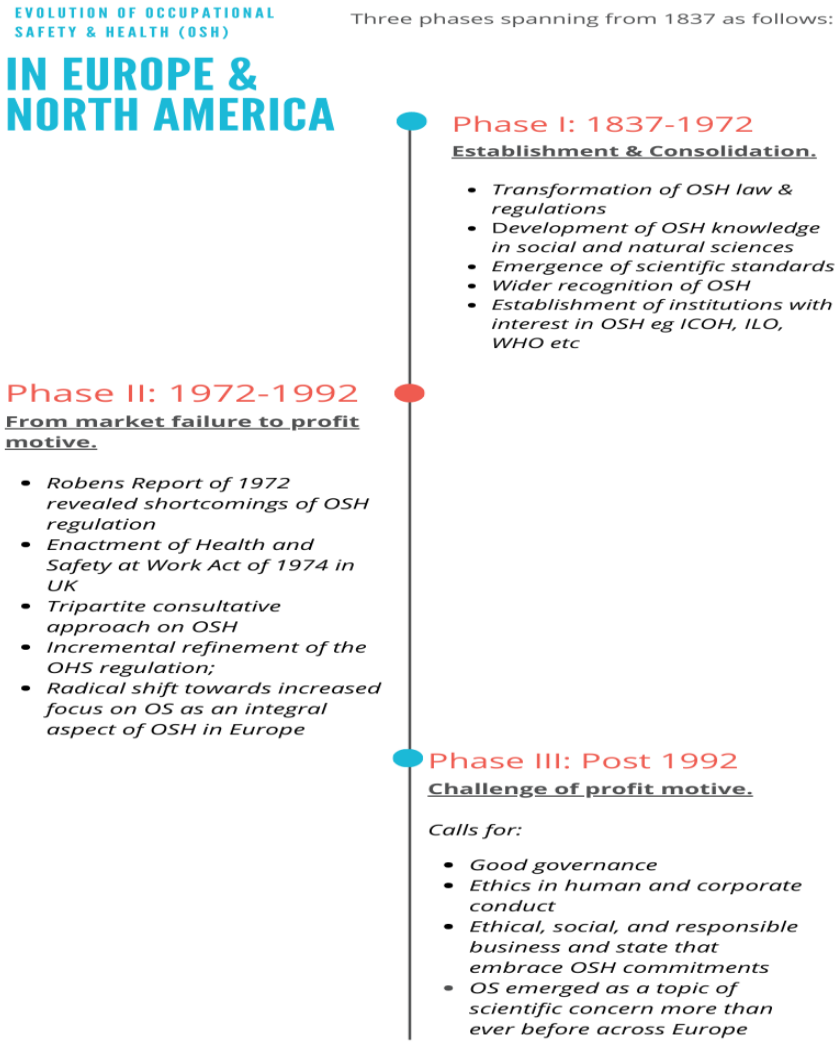
According to Eddington (2006), the framing of OSH has evolved through three stages in Europe and North America since 1837, as illustrated in Figure 4-3 below:

Phase I: Establishment and consolidation (1837-1972)

This stage is characterised by the transformation of OSH regulations into legislation, the development of knowledge in social and natural sciences with a particular interest in OSH, the emergence of scientific standards that were embedded in the OSH regulations, and a wider recognition of OSH as an important aspect of society (Eddington, 2006). According to Eddington (2006), in this period the following milestones were attained:

1. Establishment of institutions with a particular interest in OSH e.g., International Commission on Occupational Health (1906), Illinois Commission on Occupational Disease (1907), International Labour Organisation (1919), World Health Organisation (1948);
2. Survey on Occupational Diseases in the United States of America (1911);
3. Enactment of OSH-related laws at the state level in the United States of America by 1930.

Figure 4-3: Evolution of occupational safety & health in Europe and North America



Adapted from Eddington (2006).

Phase II: From market failure to profit motive (1972-1992)

This stage commenced with the Robens report of 1972, following the United Kingdom (UK) government's acknowledgement that public policies were not robust enough to address rampant industrial accidents, injuries, and diseases (Eddington, 2006). In the review, Robens' report revealed shortcomings of OSH regulation, such as ad hoc and haphazard application, fragmentation, being out of date, and gaps in coverage (Eddington, 2006; Heino, 2013). The Robens report culminated in the enactment of the Health and Safety at Work Act of 1974 in the UK, which was eventually adopted in other countries (Eddington, 2006; Heino, 2013). During this phase, there was a paradigm shift from viewing OSH as a moral obligation to regard it as a tool for boosting the profitability of the firms through an emphasis on quality assurance and

control (Eddington, 2006). Much emphasis was then devoted to self-auditing in OSH rather than policing; a tripartite consultative approach to OSH; incremental refinement of the OSH regulation; codes of OSH practice; and education and training (Eddington, 2006). During this period, there was another radical shift towards an increased focus on psychosocial hazards across Europe and other industrialised countries (Väänänen et al., 2012).

Phase 3: Post-1992

This stage stems from the Brundtland report of 1987 and the United Nations Commission for Sustainable Development established in 1992, which called for ethics in human and corporate conduct, good governance, and the building of a vibrant civil society (Eddington, 2006). In this phase, the profit motive of the capitalists is ethically challenged in light of the increased poverty, unemployment, and inequality that are associated with it (Eddington, 2006). At this stage, there has been an active role for trade unions and NGOs in agitating for ethical, social, and responsible business and state policies that embrace OSH commitments (Eddington, 2006).

During this period, psychosocial hazards emerged as topics of scientific concern more than ever before across Europe and other industrialised countries (European Commission, 2011; Väänänen et al., 2012). For example, a study by Jain et al. (2021) confirmed that during this era, mental health for workers became a key priority in OSH regulation in Europe and industrialised countries more than ever before. This study further established that by 2021, Europe and other industrialised countries had either amended existing laws and policies or developed fresh legal and policy instruments that contained specific provisions on psychosocial risk management and the promotion of mental health at workplaces.

3.2.1.2. National context

Since 1945, OSH in Malawi has evolved through two stages as shown in Figure 5-3 below.

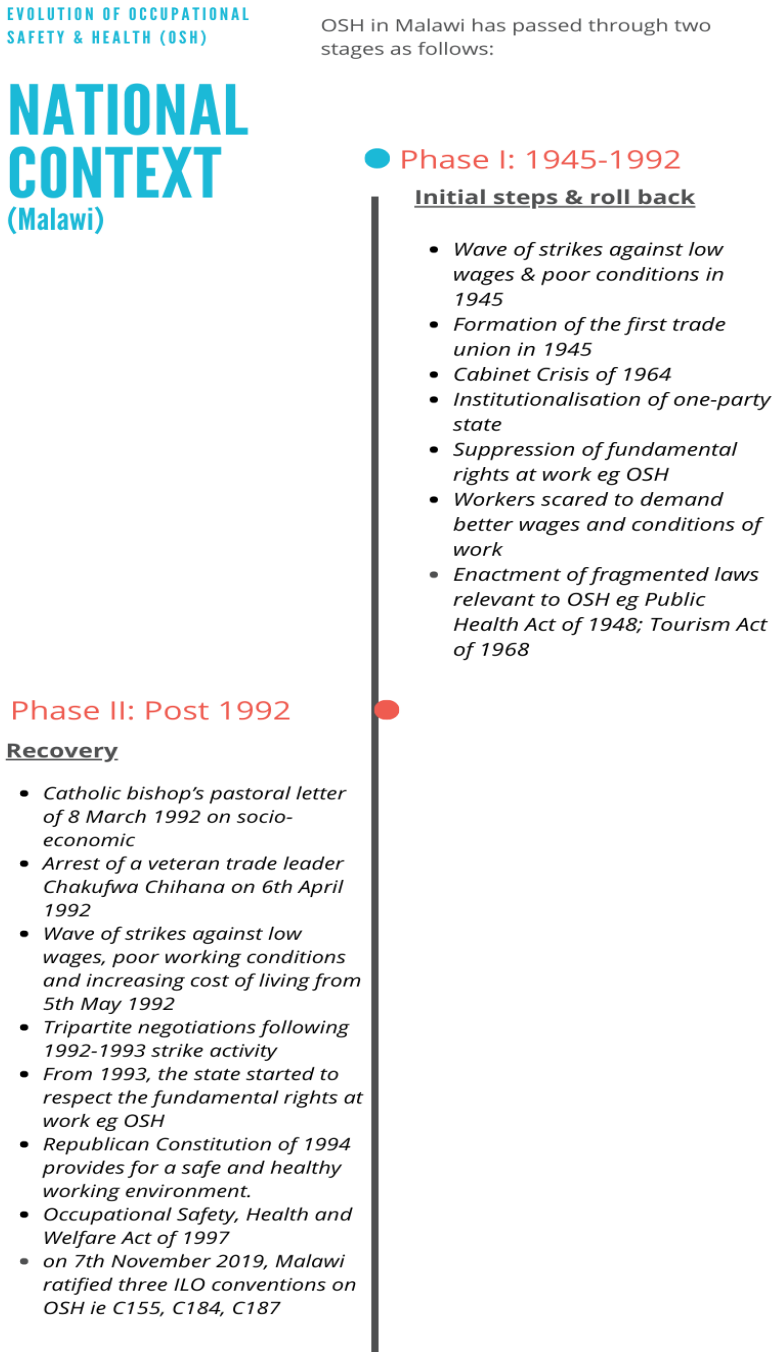
Phase 1: Initial steps & rollback (1945-1992)

In 1945, a wave of strikes against low wages and poor work conditions was staged by teachers, night soil workers, domestic workers, and rail workers in Blantyre

(Chinguwo, 2013). This led to the formation of the first workers' organisation called the Transport and General Workers Union in the same year (Chinguwo, 2013). This happened barely months after the inauguration of the first political party in Nyasaland in 1944 called the Nyasaland African Congress. The co-founders of the first trade union in Nyasaland in 1945 namely: Lali Lubani and Lawrence Makata were also the founding members of the first political party in 1944.

Malawi's attainment of self-government and independence in 1963 and 1964, respectively, was viewed as a huge sigh of relief for organised labour, which had existed under British colonial rule for almost two decades (Dzimbiri, 2007). In September 1964, barely two months after independence, an irreconcilable rift known as the *cabinet crisis of 1964* emerged between Prime Minister Dr Kamuzu Banda and his cabinet, culminating in abrupt expulsions and resignations of ministers from the cabinet (Dzimbiri, 2013). This resulted in the consolidation of power by the Prime Minister and the transformation to a one-party state from 1966 to 1993 (Dzimbiri, 2005). The draconian laws under the one-party state scared the workers into not demanding better wages and working conditions (Dzimbiri, 2005). The one-party state suppressed and muzzled fundamental workplace rights such as occupational safety and health and workers' organisations (Dzimbiri, 2005, 2007).

Figure 5-3: Evolution of occupational safety & health in Malawi



Adapted from Chinguwo, 2013; Dzimbiri, 2005, 2007, 2013; Public Health Act of 1948; Tourism Act of 1968.

Nevertheless, during this phase there was some recognition of OSH through the enactment of the following laws relevant to OSH: the Public Health Act of 1948; the Tourism Act of 1968; the Control of Goods Act of 1968; and the Railways Act of 1970 (Malawi Government, 1948, 1968a, 1968b, 1970). However, these Acts were targeted at specific sectors, i.e., health, tourism, trade, and transport. Hence, a national law to regulate OSH across sectors remained lacking during this phase.

Phase II: Recovery (Post-1992)

Following the Catholic bishop's epistle of 8 March 1992 on national socio-economic ills, on 6 April 1992, a veteran trade unionist Chakufwa Chihana, attempted to confront the one-party state in Lilongwe upon his return from abroad (Dzimbiri, 2005). The immediate arrest of Chakufwa Chihana sparked a wave of strikes against low wages, poor working conditions, and the increasing cost of living, starting with textile workers on 5 May 1992 in Blantyre (Dzimbiri, 2005). In 1993, the civil servants also staged two strikes that almost crippled the country's health, education, transport, and other sectors (Dzimbiri, 2005, 2007). From August 1993, the strike activity of 1992-1993 resulted in tripartite negotiations involving the government, workers' and employers' representatives (Dzimbiri, 2005, 2007).

The state was compelled to start recognising and respecting the fundamental rights at work, e.g., freedom of association, collective bargaining, dispute resolution, the right to strike, and OSH (Dzimbiri, 2005). These fundamental rights at work, which were abdicated during the one-party state, were recovered in this phase through the enactment of various labour laws and the ratification of three ILO conventions on OSH, as shown in Figure 6-3 below (Dzimbiri, 2013; International Labour Organisation, 2020b). The labour laws that were enacted during this era include the Labour Relations Act of 1996; the Occupational Safety, Health, and Welfare Act of 1997; the Workers' Compensation Act of 2000; and the Employment Act of 2000.

Figure 6-3: Ratified ILO conventions on occupational safety & health



Adapted from International Labour Organisation (2020b).

From the experience of Europe and North America on the evolution of OSH, I conclude that Malawi remains in the phase where OSH is generally recognised as critically important to society. To this effect, there is legislation that regulates OSH across sectors besides various sector-specific laws relevant to OSH and the ratification of ILO conventions on OSH. However, there is still insufficient focus on and neglect of psychosocial hazards as an integral component of OSH regulation. The ongoing review of OSH legislation in Malawi provides an opportunity for the country to take a paradigm shift towards an increased focus on psychosocial hazards in OSH regulation. That shift may mark the beginning of a new phase in the evolution of OSH in Malawi.

3.2.1.3. Occupational safety and health in the context of neoliberal conditionalities

The practice of OSH has also evolved in the wake of neoliberal globalisation. Neoliberal conditions are associated with the emergence of new OSH hazards in Africa. Since the 1990s, the state's capacity to formulate and implement appropriate OSH regulation in Africa has been severely curtailed by the implementation of neoliberal conditionalities prescribed by international financial institutions (London et al., 2014). These neoliberal conditionalities include the reduction of domestic subsidies and government expenditure, privatisation of state-owned assets, elevated levels of imports and foreign direct investments, and transformation of domestic markets, including the labour markets (Schrecker, 2016). Among the consequences of implementing neoliberal conditionalities have been fundamental changes in the workplace, such as downsizing and restructuring (International Labour Office, 2015; Kjellstroem et al., 2007; Loewenson, 2001; Quinlan & Bohle, 2009; Quinlan et al., 2001; Schrecker, 2016). Such fundamental changes have further outpaced the interventions for protecting workers' health, and in some instances, they have proven to be antithetical to the provisions and requirements for OSH (Loewenson, 2001).

According to Daoud et al. (2017), to keep government spending low, the IMF often imposes a wage bill freeze on developing countries, thereby constraining the government's ability to hire or adequately remunerate health workers. However, such a cost-saving measure is associated with various OSH hazards in the public sector (Blanton et al., 2017; Bohoslavsky, 2017; Kentikelenis, 2017; Kentikelenis et al., 2015;

Marphatia, 2010; Pandolfelli et al., 2014), some of which have recently become prevalent in Africa (Tshoose, 2014). These OSH hazards include increased workloads, longer hours of work, unpaid overtime schedules, or multitasking, all of which create an environment conducive to cutting corners on OSH provisions and requirements (Industrial Health Research Group and South African Municipal Workers Union, 2005; International Labour Office, 2015; Kjellstrom et al., 2007; Loewenson, 2001; Quinlan & Bohle, 2009; Quinlan et al., 2001; Schrecker, 2016). Blanton et al. (2017), Kentikelenis (2017), Marphatia (2010), and Bohoslavsky (2017) further argued that reduced state expenditure also translates into drastic reductions in the public sector workforce, including in the health workforce, wage cuts or wage bill ceilings, and redundancies and retrenchments that lead to job losses. Finally, governments are not only unable to recruit adequate health professionals, such as doctors and nurses, but are also unable to budget for expenditure on improving health workers' working conditions (Pandolfelli et al., 2014).

Kjellstro m et al. (2007) summed it all up by stating that neoliberal globalization, which is championed by IFIs, has created a rapidly changing labour market globally such that workers are put under intense pressure to be more productive and flexible, to work for longer and uncomfortable hours, and to demand a smaller salary increase. Finally, this phenomenon has a significant impact on OSH for workers, including those in healthcare.

3.3. Occupational stress and burnout among health workers

The Occupational Safety and Health Administration (2014) describes hospitals as workplaces characterised by high levels of occupational stress (OS) and other OSH hazards. Among others, OSH hazards at hospitals include potentially fatal injuries and illnesses exacerbated by work overload, shortage of staff, tight schedules, intricate or malfunctioning equipment, and dependent and demanding patients (Occupational Safety and Health Administration, 2014). Dousin et al. (2019), Shanafelt and Noseworthy (2017), Bellagamba et al. (2015), Ili et al. (2017), and Baylina et al. (2018) also concur that working conditions at health facilities are demanding and inherently stressful. In this section, I highlight the sources and consequences of OS and burnout among health workers. I further demonstrate in this section that the COVID-19

pandemic posed an unprecedented threat to health workers particularly mental well-being.

3.3.1. Contributing factors to occupational stress and burnout

There are contributing factors to occupational stress (OS) and burnout among health workers. The contributing factors include high workloads, changes at the workplace, standard precautions, occupational violence, poor work-life balance, a lack of OSH policies at health facilities, and the COVID-19 pandemic.

3.3.1.1. High workloads

The primary sources of OS and burnout among health workers are high workloads (Pikó, 1999; Töyry, 2005). The high workloads may arise as a result of increased responsibilities, role conflict, an irregular work schedule, poor interpersonal relationships with peers, supervisors, and patients, and a poor organisational climate (Pikó, 1999). In addition, high workload among health workers can also manifest through the amount of time one is on call, the number of patients one sees in a day, and the number of hours one works during an average week (Töyry, 2005). Due to resource constraints, some governments in Africa have been putting in place cost-cutting measures, such as freezing or reducing the number of new employees or hiring underqualified health workers (Marphatia, 2010). Cost-cutting techniques include freezing or reducing the number of new employees in the health sector, which also entails changes in work arrangements as the remaining staff take on bigger workloads, longer hours of work, unpaid overtime schedules, or multi-tasking (Quinlan & Bohle, 2009). For example, the Industrial Health Research Group and the South African Municipal Workers Union (2005) discovered that in South Africa, health workers at some clinics were often forced to work outside their job categories without adequate training or remuneration, such as nurses working as pharmacists without being paid an additional allowance. “At Freedom Square Clinic near Bloemfontein (South Africa), patients are required to clean the clinic before they are attended to because there is no cleaning staff at the facility” (Industrial Health Research Group and South African Municipal Workers Union, 2005, p. 32). In a study by Maluwa et al. (2012) conducted in Malawi, it was highlighted that at times, nurses delegated some of their duties to patients’ guardians due to high workloads as a result of an acute shortage of staff.

For health workers, work overload is cited as one of the prevailing drivers of burnout (Eaton, 2019; Töyry, 2005). For instance, the 24-hour medical services offered at

hospitals entail night time or prolonged shifts for health workers (Rivera et al., 2020). According to Bakhtom et al. (2019), in Iran, shift work was found to be a contributing factor to burnout among nursing staff in the intensive care unit.

3.3.1.2. Changes at the workplace

Workplace changes, such as downsizing, restructuring, and increased overtime and shift work, have been linked to high levels of OS and burnout among health workers (Day et al., 2017; Mathisen et al., 2017). Even though changes at the workplace are inevitable (Day et al., 2017; Leka & Lavicoli, 2017), the negative impacts of the organisational changes on the workers can be avoided (Day et al., 2017). Day et al. (2017) further argued that workplaces that are supportive and provide autonomy to the workers tend to provide a cushion for the workers against the negative outcomes resulting from changes.

A study on nurses conducted by Hertting et al. (2004) established that fundamental changes in the workplace through downsizing were connected with a persistent mistrust towards management and doctors, which became a significant source of stress among nurses in Sweden. Quinlan and Bohle (2009), Bourbonnais et al. (2005), and Kalimo et al. (2003) identified an association between job insecurity and changes at the workplace with significant adverse effects on workers' safety and health. In this regard, Loewenson (2001) argued that such adverse effects may be underreported due to job insecurity coupled with high labour turnover that results from downsizing and restructuring. London et al. (2014) agreed by arguing that workers who were aware of job hazards were sometimes hesitant to act to avoid exposure for fear of victimisation by superiors, which could result in job losses. Wichert (2002) demonstrated that there was a negative effect of job uncertainty and work intensification on psychological well-being. Dragano et al. (2005) concluded that there was a synergistic effect caused by the simultaneous exposure to downsizing in organisations and an increase in work-related stress.

Changes in work schedules, locations, and even layoffs may result from efforts on restructuring amidst existing staff shortages, work overload, long hours of work, and multi-tasking (Industrial Health Research Group and South African Municipal Workers Union, 2005). As a result, workers tend to express negative attitudes toward work reorganisation (Kivimäki et al., 2000). This pessimism and negativity partially lead to

mistakes by health workers while on duty (Jones & Arana, 1996). The Industrial Health Research Group and the South African Municipal Workers Union (2005) reported that following restructuring, freezing of posts, and outsourcing, the shortage of personnel and an ever-growing number of patients waiting in line were exacerbated. “As a result, health workers became stressed and eventually burned out, which made them more susceptible to infection and accidental injury” (ibid., p. 2).

3.3.1.3. Standard precautions

There is a connection between OS and low levels of compliance with standard precautions. “Standard precautions consist of: hand hygiene before and after every episode of patient contact; use of personal protective equipment (PPE); safe use and disposal of sharp objects; routine environmental cleaning; reprocessing of reusable medical equipment and instruments; respiratory hygiene and cough etiquette; aseptic non-touch technique; waste management; and appropriate handling of linen” (Ndu & Arinze-Onyia, 2017, p. 294). For health workers, needle sticks, scissors, and knives account for the most common source of physical injuries as they perform their duties (Abdulraheem et al., 2012; Mallon et al., 1992; Ramos-Gomez et al., 1997; Tereskerz et al., 1997). Hence, health workers face a risk of contracting HIV/AIDS, Hepatitis B, and Hepatitis C infections through injuries from needle sticks, scissors, and knives (Akagbo et al., 2017; Mashoto et al., 2015; Ndu & Arinze-Onyia, 2017; Sadoh et al., 2006).

The use of PPEs, e.g., gloves, gowns, masks, respirators, aprons, face shields, and eye protection, are some of the standard precautions to cushion the health workers from pathogenic microorganisms and chemical hazards to which they are continuously exposed while on duty (Conly, 2006; Raja & Sultana, 2012). Although updated guidelines for standard precautions are made available by the WHO to improve awareness and encourage the use of PPE, adherence to standard precautions is still low among health workers (Abdulraheem et al., 2012; Akagbo et al., 2017; Beyamo et al., 2019; Ndu & Arinze-Onyia, 2017; Subramaniam & Loo, 2015). For instance, Manyele et al. (2008) observed that compliance with standard precautions was inadequate in most hospitals in Tanzania. A study by Sadoh et al. (2006) on health workers in Nigeria reported that more than one-third did not use PPEs, and about half had ever used goggles during surgical operations.

Heavy workloads, which are associated with OS and burnout, are among the reasons for low compliance with standard precautions among health workers (Abdulraheem et al., 2012; Akagbo et al., 2017; Hersi et al., 2015). Abdulraheem et al. (2012) and Akagbo et al. (2017) further illustrated how non-compliance with standard precautions can specifically be attributed to work overload. The authors argued that health workers tended to feel that their work schedule was further burdened by adhering to standard precautions. Furthermore, the use of PPEs that cover the body or a considerable part of it may trap heat and sweat, restricting the body's evaporative cooling system and thereby causing difficulties in breathing for some health workers (International Labour Office, 2020; Tsamakis et al., 2020). As such, in some instances, health workers find compliance with standard precautions to be burdensome. Minnie et al. (2016) identified OS as a factor contributing to low compliance with standard precautions.

3.3.1.4. Occupational violence

There is a link between workplace violence and OS and burnout. The World Health Organization (2002, p. 5) defines violence as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation.” Some studies indicate that health workers suffer from violence at work (Arnetz et al., 1998). "The risk of violence for health workers is 16 times higher than the risk for other service workers. Workers are more likely to be attacked at work than prison guards, police officers, transport workers, retail, or bank employees” (Kingma, 2001, p. 129). While patients are the primary perpetrators of violence, health workers are also targets of violence from patients, loved ones, coworkers, and the general public (Beck & Schouten, 2000). In a study conducted in Malawi by Maluwa et al. (2012), some nurses reported that they felt a sense of ill-treatment by patients and that sometimes doctors would verbally attack the nurses in the presence of co-workers and the patients’ guardians. Schulte et al. (1998) found that 43% of 127 emergency rooms at US teaching hospitals experienced violent assaults on staff members at least once a month. A teaching hospital in Canada recorded 242 occurrences of physical assault injuries and 646 cases of verbal abuse or physically threatening behaviour (Schulte et al., 1998).

Workplace bullying, hostility, and threatening behaviours may be exacerbated by variables such as a lack of supervisory support, an excessive workload, bad work-

group relationships, and the anticipation of workplace changes such as downsizing or restructuring (Cole et al., 1997; Zapf et al., 1996). Some studies have further associated the occurrence of occupational violence, including threatening behaviours, verbal aggression, and bullying from supervisors or other workers, with restructuring (Kearns et al., 1998; Lee, 2002). Violence at the workplace is further associated with burnout, such that "burn-out contributes to workplace violence, then workplace violence contributes to burnout" (Eaton, 2019, p. 586).

3.3.1.5. Poor work-life balance

There is a connection between OS and work-life balance. Delecta (2011, p. 186) defines work-life balance as "an individual's ability to meet their work and family commitments as well as other non-work responsibilities like childcare, house chores, vacation, sports, and personal development programmes." The concept of work-life balance implies that personal life and paid work are complementary and can co-exist, hence they should be perceived less as mutually exclusive (Manfredi & Holliday, 2004; Suifan et al., 2016). A study by Suifan et al. (2016) segmented work-life balance into three dimensions, as follows:

i. Schedule flexibility

This means that workers have the freedom to choose when to start and end their shifts within the hours they are allowed to work.

ii. Job autonomy

This refers to the extent to which employees have leeway in determining when and how they get their work done;

iii. Manager support

This refers to the degree to which managers provide support and understand the personal and family life issues of those they supervise at the workplace.

Time required for family and non-work responsibilities tends to be forfeited by long hours of work, shift work, overtime work, work overload, etc., which cause fatigue, anxiety, and stress that eventually affect one's quality of home and family life (Delecta, 2011). For instance, a health worker who is fatigued due to long hours of work, overwork, and work overload may not be able to give sufficient attention to his or her spouse and family at home (Suifan et al., 2016).

Lack of work-life balance is associated with increased OS and burnout among workers (Beauregard & Henry, 2009; O'Keefe, 2014). In their studies on medical doctors conducted in Ireland and Wales, respectively, Humphries et al. (2020) and Brown et al. (2010) found that doctors struggled to maintain a balance between the desire for a successful medical career on the one hand and their family and other non-work commitments on the other. In both studies, the researchers further discovered that oftentimes, the personal needs of the doctors suffered in favour of pursuing professional commitments. In this regard, long hours of work, overtime work, work overload, and unpredictable work shifts did not afford the doctors ample time to attend to family and non-work commitments (Brown et al., 2010; Humphries et al., 2020). Against this backdrop, Beauregard and Henry (2009) and Dousin et al. (2019) concurred that there is a positive correlation between work-life balance and job satisfaction, such that workers who experience work-life balance tend to exhibit higher levels of job satisfaction as well as job performance, and vice versa. Furthermore, Humphries et al. (2020) concluded that despite being dissatisfied with work-life imbalances, the doctors expressed little hope for improvement and therefore did not show the urge to push for necessary reforms towards addressing the work-life imbalances.

3.3.1.6. Lack of OSH policies

Policy measures on OSH are not available at some health facilities in developing countries (Delgado et al., 2020). Among others, these OSH policies would make provisions for interventions to mitigate psychosocial hazards at the workplace. In some instances, OSH policies, if available at health facilities are inadequate to offer sufficient protection against OS and other hazards at the workplace (Thomas et al., 2020). The Victoria Auditor General (2013) revealed that there was low prioritisation for OSH in public hospitals in Australia as hospital staff were not aware of OSH hazards. The report further acknowledged that at public hospitals, there were insufficient resources and information to facilitate compliance with OSH policies. Lack of information on OSH and resources as well as challenges of adherence to OSH policies at hospitals were also highlighted in the country evaluations by the WHO conducted in 2007 and 2009 on policy practices in both Africa and globally (World Health Organisation, 2010b). Moyo et al. (2015) concurred that the formulation and implementation of OSH policies, which should facilitate the prevention and treatment of OS and burnout, among others, remained constrained in the private and public sectors in Southern Africa.

Furthermore, two studies demonstrated a lack of awareness of OSH as an indicator of poor implementation of workplace policies. Firstly, Baldwin et al. (1997) studied a cohort of junior doctors in Britain, most of whom had no clear idea of OSH services (including treatment and management of OS and burnout). The researchers further revealed that 70 per cent of the junior doctors could not mention an occupational health doctor by name, while 59 per cent failed to locate the OSH department at their hospital. Secondly, a study conducted in Britain by Waldron (1996) discovered that medical doctors who ever went on sick leave for infections contracted from patients, stress, or burnout did not consult the OSH department.

3.3.1.7. COVID-19 pandemic

The COVID-19 pandemic is associated with OS and burnout among health workers. It has triggered mental health problems like stress, anxiety, depression, fear, insomnia, and post-traumatic stress disorders among those with no previous mental illness and worsened cases among those with pre-existing mental health disorders (Cullen et al., 2020; Kumar & Nayar, 2020; Rajkumar, 2020; Semo & Frissa, 2020; Singh et al., 2020). For workers in general, mental health problems have the potential to adversely impact performance-based outcomes through increased sickness absence, high staff turnover, increased incidences of human errors, and a high rate of occupational accidents and injuries (Rajgopal, 2010). Furthermore, during a pandemic, mental health concerns take a backseat as limited resources and attention are diverted towards the containment of the pandemic (Singh et al., 2021). Hence, more mental health problems are anticipated to emerge and persist during and after the COVID-19 pandemic, as was the case with previous disease outbreaks like Ebola (Semo & Frissa, 2020; Singh et al., 2021).

A study by Singh et al. (2021) revealed that, amidst the COVID-19 pandemic, incidences of mental health issues such as stress, anxiety, and depression were significantly higher among health professionals than among the general population. For instance, healthcare personnel, especially those working in primary care, emergency services, and intensive care, are frequently subjected to high levels of psychological stress (Cullen et al., 2020; International Labour Office, 2020; Semo & Frissa, 2020; Tsamakis et al., 2020; Zhang et al., 2020). This is partly because the workload increases drastically with a dwindling number of staff as other health workers fall ill or are quarantined (International Labour Office, 2020).

Health workers are further prone to fear, depression, and anxiety as they work under the continuous threat of getting exposed and infected by COVID-19 amidst a lack of sufficient PPEs (Cullen et al., 2020). For instance, at the beginning of the COVID-19 pandemic, PPEs and safety protocols were not always available in many health facilities dealing with COVID-19 patients, particularly in developing countries (Delgado et al., 2020). Furthermore, Thomas et al. (2020) validated a growing concern that the national PPE guidelines issued by Public Health England (PHE) on COVID-19 were inadequate to offer sufficient protection to health workers, both in terms of quantity and quality. A COVID-19 study at a tertiary infectious disease hospital in China conducted by Huang et al. (2020) found that frontline health workers had a significant rate of anxiety and stress disorders. Zhang et al. (2020) supported this by discovering that frontline health workers dealing with COVID-19 in China were exposed to a protracted source of mental health problems such as significant rates of severe sleeplessness, anxiety, despair, somatization, and obsessive-compulsive symptoms, which outstripped their particular coping abilities. According to Zhang et al. (2020), overtime work, irregular hours, and overwork were cited among the reasons for mental health problems among frontline health workers dealing with the COVID-19 pandemic.

There are also links between workplace violence and pandemics like COVID-19. Firstly, during pandemics, some patients become unwilling to cooperate with health workers or comply with safety measures (Chersich et al., 2020; Tsamakis et al., 2020). This may eventually lead to patients launching violent attacks or engaging in aggressive behaviour toward health workers (Chersich et al., 2020; Tsamakis et al., 2020). Secondly, according to the International Labour Office (2020), those who work in occupations with a high risk of infection, such as frontline health workers on COVID-19, face stigmatisation and discrimination. This may result in marginalisation and greater exposure to violence and harassment in society (International Labour Office, 2020). Lastly, “the high mortality rate associated with some epidemics, the distress coupled with uncertainty about symptoms, the unavailability of test kits, and the absence of vaccines and treatments, can lead to acts of violence against health workers who directly care for patients” (International Labour Office, 2020, p. 26). Against this backdrop, pandemics like COVID-19 render health workers vulnerable to acts of occupational violence from patients, guardians, and communities.

Lastly, a connection can also be drawn between changes in the workplace and the COVID-19 pandemic. According to Zhang et al. (2020), changes at the workplace, such as more overtime work, irregular hours, and overwork, were highlighted, along with other reasons, as causes of psychological strain among frontline health workers dealing with the COVID-19 epidemic. The other factors included little understanding of the coronavirus, lack of prevention and control knowledge, high danger of exposure to COVID-19 patients, and a dearth of PPEs, among others (Zhang et al., 2020).

3.3.2. Consequences of occupational stress and burnout

There are negative effects of OS and burnout on health workers. OS and burnout negatively affect the quality of the personal lives of the health workers themselves and their performance on the job (Goetz et al., 2015; Gosseries et al., 2012). OS and burnout "can reduce the enjoyment of life, cause hypertension and cardiac problems, reduce immunity, contribute to substance abuse, lead to frustration and irritability, and reduce the overall status of mental and physical well-being" (Bhatia et al., 2010, p. 731). OS and burnout are also associated with gastric complaints, nervous disturbances, chronic fatigue, headaches, sleep disorders, breast cancer, stroke, and increased consumption of tranquillizers and sleeping tablets (Lin et al., 2014; Pikó, 1999; Rivera et al., 2020; Wichert, 2002).

Changes at the workplace are further associated with poor mental health among workers. There is a global assessment of published research on the health effects of job instability and work reorganization, such as restructuring, conducted by Quinlan et al. (2001). According to this assessment by Quinlan et al. (2001), 88 per cent of the 68 studies found at least one negative consequence, such as a greater risk of workplace injuries, workplace violence, heart disease, psychological distress, and mental illness. Out of the 17 studies that were reviewed by Bamberger et al. (2012), a link between exposure to organisational transformation and poor mental health (with a weaker association in longitudinal studies than in cross-sectional studies) was found in 11 studies.

OS and burnout also contribute to adverse effects on the quality of healthcare services (Baylina et al., 2018; d'Ettorre & Greco, 2015; Salilih & Abajobir, 2014). A study conducted on nurses in the United States of America by McHugh et al. (2011) revealed

that burnout and job dissatisfaction were connected with lower patient satisfaction and poor healthcare. Burnout “can result in acrimonious relationships with patients. Malawian and South African patients have reported that conflicts with providers led some to stop coming to clinics, eventually abandoning clinic care” (Kim et al., 2019, p. 9). Vecchio et al. (2009) and Wichert (2002) concurred that increasing hours of work and work overload among nurses negatively affected their mental health, job satisfaction, and quality of healthcare. Some medical errors among health workers are further attributed to OS and burnout (Kamaloo et al., 2017; Kim et al., 2019). For instance, some frontline health workers with COVID-19 in various countries were reported to be experiencing a myriad of psychosomatic disorders (Chersich et al., 2020; Greenberg et al., 2020). This made them vulnerable to errors and injuries, thereby increasing their risk of getting infected by COVID-19 (Christopher et al., 2020; International Labour Organisation, 2020a).

Workers experiencing OS and burnout pose negative impacts on their coworkers by triggering personal conflicts and disrupting job tasks (Arandjelovic et al., 2010). Hall et al. (2016) concurred, arguing that OS and burnout, which among others manifest through fatigue, irritability, and reduced cognitive functioning, exert pressure on team relationships, leading to more distanced staff. In all, Asante et al. (2019, p. 2) summed it up by stating that OS and burnout are associated with “illnesses, decreased capacity to perform, reduced initiative drive, reduced efficiency, reduced work interest, job dissatisfaction, absenteeism, lack of concern for the organization, increased staff turnover, poor well-being, and the decline in overall quality of care.” Against this backdrop, mechanisms to address the psychosocial hazards confronting health workers should be put in place to mitigate the impact of OS, burnout, and other mental health problems.

3.4. Psychosocial risk management

In this section, I present an overview of risk management for psychosocial hazards I identified as an omission in OSH regulation in Malawi, which I discuss later in this chapter. In this section, I illustrate why psychosocial risk assessment is important in the mitigation of risks and hazards at the workplace.

3.4.1. ILO guidelines on OSH management systems

The core of OSH is the management of workplace risks and hazards so that suitable preventative actions can be created and implemented to advance worker safety and health (International Labour Organisation, 2011). The ILO recommends that suitable provisions be made for the formation of workplace OSH management systems that include the following important elements: policy, organising, planning, execution, assessment, and action for improvement (International Labour Organisation, 2001). “Anticipation, recognition, evaluation, and control of hazards arising in or from the workplace that could impair the health and well-being of workers are the fundamental principles of the process governing occupational risk assessment and management." "The possible impact on the surrounding communities and the general environment should also be taken into account in establishing measures on risk prevention” (International Labour Organisation, 2011, p. 1). The OSH management systems must also stipulate comprehensive emergency preparedness and responses for eventualities such as pandemics (International Labour Organisation, 2001).

3.4.2. Framework for risk assessment of psychosocial hazards

“A hazard is anything that has the potential to cause harm, while a risk is simply a chance that somebody will be harmed by a hazard” (Rick & Briner, 2000, p. 311). Hazards and risks that are associated with psychological or physical harm are referred to as psychosocial hazards and risks (Oakman et al., 2018). As shown in Figure 7-3, the ILO recommends a framework for a risk assessment of psychosocial hazards that can be designed depending on the size and structure of a particular workplace (International Labour Organisation, 2011).

Figure 7-3: Framework for a risk assessment on psychosocial hazards



Source: International Labour Organisation (2011).

Ideally, in an organisation, the employer, in consultation with workers, should develop and implement a framework for a risk assessment of psychosocial hazards, as shown in Figure 7-3 above (International Labour Organisation, 2001). A study by Mathisen et al. (2017) stated that implementation of the risk management framework had positive impacts on significantly reducing the psychosocial hazards at the workplace. However, psychosocial risks are rarely considered during strategic planning and decision-making processes in most workplaces and rarely considered a priority in OSH regulation in some countries (Guadix et al., 2015). This explains why in Malawi, the focus is more on physical, chemical, and biological hazards than psychosocial risks (Guadix et al., 2015).

Metzler et al. (2019, p. 123) further discuss additional factors that impede the implementation of psychosocial risk assessment, such as “lack of awareness; insufficient guidance, resources, and technical support; social stigmatisation of mental health issues; and insufficient supervision by governmental authorities.” Besides threatening health outcomes, psychosocial risks also hinder performance-related outcomes within organizations, such as productivity (Guadix et al., 2015). Prevention of psychosocial risks should be a priority for workplaces despite the lack of mandatory and statutory requirements for psychosocial risk assessment in the case of Malawi. One way of achieving this can be the implementation of mental health policies that

may, among others, provide for psychosocial risk assessment and appropriate interventions to alleviate OS and other mental health problems (Chersich et al., 2020; Christopher et al., 2020; Cullen et al., 2020; Semo & Frissa, 2020; Singh et al., 2021). The psychosocial risk assessment should also address mental health problems that may arise during emergencies, disasters, and pandemics like COVID-19 (International Labour Organisation, 2001; Singh et al., 2021).

3.5. Narrow framing of OSH in Malawi

In this section, I demonstrate that in Malawi, psychosocial hazards are neglected in OSH regulation. While generally, OSH remains a priority for Malawi at the policy level (Malawi Government, 2012), there are shortcomings in the framing of OSH regulation. Firstly, the scope of OSH regulation is largely confined to chemical, biological, and physical hazards. For instance, Part XI of the Occupational Safety, Health, and Welfare Act of 1997, provides a list of 19 occupational diseases, which does not include any illnesses related to psychosocial hazards like OS and burnout (Malawi Government, 1997). This entails that workers suffering from OS and burnout or illnesses scientifically proven to be associated with OS and burnout cannot claim workers' compensation for such health problems. Simply because such illnesses are not recognised by law as health problems at the workplace. Furthermore, Part III of the Act provides for OSH risk assessments to be conducted at workplaces. However, the focus of the risk assessment is limited to physical, biological, and chemical hazards. Risk assessment on psychosocial hazards is not mandatory as far as the Act is concerned. In addition, among the objectives of Malawi's national programme on OSH is "to improve the mainstreaming of HIV/AIDS and occupational TB management" (Malawi Government, 2012, p. 9). In essence, these diseases fall under the category of biological hazards. There is no mention of psychosocial hazards and psychosomatic illnesses in this programme that guides OSH activities at the national level.

Secondly, the definition of workplaces in both the OSH Act and the national programme on OSH does not cover service sectors in which workers are also susceptible to OSH hazards, e.g., finance, tourism, transport, education, and health. The OSH Act and the national programme on OSH are biased at the prevention of

physical, biological, and chemical hazards in the following sectors: construction, manufacturing, electricity, gas, water, petroleum, agriculture, mining, and quarrying. Table 4-3 (below) shows the number of occupational accidents documented annually by the Ministry of Labour from 2015 to 2020, focusing on the sectors that are covered by the OSH Act. As shown in Table 4-3, the data on occupational accidents in the health sector is not collected, analysed, or reported by the Ministry of Labour. This is because of the narrow coverage of the OSH Act, which excludes service sectors like healthcare. The OSH Act and the national programme on OSH do not provide reasons or a justification for the exclusion of service sectors like healthcare and the neglect of psychosocial hazards.

Table 4-3: Occupational accidents reported in Malawi (2015-2020).

Sector	Year **2015-2016**	Year **2016-2017**	Year **2017-2018**	Year **2018-2019**	Year **2019-2020**
Agriculture (tobacco & tea)	17	21	18	19	16
Manufacturing	38	47	57	41	38
Electricity, Gas, Water	6	6	8	9	6
Construction	18	23	27	23	18
Mining & Quarry	3	9	13	11	3
Petroleum & others	0	0	5	8	0
TOTAL	**82**	**106**	**128**	**111**	**82**

Source: Ministry of Labour (2020).

Against this backdrop, with a particular focus on healthcare, I attempted to contribute to the discourse of OSH in Malawi by providing empirical evidence that justifies the reframing of OSH to incorporate psychosocial hazards. I build a case that psychosocial hazards that are neglected by national OSH regulation constitute a serious public health problem. Hence, psychosocial hazards should become integral to OSH regulation and health sectoral policies in Malawi.

3.5.1. Clinical officers in Malawi

There is literature on Os in particular and mid-level health workers in general. The mid-level health workers include COs, medical assistants, technicians, nurses, and midwives.

3.5.1.1. Clinical efficacy of clinical officers

The articles written about COs exclusively dwell on the actual hospital services that patients receive from COs. These articles include Mkandawire et al. (2008); Gajewski et al. (2019); Grimes et al. (2014); Chilopora et al. (2007); Sanyahumbi et al. (2017); Jiskoot (2008); Ellard, Simkiss, Quenby, Davies, Kandala, Kamwendo, and O'Hare

(2012); Muula (2009). These articles are essentially cost-benefit and cost-effectiveness evaluations of COs as substitutes for medical doctors in orthopaedics, obstetrics, echocardiography screening, and gynaecology. The studies discussed in these articles are typically clinical and were aimed at validating the clinical efficacy of COs in healthcare in Malawi. As a result, there is nothing inherent in these articles concerning the conceptualization of OSH, the sources of OS and burnout, and the consequences of OS and burnout among COs as key themes drawn from the global literature previously reviewed in this chapter.

3.5.1.2. The work environment for mid-level health workers

There are non-clinical articles on mid-level health workers in general. These articles provide important insights related to the work environment for mid-level health workers from which implications for OSH can be drawn. For example, Dovlo (2004) argued that mid-level health workers in Malawi did not receive recognition, respect, and necessary support from supervisors and coworkers. McAuliffe, Manafa, et al. (2009) found that remuneration and advancement opportunities were important factors in mid-level health workers' job satisfaction. Bradley and McAuliffe (2009) found that factors affecting the job performance of mid-level health workers included impediments to career development. According to Kalata et al. (2013), compliance with hand hygiene practices was low among health workers (including COs), with one contributing factor being negligence.

McAuliffe, Bowie et al. (2009), and Bradley et al. (2015) further associated the work environment for mid-level health workers with OS and burnout. McAuliffe, Bowie, et al. (2009) found that for mid-level health workers, inadequate resources and a lack of support from supervisors and coworkers contributed to demotivating work environments in which COs and medical assistants were relatively worse off than nurses. The researchers further identified burnout among the mid-level health workers involved in the study. Bradley et al. (2015) revealed that OS among mid-level health workers emanated from workloads with which they could not cope. Subsequently, they experienced demotivation and disengagement from work, which ultimately led to poor service. I conclude that the analysis from the articles on mid-level health workers is consistent with the general overview drawn from the global literature (previously reviewed in this chapter) in terms of contributing factors for OS and burnout among

health workers and the consequences of OS and burnout among health workers concerning the quality of healthcare.

3.5.1.3. Shortcomings of the literature on clinical officers and mid-level health workers

Although the articles on mid-level health workers discussed above provide some insights into the work environment for COs and the implications for OSH, there are some flaws with the literature that I identified. In this thesis, I address such shortcomings as my contribution to the body of knowledge. Firstly, the studies 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. The COs, medical assistants, technicians, nurses, and midwives have distinct experiences in terms of work conditions and ramifications for OSH. McAuliffe, Bowie, et al. (2009) recommended further research on each of the mid-level health workers to generate peculiar and deeper knowledge of the respective work environment and OSH in particular.

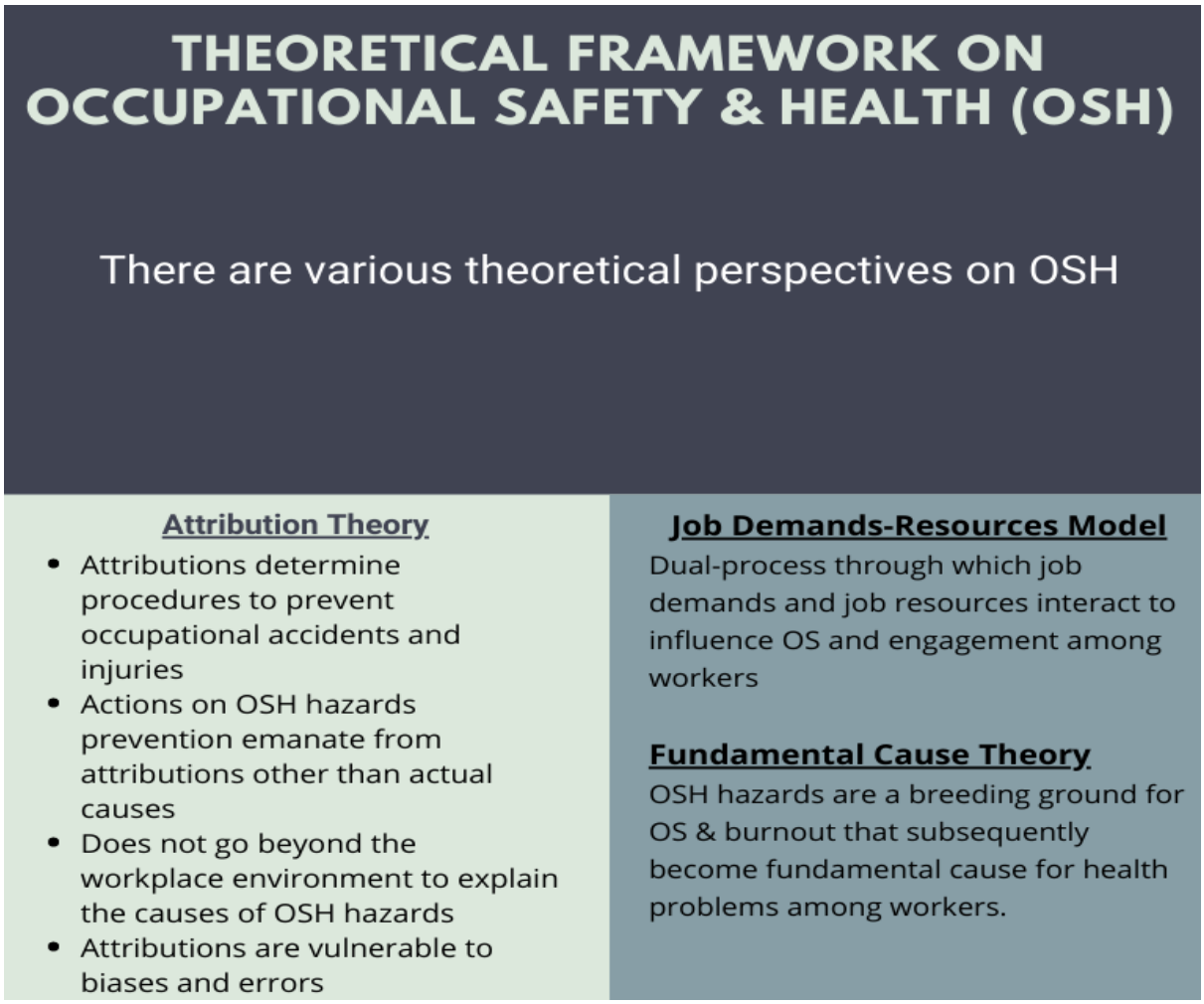
Secondly, the studies on mid-level health workers such as Dovlo (2004); Bradley and McAuliffe (2009); McAuliffe, Manafa, et al. (2009); McAuliffe, Bowie, et al. (2009); Bradley et al. (2015); McAuliffe, Bowie, et al. (2009); Kalata et al. (2013) shed light on the impact of work overload, OS, and burnout on the quality of healthcare. However, these studies did not illustrate how work overload, OS, and burnout affect the quality of healthcare. Neither did these studies shed light on the impact of OS and burnout on the health well-being of the mid-level health workers themselves, as illustrated by the global literature, i.e., gastric complaints, nervous disturbances, chronic fatigue, headaches, sleep disorders, breast cancer, stroke, and increased consumption of tranquillizers and sleeping tablets (Lin et al., 2014; Pikó, 1999; Rivera et al., 2020; Wichert, 2002). Thirdly, from the global literature, it is clear that even developed countries have grappled with insufficient priority for OSH and poor implementation of OSH policies in public hospitals (Baldwin et al., 1997; Thomas et al., 2020; Victoria Auditor General, 2013; Waldron, 1996; World Health Organization, 2010b). However, the articles on mid-level health workers did not project any picture on the prioritisation of OSH, availability, or implementation of policies on OSH at public hospitals in Malawi.

Lastly, another deficiency that I identified in the literature on COs and mid-level health workers is that the analyses provided in the articles are devoid of a theoretical lens. Perhaps this is because these articles are published in medical journals. Medical journals are mostly interested in articles derived from practical research and not necessarily articles that are grounded in theories or intended to develop theories (Alderson, 1998; Chatterjee, 2005). According to Alderson (1998), such a widespread position propagated by medical journals assumes that theories can be distinguished from practical research and that exploring theories is not practical or necessary. However, I argue that scholarly literature on aspects of OSH without an analysis grounded in theory, is intellectually inadequate. Theories should be used to enrich explanations of how a particular social phenomenon affects the health and well-being of individuals in general (Alderson, 1998; Cockerham, 2013; Harvey, 2020). As a result, various theories should be developed to improve the understanding of workplace safety and health (DeHury & Kumar, 2019). Against this backdrop, I attempted to address this intrinsic deficiency on a theoretical level by exploring various social theories. In this thesis, I develop and propose a theoretical framework for analysing OSH in Malawi, with a particular focus on psychosocial hazards at public hospitals.

3.6. Theoretical framework

I have developed a theoretical framework to use in challenging the narrow framing of OSH regulation that excludes psychosocial hazards and exempts service sectors like healthcare. As summarised in Figure 8-3 (below), I brought together framings from three theoretical perspectives to explain OSH in the context of Malawi, with a particular focus on psychosocial hazards at public hospitals. Thus, my theoretical framework combines uniquely the three distinct perspectives as shown in Figure 8.3.

Figure 8-3: Theoretical framework on occupational safety & health



In chapters 8 and 9, I apply this theoretical framework to understand how psychosocial hazards at public hospitals emerge and how psychosocial hazards increase the risks of OS and burnout among COs. I further use this theoretical framework to explain how the quality of life of COs and the health of the general public are negatively affected by OS and burnout among COs. This theoretical framework comprises three theoretical perspectives: attribution theory, the job demands-resources (JD-R) model, and fundamental cause theory, as shown in Figure 8-3 (above). In this section, I discuss the three theoretical perspectives to demonstrate their relevance to the research problem of my study. Thus, before I apply the three theoretical perspectives to the results of my study.

3.6.1. Attribution theory

Attribution refers to the human desire to explain events, one's behaviour, and the behaviour of others (DeJoy, 1994; Gyekye, 2010). Weary et al. (1989, p. 2) defined

attribution as “an inference about why an event occurred, about a person’s dispositions (i.e., a person’s inherent tendencies or inclinations) or other psychological states”. The central feature of attribution theory is that it attempts to understand how people explain and account for causality of social phenomena (Gyekye, 2010). Attribution theory is also applied to interrogate the underlying factors that can influence the causal explanations made by people (DeJoy, 1994; Gyekye, 2010). There are some scholars who are acknowledged to have contributed immensely to the development of attribution theory such as Heider (1944); Kelley (1967, 1971, 1973) and Weiner (2008).

3.6.1.1. Heider’s contribution

Attribution theory originated with Heider (1944), who asserted that people explain behaviour informally. It was he who coined the term *naive psychology* to drive home the point that human beings make efforts to comprehend their environment and society as they behave as *naive psychologists* (Gonçalves et al., 2008). Heider (1944) also held that people had the propensity to attribute behaviour to dispositional elements like individuals rather than situational factors like the physical or social environment. According to Heider (1944), two considerations influence the causal explanation to be drawn: "(1) The reason has to fit the wishes of the person, and (2) the datum has to be plausibly derived from the reason" (Miller & Ross, 1975, p. 213).

3.6.1.2. Kelley’s contribution

The work of Kelley (1967), Kelley (1971), and Kelley (1973) on attributions was built upon Heider’s original theory. Attributions are the basis of covariation between causes and effects across the dimensions of distinctiveness, consistency, and consensus (Kelley, 1967, 1971, 1973). To explain what caused a certain event, people use the covariation principle (Kelley, 1967, 1971). Kelley (1967), Kelley (1971), and Kelley (1973) further stated that distinctiveness (the degree to which current behaviour differs from past behaviour), consistency (how often a person engages in a particular behaviour), and consensus (how others would respond in a similar situation) are all used in the attribution process because they are based on past behaviours observed.

3.6.1.3. Weiner’s contribution

Weiner (2008) explained how causal attributions alter future expectations, emotions, and performance, unlike Heider and Kelley, who focused on static attribution. Weiner (2008) applied attribution theory to the context of achievement, where he contended that people's emotional reactions to their success or failure at a given task depend on the post-event attributions they make about the causes of their actions. What is distinct

about Weiner (2008) is that he added to the attribution theories of Heider and Kelley by stating that people reflect on their behaviour and the factors that led up to it after the event occurs. This entails that attributions are not static but dynamic (Weiner, 2008).

3.6.1.4. Application on occupational safety and health

According to Gyekye (2010) and DeJoy (1994), attribution theory is applicable to explain the causes of occupational accidents and injuries and the implementation of effective OSH management policies. “Causal explanations are vital to the formal analysis of workplace hazards and accidents, as they determine how organisations act to prevent accident recurrence” (Gyekye, 2010, p. 405). Hence, attributions are at the core of OSH regulation (DeJoy, 1994; Gyekye, 2010). For instance, attributions determine the procedures that should be followed to prevent occupational accidents and injuries; hence, interventions in OSH emanate from attributions other than actual causes (DeJoy, 1994).

Gyekye (2010) further highlighted that there are two parameters through which workers and supervisors/managers provide explanations for occupational accidents, injuries and diseases. Firstly, occupational accidents, injuries, and diseases are attributed to the characteristics of the individual workers e.g. age, work experience, job satisfaction and hierarchical position as shown in Table 5-3 (Gyekye, 2010). Secondly, occupational accidents, injuries, and diseases can also be attributed to characteristics of the work environment such as the lack of or poor implementation of OSH policies as shown in Table 5-3 (Gyekye, 2010).

Table 5-3: Attributions for occupational accidents, injuries & diseases by workers and managers

Characteristics of individuals workers	Characteristics of work environment
1. Age Older workers are more likely to blame outside forces than their younger counterparts.	Attributions are affected by organisational factors and the efficiency of safety procedures in the workplace.
2. Work experience Experienced workers attribute more to external causal factors while inexperienced workers/supervisors tend to do the opposite	
3. Job satisfaction Dissatisfied workers attribute more to external factors while satisfied workers tend to do the opposite	
4. Hierarchical position Supervisors attribute responsibility to subordinates and less to workplace factors while the subordinates tend to do the opposite	

Source: Adapted from Gyekye (2010).

What is important to draw from the analysis by Gyekye (2010) is that the characteristics of the individual workers and the characteristics of the work environment, are the two parameters for the explanations usually made by workers and supervisors/managers about occupational accidents, injuries, diseases. This entails that in explaining causality of occupational accidents, diseases and injuries, ordinary workers are likely to blame the work environment while the supervisors/managers tend to accuse the ordinary workers (Gyekye, 2010). Similarly, workers and supervisors/managers can also make attributions on OS and burnout to the characteristics of the individual workers and the characteristics of the work environment. Hence, in explaining causality of OS and burnout, ordinary workers may squarely blame the work environment while the supervisors/managers can accuse their subordinates.

Another key feature of the attribution theory is that attributions are vulnerable to biases and errors, hence they may not be accurate (Gyekye, 2010). The following are some of the attribution biases and errors identified by various scholars:

1. Fundamental attribution error (FAE)

According to Ross (1977), individuals sometimes attribute accidents to individual factors as opposed to situational factors at the workplace.

2. Optimism bias

Some people tend to perceive that accidents are unlikely to happen to them as compared to colleagues (Caponecchia, 2010).

3. The self-serving bias

According to Shepperd et al. (2008), this is the tendency to take credit for successes and to avoid responsibility for any failure.

4. The false consensus effect

According to Mullen et al. (1985), this is the tendency for one to believe that others think and act similarly to themselves.

5. Actor-observer bias

This is a tendency for an observer to attribute internal factors to an actor but to attribute the opposite when the particular observer assumes the role of an actor (Malle, 2006).

Given the attribution biases and errors, it is imperative to go beyond the attributions to explore the actual causes within and outside the workplace to get a more comprehensive understanding of OSH hazards.

Lastly, the application of attribution theory by Gyekye (2010) is that his analysis is confined to the explanations of OSH hazards for which employers have a primary responsibility to intervene. Hence, Gyekye (2010) did not go beyond the workplace environment in his analysis of attributions that are made by workers and managers. However, Oakman et al. (2018) identified a diverse range of factors beyond the direct responsibility of employers on which OSH hazards can also be attributed by workers and supervisors/managers. These factors include personal characteristics of the workers, supervisors/managers such as inadequate sleep at home, family problems, or pre-existing injuries or illnesses (Oakman et al., 2018). More importantly, shortcomings of OSH regulation such as its limited scope and coverage as is the case in Malawi, are also critical factors beyond the control of employers on which psychosocial hazards can be attributed. To get a more comprehensive understanding of OSH hazards, one needs to broaden the analysis of the attributions beyond the confines of the workplace. For this reason, I decided to incorporate the job demands-resources (JD-R) model into the theoretical framework. I also felt that the JD-R model would assist me in identifying the actual causes of OS and burnout (other than the attributions) among COs that may emanate either from within or outside of public hospitals.

3.6.2. Job demands-resources (JD-R) model

The job demands-resources (JD-R) model emerged from the literature of the 1980s and 1990s on job stressors and burnout (Demerouti et al., 2001). JD-R model describes work conditions that are associated with burnout and motivation (Demerouti et al., 2001; Hu et al., 2018). According to Zablah et al. (2012), Hall et al. (2010) and Hall et al. (2013), the JD-R model is a dual-process model through which job demands and job resources interact to influence burnout and engagement. 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, p. 501). 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) reduce job demands at the associated physiological and psychological costs; (c) stimulate personal growth and development" (Demerouti et al., 2001, p. 501). Job demands are thought to contribute to psychosomatic illnesses such as OS and burnout, whereas job resources are thought to reduce OS and burnout (Demerouti et al., 2001; Hall et al., 2013; Hu et al., 2018; Zablah et al., 2012).

Job resources are contributing factors for engagement on the job, while job demands reduce one's engagement on the job (Demerouti et al., 2001; Hall et al., 2013; Hu et al., 2018; Zablah et al., 2012). According to Demerouti et al. (2001), job resources can be organizational, e.g., job control, the potential for qualification, and involvement in decision-making. Job resources can also be social, like support from workmates (Demerouti et al., 2001). "When the external environment lacks resources, individuals cannot cope with the negative influences of environmental demands (like high workloads) and they cannot obtain goals. In such a situation, a reduction of motivation and withdrawal from the job can be important self-protection mechanisms" (Demerouti et al., 2001, p. 501). Hall et al. (2013) concluded that conditions for OS and burnout are created when a worker is confronted with excessive job demands and given low job resources.

The JD-R model can also be applied to explain organisational changes that are inevitable but pose negative impacts on the psychological well-being of workers (Day et al., 2017). For instance, changes at the workplace can be viewed as job demands

that require effort among the workers and are costly, while support and job control are job resources that help achieve organisational goals, reduce the costs of accomplishing tasks, and enable personal growth (Day et al., 2017; Demerouti et al., 2001). In support of this, is a study by Koukoulaki et al. (2017), which examined the effect on Greek workers' well-being of a huge restructuring programme within the country's local government. The researchers found that OS and burnout among the workers were associated with job insecurity and unfair treatment experienced during organisational changes amidst the restructuring process. In attempts to adapt to organisational changes, workers are confronted with new job demands that can become detrimental to their psychological health if the job resources are relatively lower (Leka & Lavicoli, 2017).

One reason why I found the JD-R model attractive was that it offered a broad scope and flexibility (Schaufeli & Taris, 2014). For instance, besides the JD-R model applying to different work settings, one is not confined to specific job demands and job resources that influence the worker's health at a particular workplace (Schaufeli & Taris, 2014). Hence, regarding health workers, one can exercise the flexibility to apply the model and broaden the scope of job demands and job resources to suit a hospital setting.

However, there are limitations that I identified with the JD-R model. The JD-R model is designed to be descriptive rather than explanatory (Schaufeli & Taris, 2014). For instance, the model can be useful to understand the specific job demands and job resources at public hospitals that influence specific psychological outcomes among COs. The JD-R model does not help me understand the underlying factors for job demands and job resources at public hospitals that influence certain psychological effects among COs. Another limitation of the JD-R model is that it does not go further to describe the impact of the psychological outcomes on the services being provided by a particular worker. For instance, in my study, the JD-R model cannot help explain or describe the consequences of psychological outcomes on the quality of services provided by COs emanating from low job resources and excessive job demands. Against this backdrop, I use the fundamental cause theory to explain the underlying factors for job demands at public hospitals that influence certain psychological effects among COs. I also extrapolate the fundamental cause theory to explain the

consequences of OS and burnout on the quality of life of individual COs and health outcomes in the broader population.

3.6.3. Fundamental cause theory

The fundamental cause theory originated with the analysis of basic causes by Stanley Lieberson in 1985, followed by a postulation of social economic status and mortality by James House and others in 1990 and 1994 (Phelan & Link, 2013; Phelan et al., 2004; Phelan et al., 2010). Much of the work in the development of this theory is based on the contributions of Link and Phelan (1995); Phelan et al. (2004); and Phelan et al. (2010). The theory states that certain social conditions are fundamental causes of diseases among individuals (Link & Phelan, 1995; Phelan & Link, 2013; Phelan et al., 2004). According to Link and Phelan (1995, p. 81), “social and economic status is a major contributor to health outcomes because it provides access to resources... that help individuals avoid diseases and their negative consequences through a variety of mechanisms”. Thus, even if one effectively modifies intervening mechanisms or eradicates some diseases, an association between a fundamental cause and disease will re-emerge. As such, root causes may persist if attempts to eliminate their effects are targeted at the mechanisms that link them to disease in specific situations (Link & Phelan, 1995). Link and Phelan (1995), Phelan et al. (2010), and Phelan and Link (2013) further argue that for a particular social condition to be referred to as a fundamental cause:

1. The social condition must affect multiple diseases in various ways;
2. The relationship between root causes of the diseases and health problems must be maintained over time;
3. The social condition must include access to resources that enable people to avoid risks and reduce the effects of the disease.

Access to resources (e.g., knowledge, money, power, prestige, and social support) tends to influence the individual’s ability to avoid disease and death (Phelan et al., 2004). Lack of resources, therefore, exacerbates health inequalities in society (Link & Phelan, 1995; Phelan & Link, 2013). Individuals with higher social and economic status, according to Phelan and Link (2013), are more likely to avoid preventable diseases because they have more resources to use to achieve good health and thus live longer. Conversely, the lower the socio-economic status, the more likely one is to

get affected by preventable diseases and possibly die due to limited resources (Phelan & Link, 2013).

I found the fundamental cause theory appealing to use in my study for two reasons. The first reason was that theory is applicable in understanding how job resources can be critical for health workers at a public hospital to avoid psychosocial hazards, minimise the consequences of OS-related diseases, and maintain good health. Secondly, the theory explains why the emphasis on interventions to address the consequences of OS among health workers can be ineffective if psychosocial hazards in the hospital setting remain unattended.

However, I identified one limitation with the fundamental cause theory. Specific health problems in society may be caused by a myriad of factors other than one social condition. Other events unrelated to a specific social condition can sometimes play a role in causing specific health problems among people. For example, recently, OS-related problems among health workers have been partly attributed to the COVID-19 pandemic, which has resulted in increased workloads and a reduction in staff due to infections or quarantine (International Labour Office, 2020; Tsamakis et al., 2020; Zhang et al., 2020). Inequalities in health among the general population can be attributed to a variety of factors other than one particular social condition. I partly mitigate this limitation by going beyond the confines of the fundamental cause theory to interrogate the possible sources of the identified psychosocial hazards that cause health problems related to OS and burnout among COs. I also attempt to explain how some sources of psychosocial hazards that constitute a social condition for health problems may have arisen.

3.7. Summary

The available literature confirms that OSH in Europe, North America, and Malawi has been evolving through different periods. In Europe and North America, the evolution of OSH ultimately culminated in the recognition of psychosocial hazards as integral to OSH policy and practice. However, the scope of OSH regulation in Malawi remains confined to chemical, biological, and physical hazards, thereby neglecting psychosocial hazards. In addition, the current coverage of OSH regulations in Malawi excludes healthcare. There are contributing factors to OS and burnout among health workers that are cited in the literature. These contributing factors include high workloads, changes at the workplace, standard precautions, occupational violence,

poor work-life balance, responses to the COVID-19 pandemic, and a lack of OSH policies at health facilities. According to the literature, OS and burnout among health workers harm the quality of their personal lives as well as their job performance. However, one intrinsic weakness of the literature related to OSH among mid-level health workers in Malawi is that the analysis is devoid of theoretical perspectives. I, therefore, propose attribution theory, the JD-R model, and fundamental cause theory as relevant theoretical perspectives to explain OSH in general and psychosocial hazards in particular among health workers in Malawi. In the next chapter, I present the methodology that I used in the study.

Chapter 4

Methodology

4.1. Introduction

In this chapter, I present the methodology that I used in the study. Firstly, I discuss the research philosophy, research approach, and research strategy underpinning the study. Thereafter, I demonstrate why a qualitative research design involving a combination of three methods of data collection—interviews, focus group discussions, and document analysis—was deemed appropriate. Then, I discuss sampling procedures, reliability and validity, and how the data collected was organised and analysed. Finally, I highlight the ethical considerations that guided the conduct of the study.

4.2. Research Philosophy

According to Creswell and Creswell (2018), a researcher should make explicit the broader philosophical ideas espoused in the study that inform the researcher's choice of a qualitative, quantitative, or mixed-method research design. Philosophical ideas are essentially beliefs and assumptions about the development of knowledge (Saunders et al., 2019). While Creswell and Creswell (2018) refer to philosophical ideas as *world views*, the authors also highlight that some scholars interchangeably use terms like *paradigms, ontologies*, and *epistemologies* to refer to philosophical ideas.

4.2.1. Interpretivism

My main task in the study was to understand the experiences of clinical officers (COs) with occupational stress (OS) and burnout at public hospitals in Malawi. This entailed that I would first gather the data about the COs' reality at public hospitals as far as OS and burnout were concerned. In essence, this data hovered around the COs' interpretation of their reality. Thereafter, I would conduct a thorough interpretation of the data on the COs' reality. Against this backdrop, I chose to place my study within the *interpretivism* framework as a research philosophy. *Interpretivism* is premised on the "fact that social reality has a meaning for human beings and therefore human action is meaningful—that is, it has a meaning for them and they act based on the

meanings that they attribute to their acts and the acts of others" (Bryman, 2012, p. 30). During the data analysis process, I interpreted the data on three fronts. The first front was the interpretation of the data on the COs' reality at public hospitals concerning their experience with OS and burnout. The second front was my interpretation of the relevant theories and literature that I had consulted before data collection. Then I embarked on the third front of interpretation when I subsequently subjected my interpretation of the COs' reality to the interpretation that I had conducted on the relevant theories and literature. This third stage of interpretation culminated in what finally became the findings of the study, as discussed in the subsequent chapters.

4.2.2. Philosophical assumptions

Guided by Saunders et al. (2019) and Bryman (2012), the following are the ontological, epistemological, and axiological assumptions within the *interpretivism* paradigm that underpinned my study:

4.2.2.1. Ontological assumptions

The ontological assumption of my study is *relativism*. This entails that reality varies from person to person (Scotland, 2012). The reality for the COs at public hospitals about their experiences of OS and burnout was complex, such that the reality could vary from one CO to the next. There could not be one true reality about COs' experiences with OS and burnout at public hospitals. The reality of OS and burnout at public hospitals were subjected to diverse interpretations among the COs themselves as the respondents and myself as the researcher. Finally, I assumed that the interpretation of reality by COs at public hospitals was constructed through interaction with other health workers within the hospital setting. Hence, such meanings about COs' reality concerning OS and burnout at public hospitals were constructed and reconstructed as social interaction at the hospitals continued.

4.2.2.2. Epistemological assumptions

The epistemological assumption of this study is *subjectivism.* This entails that reality and people's knowledge of that reality do not exist independently (Scotland, 2012). In social research, both the researcher and the respondents have subjectivity that influences their ability to recognise and interpret reality. In my study, I relied heavily on the narrations by COs in terms of experiences, perceptions, and subjective

interpretations. This was complimented by my subjective interpretations of the COs' reality, theories, and existing literature.

4.2.2.3. Axiological assumptions

Ordinarily, researchers are expected to be value-free and exercise absolute objectivity in the course of a study (Bryman, 2012). However, in social research, it is hardly possible for a researcher to cushion himself or herself from the influence of his or her values and beliefs (Bryman, 2012; Leavy, 2017). In particular, for a study underpinned by interpretivism as a paradigm, values play a critical role in the conceptualization of the study and interpretation of the results (Pansiri, 2005). Hence, the values of COs as the respondents and my values and interests as a researcher constituted an integral component of the study. For instance, conceptualising the research problem, choosing a research strategy, a research approach, data collection methods, a theoretical framework, and selecting research subjects and research sites were all influenced by my worldview, values, and interests. Similarly, the interpretation of reality concerning experiences with OS and burnout among COs was influenced by their worldviews, values, and interests. In addition, owing to my professional background as a trade union activist, I inevitably developed a close affinity with COs during data collection as they narrated their plight on OS and burnout at public hospitals. Hence, it became challenging to disentangle my values and interests as a trade union activist from the stories narrated by COs during data collection.

However, guided by Saunders et al. (2019), Creswell and Creswell (2018), and Leavy (2017), the problem of personal values was mitigated by self-reflexivity in three ways. Firstly, from the onset, I was conscious that my prejudices and biases could influence the decisions I would make throughout the study. Hence, I regularly took note of potential biases and prejudices emanating from my values as a trade union activist. During data collection and analysis, I would regularly check the notes to examine how such prejudices and biases could potentially influence my judgement in the research process. In this way, I was able to caution myself against my personal biases and prejudices and minimise the influence of such biases and prejudices on the research process. Secondly, I applied self-flexibility by having a focal person on voluntary basis at each of the five study sites. The focal points were elected trade union leaders who represented COs at the hospital level. I received the names and contact details of the focal persons from the secretariat of the Physician Assistants Union of Malawi

(PAUM). Two focal persons worked side by side in two of the five public hospitals. The President of PAUM, whom I interviewed as a key informant, served as an auxiliary focal person. This key informant was also working as a CO at a central hospital (not among the five study sites). I was informed that part of the duties of the trade union leadership at the hospital level was to facilitate research activities in which PAUM membership would have an interest. The focal persons assisted me in scheduling the interviews and focus group discussions among COs and facilitating replacements in situations where some COs declined to participate in the study. When I encountered biases and prejudices, especially during data collection and analysis, I engaged the focal persons bilaterally. I engaged them to validate or nullify my interpretation of data that I felt was possibly influenced by my biases and prejudices. To a greater extent, the focal persons served as internal referees on my biases and prejudices regarding the interpretation of the data.

Lastly, I applied self-flexibility by engaging two individuals outside the hospital setting as external referees on a voluntary basis. One was a retired civil servant currently working as a researcher on public health. The other one was a retired CO who was among the first cohort of locally trained COs in Malawi. When I encountered biases and prejudices, particularly during data analysis, I bilaterally engaged the two as external referees. The intention was for the two to validate or nullify my interpretation of data that I felt was possibly influenced by my biases and prejudices. The two external referees also assisted me in validating or nullifying any piece of information that I came across during data collection about which I was not certain of the veracity.

4.3. Research approach

Studies under interpretivism as a research philosophy are governed by an inductive research approach (Saunders et al., 2019), which involves drawing generalizable inferences or building theories out of observations (Babbie, 2010). In this study, I hinged on theory generation based on subjective data drawn from multiple viewpoints of the participants while also relying on my interpretation of the participants' viewpoints, theories, and literature. To some extent, the participants were actively involved in the research process. For example, some respondents (particularly focal persons) would provide suggestions on specific questions and topics that I should investigate further. Other respondents recommended to me important documents that

supported the points raised in their oral submissions during interviews and focus group discussions. In some instances, respondents (including focal persons and external referees) gathered and forwarded to me documents to which they had referred in their oral submissions. During data collection, I also received important hints from the focal persons and external referees that helped me make sense of some data. From the analysed data, I was finally able to identify patterns and generate themes on which I developed explanations with the aid of theoretical perspectives.

4.4. Research design

The research problem, questions, and objectives were most suited to the characteristics of qualitative research. Instead of numbers, words, actions, and meanings were the main elements of the data that I sought to collect. Given the characteristics of qualitative research, I decided that the research questions could be optimally interrogated through the use of a qualitative research design.

4.4.1. Qualitative explanatory approach

"Qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data" (Creswell & Creswell, 2018, p. 41). In understanding a phenomenon, qualitative research hinges on the quality of the entities and how social experience is constructed instead of measurements and statistical analysis of causal relationships between variables as it happens with a quantitative approach (Creswell & Creswell, 2018; Denzin & Lincoln, 2008). Furthermore, the qualitative approach centres on meanings attached by individuals (Creswell & Creswell, 2018). "When one wants to explain causes and effects, correlations, or why things are the way they are, explanatory research is appropriate" (Leavy, 2017, p. 5). For this reason, I decided that a qualitative explanatory research design would be suitable for my study.

4.4.2. Research strategy

A case study becomes relevant to understand the complexity of a particular circumstance (Stake, 1995). "A case study focuses on a single instance of some social

phenomena such as a village, a family, or a juvenile gang. The limitation of attention to a particular instance of something is the essential characteristic of the case study" (Babbie, 2010, p. 309). A case study involves the gathering of data and generating detailed knowledge about a particular case or a small number of related cases such as organisations or departments within the organisation (s), events, activities, and sometimes individuals (Babbie, 2010; Bryman, 2012). Given my ontological and epistemological assumptions on the reality that is relative, subjective and complex (Scotland, 2012), I felt a case study strategy was relevant to the qualitative explanatory research design that had I chosen.

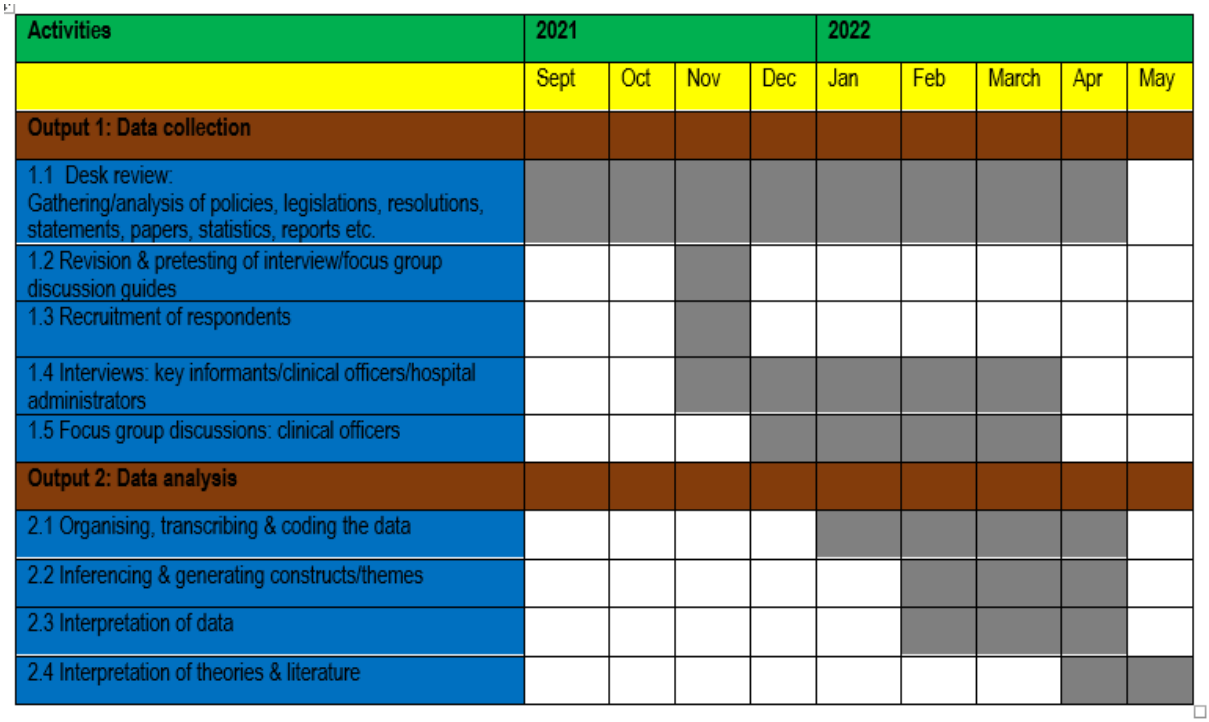
4.4.3. Time horizon

I intended to conduct a study on COs' experiences with OS and burnout at public hospitals as of the 2020–2022 period. I had no further reasons to do another observation or multiple observations on CO's experiences with OS and burnout at different periods. Hence, I chose to design the research as a cross-sectional study whose data collection and analysis would be pinned to a single period (Babbie, 2010). Within the same period, I had planned to produce a doctoral thesis and finally submit it to the university to mark the end of the entire research process.

4.5. Methods of data collection

Interviews, focus group discussions, and documentary analysis are three qualitative methods of data collection that I used. This triangulation of methods enabled me to collect the data using different sources so that it was possible to view the reality of COs' experiences with OS and burnout at public hospitals from different dimensions. The triangulation of data collection methods enhances the credibility of the study findings in terms of validity and reliability (Bryman, 2012; Creswell & Creswell, 2018). During the COVID-19 pandemic, I began working on ethics application. Due to COVID-19 restrictions, the new ethics guidelines for the university did not allow students to physically conduct data collection at hospital premises during the pandemic. As such, the interviews and focus group discussions were virtually conducted on WhatsApp, Skype, and direct phone calls during lunch hour, after working hours, or at any other time depending on the participant's flexibility and availability.

Figure 9-4: Gantt chart for data collection and analysis



Activities	2021				2022				
	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May
Output 1: Data collection									
1.1 Desk review: Gathering/analysis of policies, legislations, resolutions, statements, papers, statistics, reports etc.									
1.2 Revision & pretesting of interview/focus group discussion guides									
1.3 Recruitment of respondents									
1.4 Interviews: key informants/clinical officers/hospital administrators									
1.5 Focus group discussions: clinical officers									
Output 2: Data analysis									
2.1 Organising, transcribing & coding the data									
2.2 Inferencing & generating constructs/themes									
2.3 Interpretation of data									
2.4 Interpretation of theories & literature									

As shown in Figure 9-4 above, I conducted data collection from September 2021 to April 2022. However, in August 2021, after I had completed the data analysis and developed draft chapters for the thesis, PAUM recommended that I do additional interviews with retired COs. I welcomed PAUM's suggestion as a way to triangulate some data collected from the practicing COs, which I had already analysed by then. As such, I conducted two interviews with retired COs in August 2022.

4.5.1. Virtual interviews

"In structured and semi-structured interviews, the researcher wants rich, detailed answers. However, structured interviews are typically inflexible because of the need to standardise how each interviewee is dealt with" (Bryman, 2012, p. 470). Furthermore, a structured interview is mostly associated with the collection of data for a quantitative study such as a survey (Denscombe, 2017). However, a semi-structured interview contains specific items on the agenda and offers much flexibility to pose subsequent questions that are composed during the interview (Bryman, 2012; Denscombe, 2017). In contrast, for unstructured interviews, a researcher's role is to introduce a topic, pose a key question concerning the topic, and then the respondent is given the room to take over without follow-up questions by the researcher (Bryman, 2012; Denscombe, 2017). The phrasing and sequencing of key questions during an unstructured interview vary from one session to another (Bryman, 2012). As a result,

during an unstructured interview, the researcher risks collecting a large amount of data that is irrelevant to the study's problem (Denscombe, 2017). In my study, I sought detailed responses from the participants with as much flexibility as possible. I was also interested in gathering responses that were focused on specific items that I deemed relevant to the problem of the study. A semi-structured interview was therefore deemed suitable, as I would be able to give the participants much leeway on how to compose responses. With a semi-structured interview, I would also exercise control of the session using an interview guide and by posing subsequent questions to ensure that responses were confined to the intended topic (Bryman, 2012; Denscombe, 2017).

Five COs from different departments and an immediate supervisor of COs from each of the five district hospitals were selected for the semi-structured interviews. The 5 immediate supervisors of COs that were recruited as respondents for the semi-structured interviews were medical doctors. In addition, I also conducted 6 semi-structured interviews with 6 key informants outside the five public hospitals as follows:

- Ministry of Health- Policy/Planning specialist (1)
- An official at the Medical Council of Malawi (1)
- Trade union official from PAUM (1)
- Occupational health physician (1).
- Retired COs (2)

Table 6-4: Sample size

Interviewees	**Number of Interviews at each hospital**	**Total number of interviews**
Clinical officers from different departments/units	5	25
Immediate supervisors of COs[4]	1	5
Key informants		6
TOTAL	**6**	**36**

As shown in Table 6-4 above, in total, 36 semi-structured interviews were virtually conducted with COs at the five public hospitals and key informants outside the five public hospitals. The interviews with 2 of the 6 key informants were conducted through Skype calls on a computer, while interviews with the rest of the participants were

[4] These immediate supervisors of COs were medical doctors by profession.

conducted through direct calls on mobile phone gadgets. The two research assistants in collaboration with me conducted the semi-structured interviews.

4.5.2. Virtual focus group discussions

To complement the data from the semi-structured interviews, I conducted focus group discussions. “The focus group practitioner is invariably interested in how individuals discuss a certain issue as members of a group, rather than simply as individuals” (Bryman, 2012, p. 501). I virtually conducted five focus group discussions with COs representing different departments or units at each of the five public hospitals. Each focus group discussion was comprised of 4 or 5 COs who previously participated in the semi-structured interviews. The sessions were held on a WhatsApp group call or Skype call during lunch hour (1-2 PM), after working hours, or at any other time depending on the participants’ flexibility and availability. The aim was to draw insights on how, from practical experiences and knowledge, COs representing different departments and units could respond to each other’s ideas and generate personal interpretations in reaction to the problem of the study. During the focus group discussions, participants had leeway on how to compose responses. Guided by Denscombe (2017) and Bryman (2012), I also exercised control of the sessions using a guide and subsequent questions to ensure that respondents did not veer away from the intended topics. The focus group discussions were conducted via WhatsApp group calls using mobile phone gadgets. I conducted all the five focus group discussions with the COs.

4.5.3. Document analysis

I further used document analysis as a third method of data collection, partly to address the shortcomings of semi-structured interviews and focus group discussions. I conducted the document analysis. One shortcoming with semi-structured interviews and focus group discussions is that, because they are open-ended, respondents have more control over the data being collected; hence, sensitivities and some details that would be critical to the study tend to be suppressed (Silverman, 2010). It is also possible for respondents to change their character in response to the presence of the researcher (Schonfeld & Mazzola, 2013). For instance, this study involved investigating the sources and consequences of OS that some COs as respondents may have encountered. The topic appeared sensitive to some respondents, as the results of the study subsequently confirmed that OS and burnout were associated with

stigma among hospital staff. This inhibited some respondents from comfortably divulging information to me about their personal experiences with OS and burnout.

The shortcomings of semi-structured interviews and focus group discussions were partly mitigated by document analysis. The main aim of conducting document analysis was to either complement or validate the data collected from semi-structured interviews and focus group discussions. These documents included statements, reports, and memos by PAUM; policy documents, reports, and statements issued by the Ministry of Health; and reports, memos, and charts by the hospital administrators. However, “documents cannot be regarded as providing objective accounts of a state of affairs” (Bryman, 2012, p. 551). Other reference materials were therefore used to validate some information and data contained in the official documents, such as academic and non-academic books, papers, reports (published or unpublished) on Malawi’s economy, OSH, Malawi’s health services, and financing for health; relevant newspaper articles; pieces of legislation; international policy instruments; and reports on Malawi by international bodies, e.g., the World Health Organisation (WHO), the International Monetary Fund (IMF), the International Labour Organisation (ILO), and the World Bank.

4.5.4. Advantages of positionality

My positionality as a trade union activist posed some advantages particularly during data collection. Firstly, PAUM, as a trade union representing COs, welcomed me as a fellow “comrade” within the trade union circles. If I were not a researcher with a trade union background, I would have been treated as an "outsider” possibly with suspicions on my actual intensions of doing a study on COs. As a fellow "comrade," I was given access to the PAUM documents relevant to my study (some of which were confidential) as well as PAUM members from whom I selected the respondents that I required. In addition, PAUM communicated to the hospital administrators at each study site to introduce me as trade union researcher conducting a study involving the PAUM membership. Perhaps, this explains why the hospital administrators duly cooperated to furnish me with the relevant information I requested from the hospital administrators. Nevertheless, there was one incident I failed to get hold of two representatives of the management at two hospitals as respondents. PAUM eventually intervened to engage with the hospital administrations on my behalf so that I could be assisted.

Owing to my professional background as a trade union activist, PAUM facilitated that I should receive an invitation and then join the PAUM delegation to the 3rd international conference of the *Global Association of Clinical Officers and Physician Associates* which was held from 18 to 21 June 2023 in Malaysia. I was scheduled to deliver presentation on a paper drawn from this thesis. I eventually failed to travel to the conference due to budget constraints. If I had attended this international conference under the auspices of PAUM, I would have established vital networks with other scholars interested in studying substitutes for medical doctors like COs. At this conference, I would also have received valuable feedback on the paper presentation I was expected to deliver. I would then later consider such feedback to transform the paper into a manuscript for journal publication.

Furthermore, having had adequate work experience in a trade union political environment, I was able to sense unforeseen hurdle related to trade union dynamics and then navigate accordingly with caution. For instance, during data collection, I realised that there was another trade union called UCAHP that claimed to represent COs. I decided to approach an official from the top leadership of UCAHP to explore if I could get any information relevant to the problem of my study. During my encounter with the official from UCAHP, some insinuations were raised on which I sought to probe more. The official from UCAHP eventually consented that I could proceed to cross-check with PAUM what he claimed were facts. When I contacted PAUM, I realised that there had been a feud between the two trade unions over legitimacy and representation. It required trade union skills that I possessed to effectively defuse the tension that had ensued between the two officials from UCAHP and PAUM respectively over the issues on which I was probing.

4.6. Study sites

I conducted the study at the following five district hospitals and one central hospital, all of which are state-owned: Mulanje District Hospital, Chikwawa District Hospital, Balaka District Hospital, Nkhatabay District Hospital, and Queen Elizabeth Central Hospital in Blantyre. These five public hospitals were chosen as study sites based primarily on their geographical location as well as budgetary constraints in terms of the cost of accessing a specific public hospital.

Before the study, I was compelled to physically visit the public hospitals to introduce myself and deliver a presentation to the relevant authorities about the study. This was a condition for my application for study permission to be duly considered. To this effect, I physically visited Queen Elizabeth Central Hospital in Blantyre, Chikwawa District Hospital, and Mulanje District Hospital. According to my budget, I was able to visit these three hospitals. Other hospitals, on the other hand, I could not manage because the distance was relatively longer and required more expenses for accommodation and transportation. For Balaka District Hospital, a virtual meeting was arranged because some who were supposed to sit on the panel during my presentation were away from the hospital for other commitments. For Nkhatabay District Hospital, I was not required to physically show up at the hospital to make a presentation. Instead, I was requested to submit a summary of the study protocol.

Another consideration for selecting a particular hospital as a study site, was the promptness with which the hospital management responded to my inquiries on the process for issuing study permission at that hospital. Other hospital administrators did not even respond when I formally contacted them to express my interest in including their respective hospitals as study sites. Other hospitals delayed giving feedback after I submitted my application for study permission. For instance, Thyolo District Hospital and Chiradzulo District Hospital did not require me to pay a fee before the issuance of a study permit. However, the two hospitals took more time than I anticipated to provide the outcome of my application for study permission. I, therefore, became concerned that my waiting for the outcome would eventually become futile. By the time the two hospitals finally granted me study permission, I had already reached my target of five public hospitals as study sites and had duly paid the research fees to the five public hospitals.

Another consideration in selecting a particular hospital as a study site was related to the requirements at that hospital for processing study permissions. Some hospitals imposed stringent conditions with which I was not able to comply. One such condition was a uniform fee that every researcher, including students, was supposed to pay for their application for study permission to be considered. I found the fees charged by some hospitals too exorbitant for students, such that I was discouraged from proceeding to apply for study permission at such hospitals. For instance, at each of

the five public hospitals that I finally recruited as study sites, I was charged approximately USD 25 as a research fee. In contrast, Mchinji District Hospital, which I had initially intended to include as a study site to represent the central region of the country, required me to pay USD 100 (4 times more) as a research fee. Hence, I opted to submit applications for study permission to those public hospitals that charged reasonable amounts of research fees that were within my constrained budget. This explains why, among the three regions of Malawi, the central region was not represented as far as the study sites were concerned.

Finally, there was another challenge that I faced regarding access to a central hospital. As an additional condition to get a study permission, the head of research at the central hospital informed me that I was required to recruit a member of staff (preferably a medical doctor) to serve as a local supervisor for my study. It was stressed that the budget for my study should therefore be revised to cater for the honorarium for this additional supervisor. I argued with him that the university assigned a supervisor to students. As such, I could not incorporate additional supervisors on my own as demanded without the approval of the university. It was also stressed that the approval for such a request to the university would possibly take ages to be processed thereby delaying my study. Furthermore, I raised a concern that my study was located in the discipline of sociology for which a medical doctor would be ill positioned to provide the necessary supervision. Having been dissatisfied with the responses from the head of research, I eventually booked an appointment with the director as the overall in charge of the central hospital. Following my conversation with the director over the concerns I had raised, the condition for me to recruit a local supervisor for my study was waivered.

4.7. Study sample

In total, Malawi's public sector employs 1,045 COs out of 2,935 established positions (Malawi Government, 2018b). The results of the study indicated that during data collection, the total number of COs working at the five selected public hospitals was estimated at 152. Out of 152, I recruited 25 COs to participate in the study.

4.7.1. Sampling procedures

I used two different methods of sampling for the study sites and recruitment of respondents. The selection method for the hospitals to become study sites was based on convenience sampling. According to Bryman (2012), a convenience sample is selected based on its availability to the researcher by virtue of its accessibility. Convenience sampling became appropriate because of the challenges I faced to secure study permissions from public hospitals, as explained above. I considered it convenient to recruit the hospitals that did not require me to physically visit their premises, promptly replied to my request for study permission, and charged reasonable research fees within my budget. I, therefore, recruited the first four district hospitals and the first central hospital among the 8 hospitals that I had considered convenient to become study sites.

The selection method used to recruit the respondents to participate in the study was purposive sampling. According to Groenewald (1986) and Babbie (2010), purposive sampling is the result of a process that is intentional or not random. Purposive sampling was appropriate for this study because the intention was to interview COs, their immediate supervisors, and other key informants from outside the five public hospitals. Hence, the selection criteria for the respondents were based on my judgement about which particular respondents (and how many) needed to be recruited in the study to represent COs, immediate supervisors of COs, and key informants. I recruited COs and immediate supervisors of COs as respondents through the respective hospital administration. I also recruited some COs through the secretariat of PAUM. Soon after securing ethics clearances for the study, I contacted the respective hospital administration to request that COs and their immediate supervisors be formally alerted about my study. I further requested that the same formal communication highlight that some COs and their immediate supervisors would be recruited to participate in the study. A similar request was also sent to the PAUM secretariat, which communicated the same to PAUM leadership and membership at the five public hospitals. Thereafter, I made another request to the hospital administration for information on the total number of departments where COs worked, a list of COs in each department (possibly indicating gender and length of service), and a list of the immediate supervisors of the COs in each department. Thereafter, with a consideration of gender and departmental representation, I purposefully

selected the names of five COs along with one immediate supervisor to participate in the study as respondents.

Finally, I requested the hospital administration to furnish me with the contact details (email addresses and phone numbers) for each of the recruited COs and their immediate supervisors so that I could initially communicate with them. However, three hospitals declined to share lists, names, and contact details of the COs and their immediate supervisors. They explained that the role of the hospital administration in my study had ended the moment I was granted study approval. Thereafter, as a researcher, I was at liberty to use my strategies to get hold of the subjects at the hospital without necessarily involving the hospital administrators. In that case, I relied on the PAUM secretariat to connect me with the branch leadership of PAUM at a particular hospital. The PAUM leadership at the hospital level then shared with me details on the total number of departments where COs worked, a list of COs in each department, a list of immediate supervisors of the COs in each department, and contacts. Thereafter, I purposively selected the names of five COs along with one immediate supervisor to participate in the study on the considerations of gender and departmental representation. In my initial communication with each one of the recruited COs and their immediate supervisor separately, either through a phone call or email, I checked their availability to participate in the interview/focus group discussion on a proposed day and time. Thereafter, I electronically sent each of them the participant information sheet.

Once a recruited CO had provisionally indicated a willingness to participate in the study after going through the participant information sheet, I then proceeded to schedule the session. Soon after that, I confirmed the day and time and, where necessary, shared with the respondent (s) the uniform resource locator (URL) invitation link for a Skype session in advance. The data bundles for the case of the WhatsApp or Skype connection were finally sent to the respondent (s) at least 30 minutes before the scheduled time for the interview or focus group discussion, or soon after the session ended as a reimbursement. Furthermore, I already had the name and contact details of the occupational health physician as a key informant. I had previously consulted him for insights on OSH when I was conceptualising the research problem. The occupational health physician was the one who shared the contact

details of a policy expert at the Ministry of Health, whom I interviewed as another key informant. PAUM's secretariat nominated the President that I could interview as a key informant. The President was mandated to speak to me on the behalf of both PAUM and COs. PAUM secretariat also recommended that I also consider interviewing an official from the Medical Council of Malawi as another key informant to cross-check some facts on the training and licencing of COs in Malawi.

PAUM secretariat further suggested that I also consider interviewing two retired COs as key informants to give me historical information about COs since 1980 and their insights on the challenges faced by COs. The two retired COs were among the first cohort of locally trained COs who were licenced to practice as COs in 1980. PAUM secretariat furnished me with the contact details of a relevant official at the Medical Council of Malawi and the two retired COs. In my initial communication with each of the 6 key informants separately, either through a phone call or email, I checked their availability to participate in the interview on a day and time convenient to them. Then, I electronically sent each one of them a participant information sheet. Once the recruited key informant had provisionally indicated a willingness to participate in the study after going through the participant information sheet, I proceeded to schedule a session. Soon after that, I confirmed the day and time and shared with the key informant the URL invitation link for a Skype session in advance. The data bundles for connection were sent to the key informant 30 minutes before the scheduled time for the interview or soon after the session ended as a reimbursement.

4.7.2. Sample limitations

The sampling procedures were faced with practical limitations. Firstly, the study was conducted amidst the COVID-19 pandemic, which may have compromised the research process in general and in particular the sampling. As a COVID-19 preventive measure, I conducted the interviews and focus group discussions virtually. Hence, I encountered four challenges as a result of the use of virtual spaces, such that the quality of the data may have been negatively affected. The first challenge was that the virtual platforms limited the duration of each session such that I did not have ample room to probe more into the critical issues emerging in the sessions. Almost all the respondents used their mobile phones to connect to the interview or focus group discussion. Some respondents were uncomfortable talking on the phone for more than

30 minutes at a time. As such, I was compelled to constrain the sessions and avoid prolonging them even when I identified some important issues into which I needed to probe more.

The second challenge was that the respondents connected to the sessions either from home or the workplace, where interruptions from family members or workmates were inevitable. For instance, an interview could be put on hold for a while to allow the respondent to attend to an urgent matter at home or at the workplace that arose during the session. Besides negatively affecting the momentum of the session, such interruptions ate away the allocated time for a particular session that could not be recovered in some instances. The third challenge with the virtual platform was that I further experienced problems with internet connectivity in terms of network stability. In some instances, respondents were not able to remain connected for a considerable period without interruptions due to poor internet connectivity. As such, during transcriptions of some segments of the interviews and focus group discussions, the voices on either end could not be audible due to poor internet connectivity. One focus group discussion was curtailed and rescheduled due to the poor connectivity that two participants had encountered from the onset. When we reconvened for a fresh focus group discussion on another day, the internet connectivity improved. However, only 3 out of 5 respondents showed up for the rescheduled session. The focus group discussion had to be rescheduled two more times to get all five participants on board.

The last challenge I encountered with using the virtual platform was that, for the sake of better connectivity, I was compelled to do all the sessions with the video on mute. As such, I was not able to observe the respondents' facial expressions and other bodily gestures that would be useful in the interpretation of the data. However, I utilised the focal persons for the COs I had established at each of the study sites to mitigate the challenges I encountered with the use of virtual platforms. The focal persons were among the five COs I interviewed at each public hospital. The focal persons also took part in the focus group discussions that I held at each public hospital. In addition, the President of PAUM whom I interviewed as a key informant served as an auxiliary focal person by virtue of being a CO working at a central hospital (not a study site). For the issues I could not probe further during semi-structured interviews with the COs and focus group discussions due to the limitations of using virtual platforms, I bilaterally

consulted the focal persons. For example, I conducted several follow-up sessions with each focal person to cross-check some facts and probe into some pertinent issues that had emerged from focus group discussions and interviews with the COs. The focal persons had the advantage of being elected trade union leaders at the hospital level. They were able to offer comprehensive perspectives on the issues I had probed based on their respective work experiences as COs and by virtue of being trade union leaders at the hospital level.

Secondly, a focus group discussion is supposed to be composed of at least five respondents (Bryman, 2012; Leavy, 2017). During data collection, five public hospitals were experiencing a shortage of staff, as I demonstrate in chapters 5 and 7. The respondents were working on shifts, such that it was extremely difficult to schedule a virtual focus group discussion with 5 or more respondents. Some of the respondents would withdraw from an already scheduled focus group discussion at the eleventh hour due to a duty call. In some instances, after postponing two focus group discussions several times to avoid further inconveniencing respondents who continued to show up, I nevertheless conducted two focus group discussions with less than five participants. This may have negatively affected the quality and quantity of the data generated from such focus group discussions with fewer than five participants.

Finally, the five public hospitals were research sites for a variety of local and international NGOs conducting health research, as well as individual researchers with adequete financial support such as students on scholarships. At the beginning of data collection, I learned about an expectation that researchers should distribute cash to the respondents disguised as incentives for participating in the study. Upon recruiting a respondent into the study, the first question to me was to explain how the respondent (or respondents) would financially benefit from participating in the study. I had not budgeted for this expense because the data collection exercise was self-funded. I also found it unethical for me to compensate the respondents with cash for participating in my study. I was therefore not able to give out cash incentives other than the refunds for the internet data that respondents spent during the virtual sessions. I had made this clear to the respondents from the onset. Some respondents declined to participate in the study because I was not offering cash incentives. I am not certain if the respondents who nevertheless accepted to participate in the study without cash

incentives provided credible data with honesty. To some extent, the culture of cash incentives prevalent at the five public hospitals may have negatively affected the quality of the data that I collected during interviews and focus group discussions.

4.8. Methods of data analysis

Data analysis involved transcription, coding, inferencing of codes, generating themes, and interpretation of the data, theories, and literature. The virtual interviews and focus group discussions were recorded and then transcribed. Four research assistants worked as a team to transcribe all the recordings. Two of these four research assistants were involved in conducting the semi-structured interviews. The recordings and transcriptions were kept on a password-protected computer, to which only me had access. Furthermore, any information that could identify the participants was removed from the recordings and transcriptions. As shown in Figure 9-4 (above), I solely conducted data analysis from January to May 2022. However, I briefly reverted to data analysis in August 2022 to process the two interviews I had conducted with two retired COs in the same month.

4.8.1. Thematic analysis

I adopted a method of data analysis called thematic analysis which I solely conducted. “One of the most notable developments in qualitative research in recent years has been the arrival of computer software that facilitates the analysis of qualitative data” (Bryman, 2012, p. 591). I used computer software called Atlas. ti version 9 to conduct thematic analysis. Firstly, the computer was loaded with transcriptions of the interviews, focus group discussions, and documentary analysis extracts. Then, I used Atlas. ti version 9 to code the data with the aid of the notes that I took during data collection. Thereafter, I identified key themes from the codes. Guided by Maguire and Delahunt (2017) and Bryman (2012), I conducted a thematic analysis as follows:

1. Preparation and organising the data

classifying the transcripts according to study sites, putting together the notes, documents, and other relevant materials gathered during data collection.

2. Review and explore the data

going through the transcripts several times to get familiar with the data and, in the process, taking notes about initial thoughts, ideas, and questions.

3. Create initial codes

Highlight or isolate significant terms and phrases and make notes in the margins.

4. Review codes

Identify recurring themes from the reviewed codes and merge the refined codes where necessary.

After completing the four stages above, I started to write the results chapters of the thesis based on my interpretation of data, literature, and theories with reference to the research questions.

4.8.2. Reliability and validity

If the credibility of data analysis and study findings is assessed using traditional criteria for research reliability and validity, they may receive a low score. Reliability is the extent to which a study can be replicated, whereas validity is the extent to which a study's conclusions may be extended outside of a specific study context (Babbie, 2010; Creswell & Creswell, 2018). Like any other qualitative study, reliability and validity were challenges for my study. For instance, unlike a quantitative study, it is hardly possible to replicate a study that used a qualitative research design (Creswell & Creswell, 2018; Scotland, 2012). Furthermore, unlike a quantitative study, the findings of qualitative research that used a case study as a research strategy with a small sample cannot be generalised across a social setting (Bryman, 2012; Scotland, 2012). However, according to Bryman (2012) and Creswell and Creswell (2018), there is a drift among researchers towards alternative criteria for reliability and validity on which the credibility of a qualitative study should be evaluated. For instance, Guba (1985) and Guba and Lincoln (1994) proposed that the quality of qualitative research should be evaluated based on *trustworthiness* and *authenticity* as opposed to reliability and validity (Bryman, 2012; Creswell & Creswell, 2018).

Figure 10-4: Trustworthiness & authenticity



Adapted from Bryman (2012)

Figure 10-4 (above) illustrates how *trustworthiness* and *authenticity* can be used as alternative benchmarks to evaluate the credibility of qualitative research. I can affirm that throughout the research process, I strived to comply with *trustworthiness* and *authenticity* criteria as illustrated in Figure 10-4 (above). The sources and methods of data collection were triangulated as I illustrate in this section. Furthermore, data analysis was conducted precisely and consistently by recording, transcribing, systematically organising, and disclosing the method of data analysis in sufficient

detail. On this premise, I am confident that the methodology I utilised in this study is both trustworthy and authentic.

4.9. Ethical considerations

Informed consent and voluntary participation were mandatory for every respondent in this study. Consent was also sought for the proceedings of the interviews and focus group discussions to be recorded for purposes of transcription. To ensure the confidentiality of the data collected, all sessions of interviews or focus group discussions recorded through a normal phone call or virtual platform were stored on my personal computer with password protection. In the case of a normal call conversation being recorded using a mobile phone gadget, I ensured that the recording was done while the gadget was switched off from internet connectivity and any virtual platforms. This was done to avoid a possible leakage of the conversation into virtual spaces. As soon as each session ended, the audio recording was transferred and saved onto my computer with password protection. The original copy was then immediately deleted from the mobile phone gadget, which remained switched off from internet connectivity and any virtual platforms. For sessions conducted through WhatsApp calls, an external device (other than a gadget being used for a WhatsApp call) without connection to the internet was used to record the conversation(s). The recordings were also transferred and stored on my personal computer with password protection as soon as each session ended. The original recording was deleted from the external device as soon as I saved it on my computer. Apart from the four research assistants who assisted me with data collection and transcription, no one else had access to the recordings.

For each interview and focus group discussion, the respondents were given the details of the study through the participant information sheet. The participant information sheet was sent to each respondent electronically at least 24 hours before the commencement of the interview or focus group discussion. The participant information sheet indicated that the respondents were at liberty to withdraw from the interview or focus group discussions without giving any explanation. Before the commencement of the interview or focus group discussions, the respondent was requested to electronically sign the consent form and electronically submit it to me at least 30 minutes before the scheduled time. Those who were not able to electronically sign the

consent form were given the option to provide consent orally. The oral consent was captured in the audio recording before the commencement of the interview/focus group discussion. Some respondents were not able to electronically access both the participant information sheet and consent form or did not have ample time to go through these two documents in advance. For such respondents, I ensured that both documents were read out to them before commencing the interview or focus group discussion. Then, their oral consent was captured on the audio recording. Thereafter, the interview/focus group discussion session would begin. The respondents were not asked to foot any financial costs for participating in the virtual interviews and focus group discussions.

There was one potential risk to the respondents, the research assistants, and myself that I had identified before commencing data collection. I anticipated that some COs might have been experiencing OS and burnout at the time I was conducting data collection. Their participation in the interviews and focus group discussions would exacerbate OS or stimulate other mental health problems. I was also aware that the research assistants and myself could be emotionally affected by the touching testimonies from some COs on how OS and burnout negatively affected their personal lives. As a precaution, I made arrangements with Saint John of God Hospitaller Services, a mental health facility, to provide psychosocial support to the respondents, research assistants, and myself as needed. The respondents and research assistants were informed that they would not be burdened with paying the medical bills and related costs for the treatment of mental health problems associated with their participation in the study. The contact details for the St. John of God Hospitaller Services were furnished to the respondents and research assistants. Until the completion of this thesis, I received no alerts about a respondent or research assistant complaining of any mental problem associated with his or her participation in my study.

Finally, before data collection, the protocol for my study had been screened and approved by two ethics committees in South Africa and Malawi. These are the Human Research Ethics Committee (Medical) of the University of the Witwatersrand in South Africa and the Committee on Research Ethics in the Social Sciences and Humanities at the National Commission for Science and Technology in Malawi.

4.10. Summary

This doctoral research is a cross-sectional study with an inclination toward *interpretivism* as a research philosophy. The study adopted an inductive research approach, a qualitative research design, and a case study research strategy. Three methods of qualitative data collection were used, namely: semi-structured interviews, focus group discussions, and document analysis. Due to COVID-19 guidelines on academic research imposed by the university on students doing research in hospital settings, semi-structured interviews and focus group discussions were conducted virtually. The study sites were four district hospitals and one central hospital owned by the state, which were recruited using convenience sampling. A total of 25 COs out of 152 were purposefully selected from the five public hospitals to participate in the study. However, the virtual platforms posed challenges mainly to do with internet connectivity during interviews and focus group discussions. Tight duty schedules and an entrenched culture of cash incentives prevalent at the five public hospitals negatively affected the availability of some COs to participate in the study. Nevertheless, informed consent and voluntary participation were mandatory for every respondent. Data were analysed using a method known as thematic analysis with an aid of Atlas. ti version 9 computer software. In the next chapter, I use empirical evidence on COs' experiences with OS and burnout before the COVID-19 pandemic emerged to begin challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like healthcare.

Chapter 5

Occupational stress and burnout at public hospitals before COVID-19 pandemic

5.1. Introduction

In Chapter 1 (Introduction), I highlighted three implicit assumptions posed by the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare. In this chapter, I begin to challenge the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare from OSH regulation. I begin the challenge by using empirical evidence drawn from the experiences of clinical officers (COs) before the COVID-19 pandemic. I demonstrate that before the COVID-19 pandemic emerged, there were psychosocial hazards from the confines of the workplace that predisposed COs to OS and burnout. These psychosocial hazards from the confines of the workplace are shown in Figure 11-5 (below).

Figure 11-5: Sources of occupational stress & burnout before the COVID-19 pandemic



As I demonstrated in Chapter 3, the COVID-19 pandemic is associated with OS and burnout among health workers across the globe (Cullen et al., 2020; Kumar & Nayar, 2020; Rajkumar, 2020; Semo & Frissa, 2020; Singh et al., 2020). In Malawi, the COVID-19 pandemic also contributed to OS and burnout among the COs as I demonstrate in Chapter 7. However, in this chapter I argue that before the emergence of the COVID-19 pandemic, OS and burnout were already critical problems at public hospitals, generally confronted by health workers and COs in particular. Among others, OS and burnout among COs before the COVID-19 pandemic was caused by psychosocial hazards from the confines of the workplace, as shown in Figure 11-5 above. These psychosocial hazards are excessive workloads, long hours of work, and

poor inter-professional relationships. In this chapter, I demonstrate how excessive workloads, long hours of work, and poor inter-professional relationships contributed to OS and burnout among COs at public hospitals before the COVID-19 pandemic.

5.2. Excessive workload and long hours of work

As summarised in Figure 11-5 above, excessive workloads and long hours of work were psychosocial hazards at public hospitals that contributed to OS and burnout among COs before COVID-19 emerged. Before the COVID-19 pandemic, COs at five public hospitals experienced OS and burnout due to excessive workloads. The excessive workloads mainly resulted from the challenge of understaffing at the five public hospitals. The public sector employs 1,045 COs out of 2,935 established positions, thus representing a 64 per cent vacancy rate for COs (Malawi Government, 2018b) and a CO-patient ratio of 0.82 COs per 10,000 of the population (Malawi Government, 2018c). During data collection, I discovered that high vacancy rates among COs were also prevalent at the five public hospitals, whose estimates are shown in Table 7-5 below.

Table 7-5: Vacancy rates for clinical officers at the 5 public hospitals

Name of hospital	Established positions	Filled positions	Vacancy rate (%)
Nkhatabay District Hospital	50	21	58
Chikwawa District Hospital	69	22	68
Mulanje District Hospital	41	24	41
Balaka District Hospital	37	13	65
Queen Elizabeth Central Hospital	255	72	72

Sources: Balaka District Hospital (2022); Chikwawa District Hospital (2022); Mulanje District Hospital (2022); Nkhatabay District Hospital (2022) and Queen Elizabeth Central Hospital (2022).

The high vacancy rates for the COs at the five public hospitals, as shown in Table 7-5 above, contributed to excessive workloads among the COs employed at the five public hospitals. Against this backdrop, before the COVID-19 pandemic, COs were perpetually under intense pressure to perform too much work with unrealistic deadlines amidst high vacancy rates and a low COs-patient ratio. The intense pressure and unrealistic deadlines due to excessive workloads pushed some COs to work beyond the duration of a regular 8-hour shift in a day.

"It is always the case that because of too much workload and long hours of work, we get exhausted and fatigued. Sometimes because we are exhausted and fatigued, we develop stress and burnout. Here you can see that fatigue and exhaustion lead to stress and burnout among us the clinical officers. In the end, this negatively affects the quality of services delivered by us the clinical officers" (Interview, 05/CO/02).

Excessive workloads and long hours of work beyond 8 hours in a day, ultimately compelled some COs to forfeit time for resting and meals during working hours, while others would be knocking off from work very late. For instance, during the focus group discussions, the COs at Chikwawa and Nkhatabay district hospitals mentioned that a CO would participate in performing surgical procedures one after another for hours, such as caesarean delivery (C-section) and amputation. Instead of going home to rest after long hours of work, he or she would continue working beyond 8 hours to cover up for the shortage of staff.

Furthermore, at the five public hospitals, COs forfeited their annual leave due to excessive workloads and long hours of work. Amidst an acute shortage of staff, going on annual leave would be considered an extra burden on fellow staff in a particular department or unit while you rest at home for almost a month. Applications for annual leave were typically denied by superiors as a means of reducing work pressure. Instead, the members of staff were encouraged to consider gradually taking 1-2 off days during a particular week until one exhausted his or her annual leave days.

"At public hospitals, we were just a few clinical officers far below the recommended threshold. It normally happens for one person to be on call to oversee more than three departments like paediatrics, outpatient department, maternity etc on a 12 or sometimes 24-hour shift. You would be exhausted and fatigued while on duty for that long. This sometimes results in misdiagnosis and in some instances injuries on the patients due to our negligence amidst too much work" (Interview, 05/CO/05).

The Ministry of Health attempted to address the challenge of a shortage of staff at public hospitals. In 2005, the Ministry of Health introduced a locum programme as one response to acute shortages of health workers (Maseko et al., 2008). Under the locum programme, health workers were called to work during off-duty hours such as

weekends and public holidays in exchange for a cash allowance called locum (Tambulasi, 2012). COs confirmed that due to low salaries and ever-increasing standards of living, they were attracted to the locum programme as a means to earn an extra income. As a result, the COs started to do multiple and long hours of work under the locum programme in addition to their regular shifts. COs cited examples of some COs who immediately proceeded to an 8-hour shift under locum after completing a regular 8-hour shift instead of knocking off to rest at home. Thereafter, they would also forfeit their weekends and other off-duty hours for locum allowances to increase their monthly monetary earnings.

Before the COVID-19 pandemic, the four district hospitals under study were implementing a locum programme in which the COs in the four districts were participating. However, at Queen Elizabeth Central Hospital, the COs had withdrawn from the locum programme before the COVID-19 pandemic. The COs at Queen Elizabeth Hospital bemoaned that their grievances over low rates of locum allowances and delays in receiving the cash after completing the locum shifts were not duly addressed.

> *"You know, it became frustrating and stressful that we would not receive the locum allowances on time after toiling on the locum shifts. Sometimes, we felt we would never be paid. Out of frustration, all of us within the cadre of clinical officers eventually withdrew from the locum program. We no longer participate in the locum program"* (Interview, 05/CO/5R).

As such, some COs at Queen Elizabeth Central Hospital opted for *moonlighting*, which entailed dedicating off-duty hours to financially rewarding activities outside of a regular job at the hospital. Engaging in moonlighting instead of locum shifts at the hospital was considered a better way to earn extra income by some COs at Queen Elizabeth Central Hospital.

5.2.1. Impact on occupational stress and burnout

The excessive workloads and long hours of work led to overworking and little or no time for rest. Overworking and having little or no time for resting contributed to prolonged exhaustion and fatigue while on duty. During a focus group discussion with COs at Chikwawa District Hospital, an example was given of a CO who attended to a patient with symptoms of malaria. Instead of the CO conducting a rapid diagnostic test

to confirm if that particular patient had malaria or not, the COs skipped the test due to exhaustion and fatigue. The patient was instead given pain relief medication and sent home. Some COs mentioned that such prolonged fatigue and exhaustion ultimately caused OS and burnout.

"When we are overworked, fatigued, stressed and burned out we cannot perform to the best of our ability. All this is because we have a shortage of staff including clinical officers here at this hospital. As a result, the quality of delivery is greatly compromised because you cannot work effectively when you are exhausted, fatigued and stressed. But the challenge is that you are still expected to come to this hospital to work and work and get exhausted, fatigued and stressed more and more. Nothing seems to be done about out conditions here that cause stress in us" (Interview, 05/CO/05).

While the locum programme led to an increase in the number of staff hours available for health services at public health facilities (Maseko et al., 2008; Tambulasi, 2012), it also contributed to OS and burnout among COs and health workers in general. Locum programme led to overworking and little or no time for rest, which contributed to prolonged exhaustion and fatigue. Ultimately, the prolonged fatigue and exhaustion caused OS and burnout among COs and health workers in general. The COs further mentioned that they also experienced an exacerbation of OS and burnout due to frustration and depression over long delays to receive locum allowances. The COs anticipated that the locum allowances would immediately be paid upon completion of a locum shift. However, some COs were frustrated and depressed that they would have to wait for 3–5 months to finally receive the locum allowances in cash.

"Locum is there to address the challenge of inadequate staff on the ground. This causes further challenges because of the money attached to it as people opt to go back to work instead of resting at home. The sad thing is they don't measure the quality of services which are rendered because this guy is tired but he is enticed to continue working instead of resting just to earn extra money. Unfortunately, they don't have a mechanism to check the quality of service being rendered when people continue to work under locum instead of resting" (Interview, supervisor 01).

In addition, coverage of health workers eligible for allowances for working extra hours beyond regular shifts (locum allowances) differed from hospital to hospital, i.e., some hospitals opted for universal coverage while others targeted nurses only (Tambulasi,

2012). The rates for locum allowances also differed, such that at some district hospitals the rates were higher than at other district hospitals (ibid.). In addition, at some hospitals like Nkhatabay District Hospital, the locum cash allowances were eventually replaced with non-monetary incentives like extra off days. Instead of a cash allowance, one would be compensated with off-duty day(s) for working on a locum shift. The differential coverage, low rates, and non-uniformity of incentives under locum led to frustration and depression among some health workers. For example, the COs at Queen Elizabeth Central Hospital expressed feelings of alienation when they were compelled to withdraw from the locum programme. COs at the four district hospitals confirmed that they felt undervalued because they received lower rates of locum allowances compared to other hospitals that offered higher rates. COs at Nkhatabay District Hospital also felt it was less appreciated to be given non-monetary compensation for locum shifts as opposed to cash allowances. The COs indicated that such frustrations and depressions, as well as feelings of alienation, less appreciated and valued, contributed to OS among them.

"Yes, you take whatever I have explained somewhere on the issue of locum. The rate of a locum is miserably low at this hospital. I mean how can one be motivated to work just because there is a locum? With this locum, they are trying to address the shortage of staff that is there. Instead of having people rest, they want the people to come and work just because there is a locum. I don't want to mention the rate, but the rates they are paying for the locum are miserably low. Our colleagues at other hospitals earn better rates. Are you sure somebody could happily offer services at such miserably low rates? So, yes there might be this locum as a good intervention on the shortage of staff, but this is not enough to address the problem. In a way, these interventions are causing more stress" (Interview, 03/CO/05).

Engaging in moonlighting instead of a locum shift in the case of COs at Queen Elizabeth Central Hospital nevertheless contributed to OS and burnout just like the locum shifts. Some COs struggled to balance their primary job as COs at a hospital with extra hours of work on moonlighting. For instance, dedicating the hours or days meant for resting to moonlighting entailed working with little or no time for rest. This led to prolonged exhaustion and fatigue, which ultimately caused OS and burnout among COs engaged in moonlighting as an alternative to locum shifts. Furthermore, other COs indicated that they would fail to attend to personal commitments, e.g., family errands, studies, and leisure, due to excessive workloads and long hours of work

emanating from a combination of regular and locum shifts. Some COs would be on duty every day of the week, including weekends, under regular and locum shifts (or moonlighting in the case of COs at Queen Elizabeth Central Hospital). As such, they would have no free time for leisure or to attend to other personal commitments.

"Too much work at this hospital leads to conditions of stress among us, my friends have already elaborated on this point. I just wanted to add that such conditions of stress have a negative impact on our lives outside this hospital such as attention on our families and other personal errands. Overall, I can say to you that we are challenged to do many other important things at a personal level because we spend too much time working at this hospital" Focus group discussion, 01C.

This situation was exacerbated by the COs' inability to take annual leave due to excessive workloads and long hours of work in the face of a staff shortage. The excessive workloads and long hours of work ultimately caused prolonged conflicts between work on the one hand and time for personal commitments on the other. For some COs, such prolonged conflicts between time for work and personal commitments exacerbated OS.

5.3. Poor inter-professional relations

As shown in Figure 11-5 (above), the poor inter-professional relations at public hospitals also constituted psychosocial hazards at public hospitals that increased the risks of OS and burnout among COs before the COVID-19 pandemic emerged. I discovered that inter-professional relations between medical doctors and COs had been soured at public hospitals before the emergence of the COVID-19 pandemic. Before discussing how sour relations between medical doctors and COs contributed to OS and burnout, a bit of background is necessary to understand the context. As of 1980, when the first locally trained COs started to practice, there were a handful of medical doctors in Malawi (Muula, 2009; Thetard & Macheso, 2004). Most of these medical doctors were expatriates practicing in Malawi on fixed periods (Palmer, 2006).

"I can recall that when the 21 of us were licensed to practice as clinical officers in 1980, there were about 15 (or less) qualified medical doctors in the whole of Malawi including

specialist doctors. Most of these were foreign nationals" (Interview, retired clinical officer, 01).

It was in 1991, upon the opening of the University of Malawi's College of Medicine, that the country started to train medical doctors locally (Broadhead & Muula, 2002; Muula et al., 2016). This entails that before 1991, there was no educational institution in Malawi where one could receive the requisite training and acquire a qualification as a medical doctor. For over two decades since 1980, COs performed most of administrative and clinical tasks traditionally assigned to medical doctors (Broadhead & Muula, 2002; Muula et al., 2016; Thetard & Macheso, 2004). The situation started to change within a few years after the establishment of the College of Medicine in 1991. The first cohort of 12 students graduated with BSc in Medicine and BSc in Surgery degrees from the College of Medicine in July 1992, at a time when more than 150 COs had already been locally trained (Broadhead & Muula, 2002; Muula, 2009; Muula et al., 2016). This first cohort of 12 graduates from the College of Medicine had completed pre-clinical studies in the United Kingdom (Muula, 2009, 2016).

By 2002, there were a total of 168 medical doctors who had graduated from the College of Medicine in 10 years (Broadhead & Muula, 2002; Muula et al., 2016). 112 of the 168 were then working in the country, while 43 were pursuing various postgraduate studies abroad on government scholarships and were expected to serve at public hospitals in Malawi immediately after completion of their further studies (Broadhead & Muula, 2002). Most of the locally trained medical doctors were offered jobs in the health sector soon after graduating from the College of Medicine. As the number of locally trained doctors increased annually since 1992, they started to occupy various administrative and clinical positions in the health sector. 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 soured interprofessional relations between doctors and COs, particularly as more doctors started to take over some key positions previously occupied by COs. During the

interviews with COs and the President of PAUM, there was a general feeling that medical doctors were generally enjoying preferential treatment at the expense of COs and other cadres of health workers.

"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 some 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 like accommodation and transportation. But 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 like 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 the 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 hospital, 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 TB Control Programme. 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 side-lined as far as appointments to such high positions were concerned. Furthermore, during interviews, some COs contended that their grievances to the District Health Management Team (DHMT) and Ministry of Health were not taken seriously while similar grievances from medical doctors would be acted upon swiftly. This was also corroborated by the President of PAUM, who spoke as a key informant on behalf of COs. It was mentioned that medical doctors ascended much faster on the ladder of civil service promotions as compared to COs.

"Am not sure if you are aware of these things: you know issues to do with medical doctors are looked into more seriously than those that affect clinical officers. So, from my understanding, it starts right from the Ministry of Health headquarters. There is too much bias there against clinical officers. You can go and tell them. I think this problem of favouring medical doctors at the expense of clinical officers, has to be addressed right from the ministry headquarters" (Interview, 01/CO/05).

Another grievance that some COs raised as a contributing factor to poor relations with medical doctors was that at district hospitals, medical doctors were often preoccupied with administrative tasks other than clinical duties. This was corroborated by a respondent who was a medical doctor and was then serving as a member of one of the DHMTs. Two key informants also corroborated this observation. As such, COs were performing clinical duties, some of which were supposed to be undertaken by the available medical doctor(s) at the hospital. As a result, there was growing frustration and resentment among COs over the unfair distribution of tasks at the district hospitals between COs and medical doctors.

Poor relations between COs and medical doctors were also associated with differences in training and qualifications between the two cadres. To qualify as a medical doctor, one must complete a 5-year BSc degree programme followed by an 18-month internship at a central hospital, whereas COs are trained for three years at the diploma level followed by a 12-month internship (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014; Jiskoot, 2008; McAuliffe). 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, the COs believed that medical doctors saw them as far less competent to clinically perform as substitutes for medical doctors. However, the COs had been independently performing the conventional duties of doctors at public hospitals for decades when there was an acute shortage of doctors in the country.

"The sour relations between clinical officers and medical doctors are genuine. To say the truth, most clinical officers in the districts who have worked for years, tend to have advanced practical experience as compared to doctors who have just graduated and are immediately

dispatched to district hospitals to be supervisors for the clinical officers. These newly graduated doctors would have much theoretical knowledge of how to conduct surgeries but very little practical experience. The clinical officers would lack theoretical knowledge but in terms of practical know-how, some clinical officers would be far more advanced than a freshly graduated medical doctor. So that gives you a situation in which the supervisor who is a medical doctor is far less experienced on the ground than the one being supervised i.e., clinical officer. In that case, as the supervisor tries to prove the point that he or she is in charge and more competent than the one being supervised, it results in frustrations and anger among those being supervised in this case the clinical officers" (Conversation, external referee- public health researcher).

Against this backdrop, the COs testified that they sometimes experienced negative attitudes from medical doctors at both district and central hospitals over the question of clinical competency. For instance, some COs felt that their lack of recognition and support from medical doctors was because their clinical performance at hospitals were undermined by the medical doctors.

Lastly, the COs also bemoaned poor relations between themselves and nurses that had also been there before the COVID-19 pandemic emerged. During the interviews, COs indicated that nurses were assigned to work under the supervision of COs. However, at the district hospitals and the central hospital, most of the COs were diploma holders, while some nurses possessed BSc degrees. This created a challenge for a nurse with a degree to be supervised by a CO whose highest qualification was below a degree. In this regard, the COs sometimes felt undermined or less valued by the nurses as subordinates to COs.

*"Poor relations between cadres of health workers at this hospital is one of the critical challenges that we are confronted with as clinical officers. I can comment on an issue to do with qualifications. You know, we are substitutes for doctors. This means that in the absence of a doctor, we are the ones who supervise the nurses. But most of our nurses here are senior nurses holding BSc degrees while most of us clinical officers are diploma holders. So, we have a challenge here in that we the supervisors possess lesser qualifications than some nurses we are supposed to supervise. You find that sometimes we get undermined or receive open defiance, insults and shouts from some nurses holding degrees. I can confirm with you that this can be demoralising and stressful too" (*Interview, 04/CO/04).

5.3.1. Impact on occupational stress and burnout

The sour inter-professional relations between COs and medical doctors on one hand and between COs and nurses on the other hand before the COVID-19 pandemic emerged intensified interprofessional conflicts. The interprofessional conflicts led to OS and burnout in two ways. Firstly, the interprofessional conflicts provided fertile ground for deep-seated frustration, anger, and resentment among COs toward medical doctors and nurses. Ultimately, such deep-seated frustration, anger, and resentment caused OS and burnout. In addition, interprofessional conflicts also resulted in a lack of support, respect, understanding, and empathy between COs and doctors/nurses. 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 relationships. Such deep feelings ultimately caused OS and burnout 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 the clinical officers. The stress and burnout that the clinical officers suffer are also coming from prolonged frustrations, anxieties and depression arising from several issues like poor relations between the clinical officers and other cadres like medical doctors and nurses in particular. Such grievances on poor relations may have nothing to do with workloads that clinical officers are subjected to" (Interview, retired clinical officer, 01).

Secondly, during focus group discussions COs mentioned that sometimes they experienced occupational violence in the form of verbal aggression and bullying from the medical doctors and nurses over COs' lower qualifications and clinical competencies. The verbal aggression and bullying by medical doctors and nurses 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 and nurses. Subsequently, this caused prolonged feelings of frustration, anger, resentment, and alienation among COs. Ultimately, such prolonged feelings became sources of OS among COs.

"Sometimes working with some nurses who are more qualified than clinical officers like me and working with doctors who feel a clinical officer is less competent, is challenging. We

sometimes get insults and verbal attacks from some doctors and nurses over our qualifications and competencies. That makes some of us feel offended, less valued and undermined. That is very frustrating that such sentiments are coming from people who are supposed to be colleagues at this hospital. If you ask me about sources of stress and burnout, I can cite poor relations between clinical officers and doctors/nurses as one of the many factors that contribute to stress and burnout among clinical officers" (Interview, 03/CO/05).

5.4. Discussion

In this section, I articulate my interpretation of the results on excessive workloads, long hours of work, and poor interprofessional relations as psychosocial hazards at the five public hospitals before the COVID-19 pandemic emerged. In this section, I also demonstrate at conceptual, empirical, and methodological levels how the results of my study relate to the literature.

5.4.1. Excessive workloads and long hours of work

The Employment Act of 2000 is a piece of legislation in which 8 hours per day and 48 hours per week are promulgated as the maximum number of hours for employees to work (Malawi Government, 2000). This entails that in the context of Malawi, jobs that compel employees to work more than 8 hours in a day and 48 hours a week are considered hazardous and therefore prohibited by law. In a study on university staff in New Zealand, Chalmers (1998) cited high workloads as sources of long hours of work. The results of my study also show that the source of long hours of work among COs is excessive workloads amidst high vacancy rates among the COs at the five public hospitals. Hence the results of my study in this regard, are consistent with Chalmers (1998).

In their respective analyses, Chalmers (1998), Dewi and Riana (2019), and Park et al. (2010) established that OS had a positive correlation with high workloads and long hours of work. In their study on workload and stress at workplaces, Dewi and Riana (2019) theorised that the higher the workloads at workplaces, the higher the levels of OS and burnout among employees. In a study on workloads and stress among university staff in New Zealand, Chalmers (1998) revealed that levels of OS were higher among employees working for longer hours per week. Park et al. (2010) discovered that complaints about OS significantly increased among those working 60 hours or more per week as compared to those working fewer hours per week.

A study by Li et al. (2019) on long hours of work and mental well-being among workers in Shanghai implicitly supports Chalmers (1998), Dewi and Riana (2019), and Park et al. (2010) on the positive correlation of OS with excessive workloads and long hours of work. For instance, Li et al. (2019) found that poor mental well-being gradually increased among those working between 40 and 60 hours per week, while depression significantly increased among those working over 60 hours per week. Chalmers (1998) and Dewi and Riana (2019) explained that a high workload and long hours of work had a significant impact on fatigue and exhaustion that ultimately triggered OS among the workers. In my study, depression, fatigue, and exhaustion came out as effects of OS and burnout, among others.

Conceptually, the studies by Chalmers (1998), Dewi and Riana (2019), Park et al. (2010), and Li et al. (2019) cited above confirm that high workloads and extended work hours are harmful to the mental health of workers insofar as OS and burnout are concerned. This is consistent with the results of my study. The results of my study reveal that before the COVID-19 pandemic, COs at the five public hospitals in Malawi experienced OS and burnout due to excessive workloads. The excessive workloads mainly resulted from the understaffing of COs at public hospitals. This supports the observation by Bradley et al. (2015), Mangham (2007), and Palmer (2006) that in Malawi, the number of health workers on the government payroll continued to be insufficient. In addition, the results of my study reveal that, given the excessive workloads, COs are perpetually under intense pressure to perform too much work with unrealistic deadlines amidst high vacancy rates for COs.

However, unlike Chalmers (1998), Dewi and Riana (2019), Park et al. (2010), and Li et al. (2019), I could not measure the extent to which excessive workloads and long working hours impacted on OS and burnout among COs. The reason is that my study was qualitative while Chalmers (1998), Dewi and Riana (2019), Park et al. (2010), and Li et al. (2019) used quantitative methods of data collection such as questionnaires and surveys. The researchers further used quantitative methods of data analysis, e.g., validity and reliability tests, significant tests, and multiple logistic regression on computer software. These quantitative tools of data collection and analysis enabled the researchers to quantify the impact of excessive workloads and long working hours on OS and related aspects.

The results of my study further show that excessive workloads and long hours of work lead to overworking and little or no time for rest among COs. Overworking and having little or no time for resting contribute to prolonged exhaustion and fatigue that ultimately cause OS and burnout among COs. This supports the conclusion by Eaton (2019) and Töyry (2005) that for health workers, work overload was among the prevailing causes of OS and burnout. At the national level, this supports a finding by Gondwe and Brysiewicz (2008) and Bradley et al. (2015) that as health workers in Malawi strived to cope with the increased workloads, longer hours of work, and little time for rest, they encountered OS and burnout. Nevertheless, the studies by Bradley & McAuliffe (2009), Mangham (2007), Gondwe & Brysiewicz (2008), and Bradley et al. (2015) are generally on health workers in Malawi. Eaton (2019) and Töyry (2005) are also studies on health workers, but outside Malawi. In contrast, my study specifically targeted COs at public hospitals in Malawi. I confirm that in Malawi, just like other parts of world, excessive workloads and long hours of work are also the primary sources of OS and burnout among health workers.

5.4.1.1. Locum programme

In my study, I found out that intense pressure and unrealistic deadlines due to excessive workloads pushed some COs to work beyond normal working hours. In 2005, the Ministry of Health introduced a locum programme as one response towards acute shortages of health workers (Maseko et al., 2008). This supports Bradley and McAuliffe (2009) and Mangham (2007) who argued that to address the acute shortage of health workers in Malawi, various fundamental changes in working arrangements were implemented at public hospitals. Such fundamental changes include increased workloads, longer hours of work beyond regular eight-hour shifts, limited off-duty time, and multi-tasking among health workers (Bradley & McAuliffe, 2009; Mangham, 2007). However, the locum programme contributed to overworking and little or no time for resting such that COs would work for more than 8 hours a day and 48 hours a week. This contravenes the stipulations of the Employment Act of 2000 on a maximum number of hours in a day and a week for employees to work. To this extent, the locum programme aggravated prolonged exhaustion, fatigue and ultimately OS and burnout among COs before the COVID-19 pandemic emerged.

While the locum programme was aimed at increasing the supply of labour, there was no consideration of the quality of that labour given the OS and burnout associated with

the locum programme. Hence, I argue that under the locum programme, the services of health workers in general and COs in particular, are considered undifferentiated labour inputs. In this regard, the labour of the COs is exploited to cover for the acute shortage of staff at the public hospitals while their welfare in terms of OSH is not considered critically important. For instance, the psychosocial well-being of COs is not prioritised in the implementation of the locum programme. As such, while the locum programme temporarily addresses the challenge of staff shortages, it exacerbates psychosocial problems among COs such as OS and burnout.

In response, PAUM has bemoaned the exploitation of COs through the locum programme. There is a statement issued by PAUM in 2020 in which the President of PAUM highlighted that it was a violation of international labour standards for the Ministry of Health to implement the locum programme in the country (Physician Assistants Union of Malawi, 7 October 2020). In the same statement, the President of PAUM demanded the scrapping of the locum programme altogether and instead recruiting an adequate number of COs on full-time (Physician Assistants Union of Malawi, 7 October 2020). This was considered by PAUM as the most appropriate solution to address the shortage of staff at public hospitals instead of the locum programme.

5.4.1.2. Neoliberal conditionalities

I discovered that high vacancy rates among COs, which contributed to excessive workloads and long hours of work before the COVID-19 pandemic, were associated with the neoliberal conditions of the international financial institutions (IFIs). Like other countries in Africa, since the 1990s Malawi has been implementing several programmes offered by IFIs such as the IMF and the World Bank with neoliberal conditionalities (Mangani, 2020; Munthali, 2004; Ng'ong'ola, 1996). When structural adjustment programmes (SAPs) were phased out in 1994, the IMF's neoliberal policy prescriptions for the Malawi persisted through various programmes (Mangani, 2020; Munthali, 2004). Between 1995 and 2002, Malawi implemented three Fiscal Restructuring and Deregulation Programmes (FRDP) with support from the World Bank (Bridges & Woolcock, 2017; Mangani, 2020). These programmes had a thematic focus on public expenditure, financial management, and procurement (Bridges & Woolcock, 2017). Since then, there has never been a year in which the World Bank did not engage the Malawi on public financial management reforms (Bridges &

Woolcock, 2017). Since 1995, Malawi has implemented the following neoliberal IMF programs: the Enhanced Structural Adjustment Facility (ESAF) programs, the Poverty Reduction and Growth Facility, the Exogenous Shocks Facility, the Extended Credit Facility, and the Rapid Extended Facility (International Monetary Fund, 1 May 2020, 3 December 2008, 31 July 2009, December 2019; Mangani, 2020). Established in 1987, the Enhanced Structural Adjustment Facility was aimed at providing low-interest loans to poor countries (International Monetary Fund, 1999). Introduced in 1999, the now-phased-out Poverty Reduction and Growth Facility were anchored on poverty reduction and growth as the lynchpin for the IMF's lending to low-income countries (International Monetary Fund, 31 July 2009). The Exogenous Shocks Facility provides financial aid to low-income nations experiencing abrupt and exogenous shocks (International Monetary Fund, 2005). The Extended Credit Facility provides financial assistance to countries with protracted balance of payments problems that agree to implement a set of neoliberal conditionalities over the medium term (International Monetary Fund, 3 March 2020). In contrast, the Rapid Credit Facility provides immediate concessional financial assistance with relaxed conditionalities to low-income countries struggling to fulfil their balance of payments (International Monetary Fund, 9 April 2020).

The neoliberal conditions of the IMF/World Bank programmes discourage the Malawi government from increasing expenditure on the wage bill in the public sector, among others. Munthali, 2004; Ng'ong'ola, 1996; Palmer, 2006). "The loans provided by the IMF are made conditional on wide-ranging fiscal and economic reforms, including a drastic reduction of public budgets, debt reduction, and the opening up of the national economies to foreign investors" (Laterza, 2016, p. 576). This entails that even though the existing vacancies in the health sector would be budgeted for annually, the government cannot recruit health workers to fill the existing vacancies and thereby increase the wage bill. In compliance with such neoliberal conditions, Malawi faces budgetary constraints to recruit more health workers to fill the existing vacancies in the health sector. For instance, training and recruitment of more COs would bloat the wage bill, thereby contravening the neoliberal conditionalities of the IMF programmes.

To a certain extent, the neoliberal conditionalities of the IMF on avoiding wage bill increase through the recruitment of a sufficient number of health workers, among

others, are associated with OS and burnout among COs at public hospitals in Malawi. This confirms the conclusion by Daoud et al. (2017). The authors argued that a wage bill freeze imposed by the IMF on developing countries to keep government spending low would limit the government's ability to hire or adequately remunerate health workers. Furthermore, Blanton et al. (2017), Bohoslavsky (2017), Kentikelenis (2017), Kentikelenis et al. (2015), Marphatia (2010), and Pandolfelli et al. (2014) argued that a wage bill freeze as a cost-saving measure was associated with various OSH hazards among health workers. In my research, I identified excessive workloads and longer work hours as specific examples of psychosocial hazards associated with IMF and World Bank neoliberal conditions. The neoliberal conditions of the IMF partly contribute to excessive workloads and long hours of work among health workers in general and COs in particular. The neoliberal environment is one of the factors preventing the government from hiring an adequate number of COs to fill the existing vacancies at public hospitals. Without the neoliberal conditionalities, the excessive workloads and long hours of work as psychosocial hazards would partly be minimized, thereby partly reducing the risk of OS and burnout among COs. To some extent, OS and burnout associated with neoliberal conditionalities of the IMF that constrain the government from recruiting an adequate number of hospital staff would partly be averted.

5.4.1.3. Work-life conflict

On work-life conflict among COs, the results of my study illuminate two aspects. The first aspect is the association of work-life conflicts with excessive workloads and long hours of work. The second aspect is the association of work-life conflicts with OS. Firstly, the results of my study show that some COs fail to undertake personal commitments like family errands and leisure activities due to excessive workloads and long working hours emanating from a combination of regular and locum shifts. Subsequently, excessive workloads and long hours of work cause prolonged conflicts between work on the one hand and time for personal commitments on the other. For some COs, such prolonged conflicts between time for work and personal commitments exacerbate OS. This is consistent with Suifan et al. (2016), Delecta (2011), Beauregard & Henry (2009), O'Keefe (2014), Humphries et al. (2020), and Brown et al. (2010). Firstly, in their respective analyses, Suifan et al. (2016) and Delecta (2011) concurred that health workers experiencing fatigue due to long hours of work and work

overload failed to give sufficient attention to their families at home. Suifan et al. (2016) further segmented work-life balance into three dimensions, as follows:

i. Schedule flexibility

This refers to flexibility among the workers in choosing their starting and finishing times within the permissible hours that one must be on duty.;

ii. Job autonomy

This refers to the extent to which employees have leeway in determining when and how they get their work done;

iii. Manager support

This refers to the degree to which managers provide support and understand the personal and family life issues of those they supervise at the workplace.

Secondly, Beauregard & Henry (2009) and O'Keefe (2014) found that a lack of work-life balance was associated with increased OS and burnout among workers. The results of my study qualify the studies on medical doctors conducted in Ireland and Wales by Humphries et al. (2020) and Brown et al. (2010), respectively. The authors found that doctors struggled to maintain a balance between the desire for a successful medical career on the one hand and their family and other non-work commitments on the other. In both studies, the researchers discovered that oftentimes, the personal needs of the doctors suffered in favour of pursuing professional commitments.

A research study on medical doctors at public and private hospitals in Pakistan conducted by Malik et al. (2010) found that there was no significant effect of OS or burnout on doctors' efforts to achieve work-life balance. While the results of my study show that OS and burnout among COs negatively affect COs' work-life balance, I could not establish whether the effect was significant or not, as Malik, Zaheer, Khan, and Ahmed (2010) found. One reason is that I was not able to generate adequate data to determine whether the effect was significant or not. However, Zaheer, Khan, and Ahmed (2010) used quantitative methods of data collection such as questionnaires, burnout scales, and work-life balance scales. The researchers further used quantitative methods of data analysis like statistical tests and structural equation modelling on computer software called Statistical Package for Social Sciences (SPSS) and Amos 16.0. Perhaps by using these quantitative tools of data collection and

analysis, the researchers collected sufficient data that enabled them to measure the significance of the effects.

However, the results of my study contradict Suifan et al. (2016) and Humphries et al. (2020). Firstly, the results of my study are not consistent with the segmentation of work-life conflict by Suifan et al. (2016) presented above. The results of my study show that due to excessive workloads and long hours of work emanating from a shortage of staff, the COs do not have the flexibility to choose the start and finish times of their tasks. The COs find themselves overworking with unrealistic deadlines. Furthermore, COs have no flexibility to choose when to go on annual leave to rest and attend to other personal commitments. In addition, the COs are not able to exercise freedom and discretion on the amount of work to do on a day before retiring to rest at home. Due to poor interprofessional relations, COs receive little support and recognition from their superiors, who are medical doctors. Hence the results show that there is a lack of schedule flexibility, job autonomy, and manager support at public hospitals as far as COs are concerned. This does not comply with the work-life balance segmentation by Suifan et al. (2016).

Secondly, the results of my study also contradict a study on medical doctors by Humphries et al. (2020). The authors concluded that despite being dissatisfied with work-life imbalances, the doctors expressed little or no hope for improvement and therefore did not show the urge to push for necessary reforms towards addressing work-life imbalances. In contrast, the results of my study indicate that work-life conflicts among COs and health workers, in general, could be addressed by putting measures in place to minimise the impact of psychosocial hazards that cause or aggravate OS and burnout at public hospitals. PAUM through HRHC continued to push for interventions to curb psychosocial hazards like excessive workloads and long hours of work at health facilities. During an interview, the President of PAUM stated that COs harboured positive expectations that negotiations with the Ministry of Health on psychosocial hazards that hampered work-life balance for health workers would eventually yield results to the satisfaction of health workers in general and COs in particular. This gives an impression that among COs, there is hope for improvement in their situation regarding work-life conflict caused by psychosocial hazards such as excessive workload and long hours of work. This positive hope among COs is not consistent with the finding by Humphries et al. (2020), which showed no hope at all

among doctors about any possible interventions on their plight regarding work-life conflicts.

5.4.2. Inter-professional conflicts

By nature, the delivery of healthcare services involves various team players from different disciplines working closely together to satisfy the patient population (Nwobodo et al., 2022; Skjrshammer, 2001). When various team players from different disciplines are working together, disagreements, disputes, and interprofessional conflicts among them are inevitable (Kim et al., 2016; Nwobodo et al., 2022; Omisore et al., 2017). Like anywhere else, Malawi's health care delivery system is also organised in such a way that it involves teams across the four levels of health service delivery. Interprofessional conflicts among health workers, according to Nwobodo et al. (2022), can include abusive language (yelling, threats, vulgarity), blame, and disruptive behaviour. This is consistent with the results of my study on poor interprofessional relations and occupational violence. Because of their lower qualifications and clinical competencies, COs face violence in the form of verbal aggression and bullying from medical doctors and nurses, according to the findings of my study. The verbal aggression and bullying by medical doctors and nurses against COs manifested through insults, shouting, and outbursts.

5.4.2.1. Sources of interprofessional conflicts

According to Ogbonnaya et al. (2007), unequal relationships between professionals in healthcare teams are a contributing factor to interprofessional conflicts. The 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, three-quarters of doctors felt that teams and overall management at the hospitals should be headed by doctors only, while 90 per cent of other health workers perceived the doctors' propositions as unacceptable. In Nigeria, competition for positions of authority is a source of rivalry and conflict among medical doctors and other health workers (Omisore et al., 2017).

Kim et al. (2016) developed a conceptual framework for interprofessional conflict in the delivery of healthcare services. Their conceptual framework encompasses the

factors that contribute to interprofessional conflicts. The factors were categorised into three groups as follows:

- Personal factors such as one's competence on the job;
- Interpersonal factors such as prior relationship dynamics;
- Organisational factors such as complexity of structures within the organisation

The conceptualization of contributing factors to interprofessional conflicts by Ogbonnaya et al. (2007), Kim et al. (2016), and Omisore et al. (2017) is consistent with the results of my study. In my study, one contributing factor to poor relations between medical doctors and COs was that at district hospitals, medical doctors were often preoccupied with administrative tasks other than clinical duties. This leaves the COs to do much of the clinical work that is supposed to be performed by doctors. Drawing from the conceptual framework by Kim et al. (2016), I placed this under organisational factors contributing to interprofessional conflicts between COs and doctors. Another source of poor interprofessional relations that I established was the differential training and qualifications between COs and doctors on the one hand and between COs and nurses on the other hand. Drawing from the conceptual framework by Kim et al. (2016), I placed this under personal factors contributing to interprofessional conflicts between COs and doctors.

The architecture for healthcare service delivery in Malawi places medical doctors at the helm of clinical practice (Malawi Government, 2017a, 2018b). As such, medical doctors occupy a preeminent position in the entire delivery of healthcare. This is why doctors enjoy higher degrees of autonomy, responsibility, authority, and social status as compared to other health workers such as COs. The results of my study reveal that COs perceive the higher degrees of autonomy, responsibility, authority, and social status among doctors as manifestations of nepotism in favour of doctors. In response, COs react with feelings of frustration and resentment against medical doctors, culminating in a heightening of rivalry and conflicts between doctors and COs. This supports a study by Omisore et al. (2017), in which 70 per cent of the respondents perceived interprofessional rivalry as a leading cause of conflicts among health workers in Nigeria. Drawing from the conceptual framework by Kim et al. (2016), I placed this under interpersonal factors for interprofessional conflicts between COs and doctors.

The results of my study 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 bemoaned that suitably qualified COs were deliberately side lined as far as appointments to such management positions were concerned. The results of my study highlight the perceived dominance of top managerial positions by medical doctors as a source of interprofessional conflict between medical doctors and COs. This 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. Drawing from the conceptual framework by Kim et al. (2016), I placed this under interpersonal factors contributing to interprofessional conflicts between COs and doctors. However, unlike Omisore et al. (2017), I could not quantify the COs who disapprove of the dominance of doctors in top management positions in the health sector. Furthermore, I could not quantify the number of COs who felt suitably qualified COs were deliberately side lined in the appointments for such top management positions. The reason is that my study was qualitative while Omisore et al. (2017) used quantitative methods of data collection, such as questionnaires. The researchers further deployed quantitative methods of data analysis using computer software called SPSS version 17.0. These quantitative tools of data collection and analysis enabled the researchers to quantify health workers who disapproved of the notion that management tasks and leadership positions at hospitals should be headed by doctors only.

5.4.2.2. Impact on occupational stress and burnout

Bendix (2019) and Töyry (2005) concluded that inter-professional conflicts led to poor psychosocial welfare among health workers. This is consistent with the results of my study. The results of my study show how poor interprofessional conflicts between COs and medical doctors lead to OS among COs. Firstly, interprofessional conflicts provide fertile ground for soured interprofessional relations between doctors (supervisors of COs) and COs (subordinates to doctors). Sour interprofessional relations hinder the supervision and support that the COs require from the doctors as their superiors. As a result, the COs experience frustration, depression, and anxiety due to poor supervision and support by their superiors. The results of my study further show that ultimately, such frustration, depression, and anxiety lead to OS and burnout among COs. This qualifies McAuliffe, Manafa, et al. (2009), who found out 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, Manafa et al., 2009). The results of my study also support a discovery by Dovlo (2004) that mid-level health workers in Malawi did not receive recognition, respect, and necessary support from supervisors and coworkers. The results of my study further qualify the finding by Bradley and McAuliffe (2009) and McAuliffe, Bowie, et al. (2009) that there were tensions, frustrations, and other inter-professional conflicts at hospitals between COs on one hand and medical doctors on the other.

Secondly, occupational violence, including verbal aggression and bullying to which COs are subjected by medical doctors and nurses over COs' lower qualifications and clinical competence, also contributes to OS among COs. The verbal aggression and bullying make some COs feel intimidated, offended, and underrated by medical doctors and nurses. Subsequently, COs experience prolonged feelings of frustration, anger, resentment, depression, and anxiety. Ultimately, such prolonged feelings become sources of OS and burnout among COs. This is an extension of Cole et al. (1997) on the association between occupational violence and soured interprofessional relations. The researchers argued that, among others, low supervisor support and poor work-group relationships may increase the risk of bullying, aggression, and threatening behaviours at the workplace.

5.5. Summary

In this chapter, I discussed factors from the confines of the workplace that cumulatively contributed to OS and burnout among COs at five public hospitals before the COVID-19 pandemic emerged. These factors were: excessive workload, long hours of work, and poor interprofessional relations. I, therefore, considered excessive workload, long hours of work, and poor interprofessional relations as psychosocial hazards. I then demonstrated how these psychosocial hazards from the confines of the workplace increased the risk of OS and burnout among the COs at public hospitals. In the next chapter, I continue challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare by discussing a psychosocial hazard from outside the workplace. This psychosocial hazard that I refer to as *restructuring* was also manifest before COVID-19 emerged.

Chapter 6

Restructuring in the health sector before the COVID-19 pandemic emerged

6.1. Introduction

In this chapter, I continue to challenge the three implicit assumptions posed by the narrow scope and coverage of OSH regulation, which neglects psychosocial hazards and exempts service sectors like healthcare. I continue the challenge by using empirical evidence on restructuring drawn from the experiences of clinical officers (COs) before the COVID-19 pandemic. Restructuring was manifested through the introduction of new processes on the job, new working procedures, new tasks, and revised organisational structures. I argue that while restructuring in the health sector may have yielded some benefits (Riany et al., 2012), its implementation aggravated OS and burnout among COs. As such, I consider restructuring in the health sector a psychosocial hazard from outside the workplace that impacted on the mental well-being of COs before the COVID-19 pandemic emerged. In this chapter, I demonstrate how restructuring in the health sector contributed to OS and burnout among COs at public hospitals before the COVID-19 pandemic.

6.2. Restructuring

Proponents of restructuring argue that the logic behind implementing it in the public sector is to improve efficiency, effectiveness, and accountability in terms of service delivery (Riany et al., 2012; Tetřevová, 2007; Young, 2002). For decades, the health sector in Malawi has undergone restructuring processes in various forms. In this section, I confine my focus to three forms through which restructuring of the health sector was implemented before the COVID-19 pandemic. As shown in Figure 12-6 (below), these three forms are decentralisation, Emergency Human Resources Programme (EHRP), and functional reviews in the health sector.

Figure 12-6: Three forms of restructuring in the health sector



Restructuring of the health sector can be illustrated through the three forms as shown in Figure 12-6. In this section, I illustrate how the three forms of restructuring contributed to increased risks of OS and burnout among COs at public hospitals. Restructuring of the health sector can be illustrated through the three forms shown in Figure 12-6.

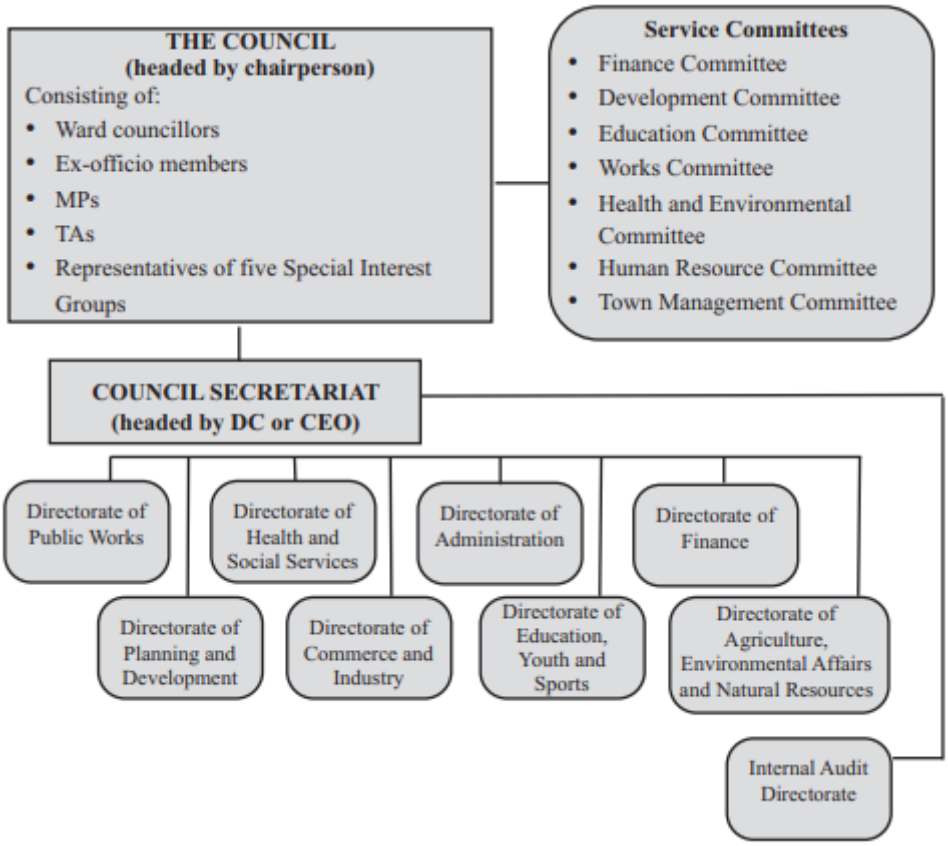
6.2.1. Decentralisation

Proponents of decentralisation argue that decentralisation in the public sector leads to better decisions that are more consistent with the wishes of the grassroots people than those made at higher levels, and therefore improves governance (Smoke, 2003). Before the COVID-19 pandemic emerged, Malawi had been advancing a decentralisation agenda of strengthening local governments. Within the framework of the Decentralisation Policy of 1998 and the Local Government Act of 1998 (as amended in 2010), Malawi adopted and operationalized a decentralised government (Malawi Government, 1998a, 1998b, 2013).

In Malawi, a decentralised government entails the transfer of power and authority from the central government to the local government, which consists of four cities, two municipalities, one town, and 28 districts governed by councils (ibid.). Figure 13-6 is a summary of how a district council in Malawi is constituted within the framework of decentralisation. As shown in Figure 13-6 below, each district council consists of two structures: the council, which is composed of elected officials (councillors, legislators), chiefs, and representatives of interest groups; and the council secretariat, which is staffed by civil servants (Bulthuis et al., 2021; Malawi Government, 2013). As shown in Figure 13-6, both the council and council secretariat are headed by a chief executive

officer called the district commissioner (Bulthuis et al., 2021; Malawi Government, 1998a, 1998b, 2013).

Figure 13-6: Structure of a district council



Source: Malawi Government (2013)

As shown in Figure 13-6, the council has numerous service committees, one of which is for health, and the council secretariat is made up of several directorates, one of which is the Directorate of Health and Social Services (Bulthuis et al., 2021; Malawi Government, 1998a, 1998b, 2013). The District Health Management Team (DHMT) that is responsible for managing the district hospitals falls under the Directorate of Health and Social Services (Borghi et al., 2018; Bulthuis et al., 2021). Each district council develops a district implementation plan with a detailed annual work plan and budget (Borghi et al., 2018).

Before the emergence of the COVID-19 pandemic, restructuring in the health sector continued to unfold in light of the Decentralization Policy of 1998 and the Local Government Act of 1998. The implementation of reforms in the administration of healthcare services at both the national and sub-national levels is one aspect of restructuring following decentralization. Healthcare services were previously

administered countrywide under five zones comprising quality improvement support teams at the district level (Bulthuis et al., 2021; Malawi Government, 2017c). In 2017, the zones and Quality Improvement Support Teams were replaced by quality assurance roles of the quality management directorate under the Ministry of Health, guided by a new policy framework called Quality Management Policy (Bulthuis et al., 2021; Malawi Government, 2017c). The quality management directorate was created in November 2016 to provide health sector-wide strategic leadership and coordinate quality management efforts by the Ministry of Health (Malawi Government, 2017c). Currently, there are quality management officers at the national, district, and community levels as well as a health sector working group, which is the national multi-sectoral steering committee responsible for oversight in the implementation of the Quality Management Policy (ibid).

In the wake of decentralisation, the DHMT was also restructured. The district health officer, as the head of the DHMT, whose office was previously located at a district hospital, was replaced by a director of health and social services based at the district council, as shown in Figure 13-6 above (Bulthuis et al., 2021). The DHMT is now headed by the district medical officer, based at a district hospital, who directly reports to the director of health and social services (ibid). In contrast, health services at the tertiary level provided by central hospitals remained dependent on the Ministry of Health for operational decisions (Malawi Government, 2018a, 2020d). Within the framework of the Decentralization Policy of 1998 and the Local Government Act of 1998, the Malawi Government set 31 December 2020 as a deadline for the completion of the devolution of strategic and operational management of all central hospitals to the board of trustees (Malawi Government, 2020d).

6.2.2. Emergency Human Resources Programme

Before the COVID-19 pandemic emerged, restructuring also occurred in the health sector through the Emergency Human Resources Programme (EHRP). The restructuring of the health sector under the EHRP brought about drastic changes in the roles and responsibilities of COs vis-a-vis medical doctors. Perhaps, before proceeding to illustrate restructuring in the health sector under the EHRP, a contextual background is necessary. The period between 2000-2006 is probably the climax in terms of registering the most significant contributions in clinical practice by COs at the

national level. For instance, by 2006 a good number of COs had upgraded their qualifications to postgraduate level including PhD (doctoral) degrees.

Figure 14-6: Prof. Felix Salaniponi graduated from the second cohort of locally trained clinical officers



Source: Harries et al. (2014)

While some DHMTs were still being led by COs as district health officers by 2004, some COs were also in charge of various programmes under the Ministry of Health as programme managers, like the National Tuberculosis (TB) Control Programme, the National Malaria Control Programme, and the Integrated Management of Childhood Illnesses, among others (Thetard & Macheso, 2004). Programme Managers for the National TB Control Programme, Malaria Control Programmes, and Integrated Management of Childhood Illnesses were COs by the names of Prof. Felix Salaniponi, Alan Macheso, and Kelvin Nindi respectively. As of 2004, a CO by training named Edwin Nkhono had assumed the position of chief primary healthcare coordinator at grade P5 in the Ministry of Health. In addition, from October 2000 to March 2004, the Minister of Health was Hon. Yusuf Mwawa, who was himself a CO by training. During his tenure as Minister of Health, a few COs were promoted to grade 4. For instance, in November 2002, under Hon. Yusuf Mwawa's tenure as Minister of Health, Dr David Mtotha (PhD), a CO by training, was promoted from superintendent controller of

clinical services (grade P5) to deputy director of clinical services (grade P4). In 2006, one of the graduates from the second cohort of locally trained COs, called Prof. Felix Salaniponi, shown in Figure 14-6 above, was awarded a professorship by the University of Malawi (Harries et al., 2014). Soon after completing the CO training in 1981, he worked as a district health officer in Ntcheu district until 1991, when he moved to serve as programme manager/director at the National TB Control Programme for 17 years (Harries et al., 2014).

The heyday of COs ended after Hon. Yusuf Mwawa left as Minister of Health in March 2004. He was succeeded by a medical doctor called Dr Heatherwick Ntaba, who was appointed Minister of Health by a newly elected head of state, Prof. Bingu Mutharika, in June 2004. In April 2005, under Dr Heatherwick Ntaba, the Ministry of Health launched the EHRP as a response to an acute shortage of health professionals (Bailey et al., 2012; O'Neil et al., 2010; Palmer, 2006). This acute shortage of health professionals was therefore declared a crisis by the Ministry of Health in April 2004 (Palmer, 2006). Funded by international cooperating partners, the EHRP was designed to complement the implementation of EHP for 6 years (Bailey et al., 2012; Palmer, 2006). The EHRP was aimed at increasing the number of health professionals in Malawi through financial and non-financial incentives and a massive scale-up of pre-service training for health professionals (Bailey et al., 2012; O'Neil et al., 2010).

The implementation of the EHRP led to aspects of restructuring in the health sector, which had a bearing on the roles and responsibilities of COs vis-à-vis medical doctors. For instance, through donor funding and the government's subsidising of fees, the College of Medicine drastically increased its annual intake of new students, and the number of graduating doctors rose from 18 in 2004 to 51 in 2011 (Bailey et al., 2012). This resulted in a sharp increase in the number of qualified doctors available for employment in the health sector, where COs were still performing most of the roles and functions conventionally designated for doctors.

Table 8-6: Increase of health professionals in public & CHAM facilities (2004-2009)

Cadre	Total number of staff		Percentage (%) increase in 2009
	2004	2009	
Clinical officer	594	958	61
Nurse	3456	4812	39
Physician	43	265	516
Physiotherapist	10	40	300

Source: Bailey et al. (2012)

Table 8-6 shows how the number of health professionals employed by the Ministry of Health and CHAM increased from 2004 to 2009 in the wake of implementing the EHRP. As shown in Table 8-6 (above), the number of physicians and physiotherapists who were trained at the College of Medicine increased by 516 per cent and 300 per cent, respectively, from 2004 to 2009, while the number of COs rose by 61 per cent. Within 10 years after the launch of EHRP, some doctors had replaced COs in administrative positions previously occupied by COs. These positions included: district health officers, programme managers, and other top positions at the Ministry of Health headquarters.

"Around 2011-2013, that was a turning point for clinical officers in Malawi. That is the genesis of a wave of purging out clinical officers from top positions within the Ministry of Health. That is when doctors suddenly started to replace clinical officers in top positions. Some clinical officers were frustrated deliberately so that they resign on their own for doctors to take over. Other clinical officers were temporarily deployed elsewhere hoping that they would soon come back to these top positions to no avail. When some clinical officers retired from such top positions, they would mostly be replaced by doctors. Today, as we speak we only have one clinical officer serving as head of the District Health Management Team (in Karonga). Only one clinical officer is heading a national programme of the Ministry of Health. Since 2014, none of the clinical officers has ever been appointed to serve as deputy director or above at the Ministry of Health headquarters anymore. All these top positions were previously occupied by clinical officers. No longer do we have a clinical officer being promoted to grade P4 from P5 as it used to be in the recent past. Grade P4 is now a no-go zone area for a clinical officer" (Interview, key informant, President of PAUM).

For instance, in 2007, when Dr David Mtotha (PhD), a CO by training, was seconded to foreign service in South Africa as a health attaché, his position as deputy director of clinical services was filled by a medical doctor. When he returned from his secondment in 2011, he did not resume his duties as deputy director of clinical services. He was instead assigned other administrative duties at Kamuzu Central

Hospital in Lilongwe, where he retired from civil service in 2014. In 2012, Edwin Nkhono, another CO by training, became deputy director for preventive healthcare (grade P4) following the elevation of primary health services (for which he had served as chief coordinator) to a directorate. He worked as a deputy director in this new directorate for two years before he retired from the civil service in 2014. His successor was a nurse by profession.

Furthermore, through the EHRP, the Ministry of Health created new posts in the districts for medical doctors, such that each district hospital would have at least one medical doctor (Bailey et al., 2012). Before EHRP, some district hospitals had COs with no medical doctors to serve the rural population in the districts (Dovlo, 2004; Gajewski et al., 2019). However, the majority of doctors prefer working in urban areas to the rural areas where district hospitals are located, while COs are more willing to practise in rural areas (Muula, 2009). Most of the top managerial positions in the health sector are at the Ministry of Health headquarters in the capital city, where various programmes of the Ministry of Health are also hosted. Despite a significant improvement in the situation of human resources following the implementation of EHRP, the country continues to experience critical shortages of key health professionals such as COs, doctors, and nurses (Malawi Government, 2011b, 2017a, 2018b).

6.2.3. Functional reviews

Before COVID-19, there had been planning and implementation of functional reviews in the health sector under the coordination of the Human Resource Planning Section of the Department of Human Resource Management and Development at the Ministry of Health (Malawi Government, 2011b, 2020d). The functional reviews aim to establish new structures and functions in the architecture of health service delivery that reflects current needs while shedding off some responsibilities that may no longer be relevant (Malawi Government, 2018a, 2018b, 2020d). The Malawi Health Sector Strategic Plan for the 2011–2016 period stipulated a series of functional reviews for the health sector (Malawi Government, 2011b). The Ministry of Health had further planned to complete the reviews of functional and governance structures across all four levels of health service delivery by 30 June 30, 2021 (Malawi Government, 2018a, 2018b, 2020d).

Following functional reviews, there have been reconfigurations of some structures as well as the creation of new positions and functions in the health sector. In the first place, the creation of a new position called the clinical officer in 1976 was a result of functional reviews that had been conducted in the wake of an acute shortage of medical doctors (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014; Jiskoot, 2008; McAuliffe, Bowie, et al., 2009; Mkandawire et al., 2008; Muula, 2009; Muula, 2009; Muula, 2009). The introduction of COs into the architecture of healthcare service delivery is a good example of *task shifting* in the context of Malawi. Clinical officers were introduced as less qualified health professionals who would be recruited to serve as substitutes for medical doctors in the wake of an acute shortage of the latter (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014; Jiskoot, 2008; McAuliffe, Bowie, et al., 2009; Mkandawire et al., 2008; Muula, 2009; Bradley & McAuliffe).

Secondly, another outcome of functional reviews was the creation of a new position called *clinical technician* (Malawi Government, 2017a, 2018b). The rationale by the Ministry of Health is that in the civil service for one to be called an *officer,* he or she must possess is a university degree. The creation of a new position of *clinical technician* was an intervention to address an anomaly within the Ministry of Health in which some civil servants without a university degree, were being referred to as *officers*. The creation of this new position of clinical *technician* position by the Ministry of Health, therefore, resulted in a split among health workers over 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). However, the job descriptions for both clinical officers and clinical technicians have largely remained the same. While the designation of COs holding diplomas was downgraded to the 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 technician, 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 despite that 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).

Thirdly, in 2012, a unit for coordinating primary health services at the Ministry of Health headquarters was elevated to a directorate of preventive healthcare. New positions of director and deputy director, among others, were created for this directorate. In 2016, a new directorate at the Ministry of Health headquarters called the quality management directorate was created, along with new positions such as director and deputy director, among others. In 2018, functional reviews of the five central hospitals were conducted to improve efficiency in the delivery of healthcare provided at the central hospitals (Malawi Government, 2018a). All along, the five central hospitals have been managed by the central government through the Ministry of Health (Malawi Government, 2017a, 2018a). Among others, functional reviews recommended the transfer of authority over central hospitals from the Ministry of Health to boards of trustees (Malawi Government, 2018a). The Ministry of Health is currently operationalising this recommendation such that sooner or later, the central hospitals will be put under the management of board of trustees whose decisions will be independent of the Ministry of Health's control or influence.

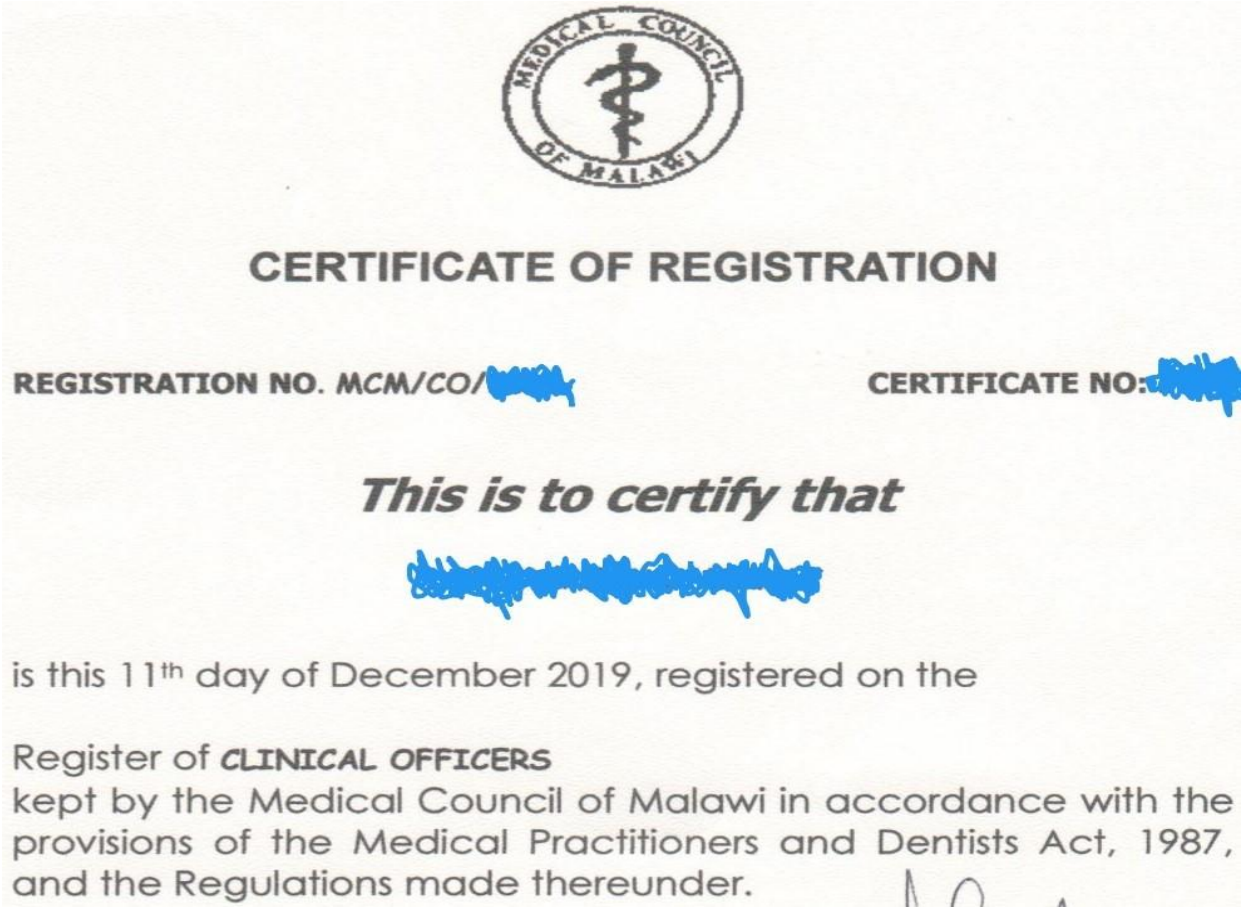
Lastly, due to budgetary constraints confronted by central and district hospitals to effectively deliver healthcare amidst ever-increasing demand, optional paying wings are being established at central hospitals and 5 out of 29 district hospitals (Malawi Government, 2020d). This is aimed at mobilising financial resources for healthcare at public hospitals (Malawi Government, 2020d). 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, namely: Queen Elizabeth Central Hospital, Nkhatabay District Hospital, and Mulanje District Hospital (ibid). These three hospitals were the study sites for my doctoral research.

6.3. Impact on occupational stress and burnout

The benefits of restructuring processes through decentralisation, EHRP, and functional reviews include empowering local authorities, improving the active participation of citizens in decision-making, cutting costs, and improving efficiency in healthcare (Bailey et al., 2012; Bulthuis et al., 2021; Malawi Government, 2013). However, restructuring in the health sector was also associated with increased risks of OS and burnout among COs before the COVID-19 pandemic emerged. In this section, I demonstrate how *task shifting* i.e., the use of COs as substitutes for medical doctors since 1976 and restructuring in the health sector contributed to OS and burnout among COs at public hospitals before the COVID-19 pandemic.

Firstly, one of the outcomes of functional reviews was the creation of a new position called *clinical technician* which resulted in a split among health workers in the position of CO between degree and diploma holders (Malawi Government, 2017a, 2018b). However, until the data collection period for my study, 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 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 *clinical technician*, the Medical Council of Malawi still recognised them as clinical officers. Figure 15-6 (below) shows a practicing licence for an individual whose highest educational qualification was a diploma. The holder of this licence was among the respondents in my study. During an interview, the holder of the licence shown in Figure 15-6 (below) still used the licence to practise as a legally registered clinical officer. This is despite being classified differently by the employer (the Ministry of Health).

Figure 15-6: License for practice as a clinical officer issued to a diploma holder



MEDICAL COUNCIL OF MALAWI

CERTIFICATE OF REGISTRATION

REGISTRATION NO. MCM/CO/[redacted] CERTIFICATE NO: [redacted]

This is to certify that

[redacted]

is this 11th day of December 2019, registered on the

Register of CLINICAL OFFICERS
kept by the Medical Council of Malawi in accordance with the provisions of the Medical Practitioners and Dentists Act, 1987, and the Regulations made thereunder.

Source: Medical Council of Malawi (2019)

The unbundling of CO position was implemented by the Ministry of Health without prior consultations with COs thereby contravening the classification of health professionals by the Medical Council of Malawi under the provisions of the law (Physician Assistants Union of Malawi, 1st 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, a key informant who spoke on behalf of the COs.

"Those of us holding diplomas, 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 who spoke on behalf of COs confirmed that the designation of *clinical technician* eventually caused deep-seated disenchantment, frustration, and depression with the entire restructuring process in the health sector. Such deep-seated disenchantment, frustration, and depression were associated with the escalation of OS and burnout among COs. The President of PAUM further mentioned that 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 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 which 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. And then, we can have a new position called associate clinical officer to refer to those holding diplomas who can then ascend to a full clinical officer upon upgrading qualifications to 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. But they have not dared to consider our submission on this matter"
(Interview, Key Informant, PAUM President).

Secondly, 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 reviews. According to Malawi Government (2020d) and Malawi Government (2018a), by the deadline of 30 June 2021, 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 regards 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, 2020d). According to some COs, such

disparities in functional reviews have increased their fears and anxieties about what will happen to their roles and responsibilities after functional reviews. This was corroborated by the president of PAUM as a key informant who spoke on behalf of the COs. The President of PAUM confirmed that COs feared that functional reviews would ultimately result in some of their roles and responsibilities becoming redundant or less valued. The PAUM president further indicated that complete functional reviews would ultimately culminate in additional tasks on their job descriptions while their emoluments remained static. Hence, the COs further feared that the problem of excessive workloads and long hours of work would be intensified by restructuring through the implementation of functional reviews. During interviews and focus group discussions, the COs associated such heightened fears and anxieties with the exacerbation of OS and burnout.

"There are reviews that 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 fears and uncertainties. It is stressful as you work when you think what might happen tomorrow with our jobs here" (Interview, 05/CO/02).

Thirdly, another outcome of the ongoing functional reviews that became a source of OS and burnout among the COs was the uneven distribution of decision-making positions at the Ministry of Health headquarters and the entire health sector. PAUM held that experienced and adequately qualified COs were being deliberately side lined when it came to appointments for top-level management positions. According to PAUM, the implementation of EHRP was the turning point. The EHRP led to a drastic increase in the number of newly graduated doctors being recruited into the public sector. In contrast, up until 2013, some COs occupied key decision-making positions in the health sector, such as director/deputy director and programme managers at the Ministry of Health or heads of district health management teams. During interviews, the retired COs and PAUM president confirmed that since around 2013, such top managerial positions have been dominated by medical doctors.

"There seems to be a conspiracy at the Ministry of Health to block the well-deserving clinical officers to get promoted beyond grade P5. As such, clinical officers stagnate in grade P5 while medical doctors progress further than P5 to P4 and beyond. For one to be appointed as Director/Deputy Director in the Ministry, one must be in P4 grade. This is why predominantly; medical doctors are appointed to occupy top management positions like directors and deputy directors without even undergoing interviews. This nepotism must be exposed, condemned and put to a stop" (Interview, Key Informant, PAUM President).

The uneven distribution of decision-making roles at the Ministry of Health has also remained on the list of grievances raised by the HRHC since 2020 (Human Resources for Health Coalition, 15 January 2021). Against this backdrop, PAUM on behalf of COs proposed further reforms to pave the way for a well-balanced representation of health professionals in top management positions across the entire health sector. PAUM particularly suggested that at the district level, the position of a district medical officer, to which only medical doctors were appointed, should be changed to deputy director of health and social services. PAUM's stance was that such a change would accommodate other health workers who were also qualified, such as COs to occupy the positions of both director and deputy director of health and social services through a transparent and competitive procedure which COs felt was lacking.

"At the Ministry of Health, medical doctors are favoured very much at the expense of other cadres of health workers like us clinical officers. Most of the key decision-making positions are occupied by medical doctors. This has been going on for a couple of years. We hear in the past, all cadres of health workers were valued by the Ministry and treated well. There is some sort of oppression that we sense being executed by medical doctors who dominate most of the key positions in the health sector. These medical doctors in key positions in the Ministry of Health impose some decisions on the rest of us even when it is against our wishes. As such, this tendency makes us feel out of place, frustrated, demotivated" (Focus group discussion, 03C).

Fourthly, as discussed above, under decentralization, the DHMTs were reconfigured. However, there was no clarity on the terms of reference (ToRs) for the reconfigured DHMTs, whose members were not furnished with job descriptions (Malawi Government, 2017a). This contributed to a myriad of challenges at the district hospitals, like poor supervision and a lack of support by the DHMT for the staff

members. This compelled the COs to develop a negative feeling that there was no recognition of their role on the part of DHMTs. For instance, on some critical matters concerning the general welfare of the COs, the COs mentioned that they would not be consulted by the DHMTs. In a few instances where they were substantially consulted, most of their views would subsequently be neglected. For example, COs at Chikwawa District Hospital and Nkhatabay District Hospital mentioned *staff rotations*. The DHMT in Chikwawa introduced staff rotation, whereby the hospital staff would be shifted to another department or unit after working in one department or unit for a while. Some COs at Chikwawa District Hospital raised concerns that staff rotation resulted in some COs being shifted to other departments or units under duress. They mentioned that if they had been consulted on staff rotations, they would have recommended the phasing out of staff rotation because some COs ended up being deployed to departments or units where they struggled to acclimate.

"When you are working, you need to be supported and appreciated by bosses to give you the feeling that what you are doing is valuable. No appreciation and no support bring about stress. At a workplace, one needs to be duly appreciated verbally or otherwise, but that is not the case here at our hospital. Most of the time, we see changes happening here without our input on how best to implement those proposed changes. Some of these changes would have a direct effect on our work as clinical officers" (Interview, 01/CO/04).

However, some COs at Nkhatabay District Hospital had a contrary view on *staff rotation*. They highlighted that there were no staff rotations at their hospital. But if they had been consulted by the DHMT, they would have recommended staff rotation be introduced. They mentioned that staff rotation would be beneficial in terms of professional development among COs. The COs at Nkhatabay District Hospital felt that staff rotation would provide an opportunity for COs to develop skills in each functional area of the hospital. Nevertheless, COs experienced frustration, depression, and anxiety due to a lack of recognition as a result of poor supervision and support by their superiors, as well as little or no consultations by their superiors on critical workplace issues.

Fifthly, another challenge connected to the lack of clarity on the ToRs of the DHMTs was the poor distribution of incentives among the staff, such as deployment to training

and workshops. The DHMTs are regularly requested to nominate staff to attend training and workshops at district, national, and international levels. At many of these training and workshops, participants receive a daily subsistence allowance. In terms of capacity development, training and workshops are critical for health workers. Training and workshops, for example, provide a platform for health workers to learn new ideas and methods of work, as well as to form new relationships that are essential for their clinical practice. The knowledge that health workers grasp from training and workshops, therefore, helps them improve their clinical skills and performance at the hospital. However, COs complained about cronyism in the nomination of names for training and workshops. During interviews and focus group discussions, some COs mentioned situations where the same individuals were always nominated for training and workshops. Some COs became frustrated and depressed that they did not get opportunities for training and workshops. They felt that opportunities for workshops and training were always allocated to a handful of health workers favourably selected by the DHMTs. Such frustrations and depression were associated with the exacerbation of OS and burnout among COs.

Sixthly, under a decentralised government, there are new challenges on how to deal with isolated human resources matters like opportunities for further education and staff relocations. For instance, some COs were denied an opportunity for further studies if the district implementation plan did not prioritise further studies for a particular cadre of health professionals during that year. Even if a member of staff was able to secure funding for the studies, the application for further studies would be denied. Sometimes the ceiling for the number of staff allowed to go on study leave for a particular year as per the work plan would be reached by the time one applied for a study leave. In instances when some COs nevertheless insisted on proceeding to do further studies, they received constant threats that their employment would be terminated for flouting procedure. This was another source of frustration, depression, and anxiety among COs who managed to raise funds for further studies on their own. During interviews with COs, such frustrations and depression were associated with exacerbation of OS and burnout among COs at the five public hospitals.

“In the past, our colleagues had opportunities to secure funds on their own and apply for study leave and go to study. But today, the system is changed such that even when you

have your sources of funding, you will be blocked to go for further studies. They will tell you that it is not your turn to go on study leave or that there is a shortage of staff so you can't go on study leave. Sometimes when you attempt to defer the scholarship since the bosses can't approve your study leave, you lose the scholarship and when you insist to go to study, they threaten you that you would lose employment altogether. So, it is frustrating and demotivating to some of us" (Interview, 01/CO/03).

Even when one's prospects to pursue further studies were supported by the district implementation plan and the annual work plan, exacerbation of OS and burnout were inevitable among COs. Upon completing further studies, COs expected that they would immediately be rewarded with promotions and the requisite emoluments. COs were disillusioned that this did not automatically happen when one returned to work upon completing further studies. At the five public hospitals, there were COs stuck on the same grade for 5 years or more despite upgrading their educational qualifications. Some COs were further disenchanted that upon returning to duty with higher qualifications, they would be assigned additional tasks while their grade and emoluments remained static. This caused frustration and depression among some COs. Such frustrations and depression exacerbated OS and burnout among COs.

"We have clinical officers in our membership who have had a chance to go for further studies to upgrade their qualifications. When they come back from studies, they get frustrated, depressed and bitter that they don't get instant promotion to a new grade. Their salaries remain the same while their responsibilities may increase. Some work for years after upgrading their qualifications without getting promoted. This is taken as a sign that your skill as a clinical officer is not duly recognised and valued. This is another source of stress among clinical officers that I can highlight. As a trade union representing clinical officers, we have been engaging the Ministry of Health on this issue of training and promotion" (Interview, Key Informant, PAUM President).

Before decentralisation, when staff was faced with a situation that required one to relocate to follow a spouse or due to other factors such as an unfavourable environment, they would make a request to the Ministry of Health to be redeployed to another district. The Ministry of Health would duly consider your request and assist accordingly. Under decentralisation, one cannot be transferred from one district hospital to another unless you first resign and then apply for a similar position in the

district to which you intend to shift. For some COs with intentions to relocate to another district for valid reasons, this was another source of frustration, depression and anxiety leading to exacerbation of OS and burnout among COs.

"Again, on decentralization, if you find yourself not on good terms with your superiors or the environment altogether is not conducive for you, then you have to live with that as there is no room that you can change work station as was the case before. The only way is for you to identify someone elsewhere in a similar position and also willing to relocate, then bilaterally negotiate to swap. However, it is always frustrating that the chances for you to succeed are slim" (Interview, supervisor 01).

Lastly, the President of PAUM indicated that COs anticipated that restructuring through decentralisation would, among others, lead to the fast-tracking of promotions for COs. In the wake of decentralisation, there were delays in implementing promotions among COs, such that scores of eligible COs did not get the promotions. Some COs had stagnated at the entry-level despite serving for 8 years and above.

"There are many of us who have served on the same grade for over 8 years without any promotion. Instead of being promoted, we got demoted from clinical officer to clinical technician. This is one reason one suffers from stress. So, because of that stress, you cannot even provide the services as a clinical officer according to the standard" (Focus group discussion, 03A)

The President of PAUM gave an example of one CO at Nkhatabay District Hospital and another at Chikwawa District Hospital who had stagnated on the entry grade of COs for 24 and 23 years respectively, without a promotion. According to PAUM, this violated Section 29 of the Malawi Public Sector Regulations, which state that every civil servant is eligible for promotion after serving in that position for at least four years (Malawi Government, 2017b; Physician Assistants Union of Malawi, 1 September 2020). The President of PAUM who spoke on behalf of COs, confirmed that delays in implementing promotions in the wake of decentralisation contributed to prolonged frustration, depression, and anxiety. Ultimately, such prolonged frustration, depression, and anxiety caused OS and burnout among COs.

6.4. Discussion

In this section, I discuss my interpretation of the results of restructuring as a psychosocial hazard at the five public hospitals before the COVID-19 pandemic emerged. I also demonstrate at conceptual and empirical levels how the results of my study relate to the literature. Day et al. (2017), Mathisen et al. (2017), and Hertting et al. (2004) argued that aspects of restructuring involved the possibility or experience of changing employment circumstances, relocation, and even job loss amidst existing staff shortages, work overload, long hours of work, and multitasking. The authors further associated restructuring with increased OS and burnout among health workers. This is consistent with the results of my study. The results of my study show that the restructuring process heightened fears and anxieties among some COs about what would finally become of their roles and responsibilities in light of decentralisation. The COs feared that functional reviews would ultimately result in some of their roles and responsibilities becoming redundant or less valued. The COs also feared that functional reviews would ultimately culminate in additional tasks on their job descriptions while the emoluments remained static, leading to an intensification of excessive workloads and long hours of work. I demonstrated that such heightened fears and anxieties exacerbated OS and burnout among COs.

6.4.1. Power

The interactions between COs and doctors hinge on power relations. To comprehensively understand the impact of restructuring on OS and burnout among COs at public hospitals, one first needs to recognise power dynamics between COs and doctors. In this sub-section, I analyse power relations between COs and doctors from three perspectives, namely: power through control, power through cooperation, and power as a process.

6.4.1.1. Power through control

There is a perspective that views control as the essence of power. Mechanic (1962, p. 351) postulated that power involves “force that results in a behaviour that would not have occurred if the force had not been present.” This entails the use of force to overcome resistance emanating from those subjected to power (Lucas & Baxter, 2012). Hence, power is regarded as an instrument for controlling and coercing others to maintain order and authority (Lucas & Baxter, 2012; Mechanic, 1962). According to Clegg and Dunkerley (1980), in organisations, some groups dominate others such that

the dominant groups can advance their vested interests through coercion. The dominant groups can also advance their interests through control of resources on which others depend, i.e., money, information, access to other persons, and decisions (Anderson & Brion, 2014; Mechanic, 1962). The COs perceive that the doctors, who dominate key decision-making positions in the health sector, exercise power over the COs and other health workers through control and coercion. The domination of key positions of power by doctors, which COs bemoan, entails a hegemony of ideas and thoughts among medical doctors. This hegemony entails that medical doctors can advance their interests by imposing ideas and thoughts on other health workers, including COs, through both persuasion and coercion. This explains why the COs feel frustrated, depressed, and alienated because there is always a bias towards medical doctors at the expense of COs when it comes to making some decisions at the Ministry of Health headquarters. Ultimately, such feelings exacerbate OS and burnout among COs.

The results of my study show that the COs still protest against a decision to unbundle the CO position and create a new position called a *clinical technician*. The decision was imposed on the COs through coercion amidst the COs' resistance from the onset. At the district level, COs also mentioned that some decisions were being imposed on the staff by the DHMTs without efforts to solicit inputs from the subordinates, including the COs. Despite their disagreement with such impositions by the doctors (supervisors to COs), COs eventually agreed. In this chapter, I have given examples of staff rotation to support the point about a lack of consultations. I later discuss more examples of the lack of consultation by the DHMTs in Chapter 7.

However, according to Deutch (1973), the use of control and coercion in an organisation can lead to harmful consequences such as alienation and resistance among those subordinated to power. To some extent, this is consistent with the results of my study. In the results of my study, I have unearthed the harmful consequences that occurred following the imposition of the decision to unbundle CO positions through control and coercion, despite the resistance among COs. The harmful consequences include deep-seated disenchantment, frustration, and depression among COs. I further illustrated that such deep-seated disenchantment, frustration, and depression contributed to OS and burnout among COs. The resistance among COs (as subordinates to doctors) that control and coercion by doctors (as supervisors to COs)

generates, is a potential source of interprofessional conflicts between COs and doctors. As I demonstrated in the results of my study, interprofessional conflicts lead to sour interprofessional relations as I illustrated in Chapter 5.

6.4.1.2. Power through cooperation

There is also a perspective that views cooperation as the essence of power. Follet (1973) developed a perspective on the power that is distinct from the notion of power through control. She contended that power can be viewed as shared with others and jointly exercised as non-coercive, with positive outcomes welcomed and supported by all stakeholders within an organisation. Such power motivates individuals to explore each other's abilities, value each other's input, and effectively influence each other through engagement, consultations, and the exchange of resources toward achieving organisational goals (Follet, 1973). This type of power appears to be consistent with COs' propositions on how power should be exercised. The COs through PAUM propose reforms to level the playing field for a well-balanced representation of all health professionals in top management positions across the entire health sector. The COs feel that such a change will accommodate other health workers with necessary qualifications such as COs, to occupy key positions of power through a transparent and competitive procedure, which the COs feel is lacking. The COs further feel that the even distribution of key positions of power among all health workers is a significant step to limit the use of control and coercion and foster power through cooperation.

However, I view that power through cooperation in the delivery of healthcare would be difficult to achieve owing to the sour interprofessional relations that exist between COs and doctors, which I highlighted in Chapter 5. The testimonies of COs confirm that interprofessional relations between COs and doctors are marred by tensions, rivalries, suspicions, and ruptures in trust between the two groups. In such an atmosphere, it may not be possible for COs and doctors to mutually practice power through cooperation.

6.4.1.3. Power as a process

Power can also be viewed as a process that continuously evolves (Anderson & Brion, 2014; Li et al., 2017). Anderson and Brion (2014) conceptualised that power evolves through three stages: acquisition, maintenance, and loss of power, to which I now turn as I continue to draw connections between restructuring and power.

i. Acquisition

In terms of the acquisition, Anderson and Brion (2014) argued that individuals perceived to possess superior competence and expertise are accorded power over others. In 1980, the 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. Since 1980, the majority of district hospitals have lacked qualified doctors (Dovlo, 2004). COs were the only available health professionals perceived to be superior in clinical practice at such district hospitals. The COs occupied key positions of power as substitutes for medical doctors.

As I demonstrated earlier in this chapter, following restructuring processes through decentralisation, EHRP, and functional reviews, by 2010 the number of doctors trained and recruited into the public sector had drastically increased. The doctors, who are perceived to possess superior training and competence in clinical practice, started to occupy their preeminent position in the architecture of health care service delivery. Doctors assumed key positions of power in the health sector as the number of doctors employed in the health sector increased. Some of these key positions of power had been held by COs since the 1980s. The results of my study provide evidence that there have been different moments since 1980 when COs and doctors assumed power within the health sector.

ii. Maintenance

According to Anderson and Brion (2014), there is a tendency for people in power and those subjected to power to justify a particular system or, rather, defend the status quo, including the hierarchical systems in which they find themselves. Furthermore, people who hold power strive to reinforce and maintain their preeminent positions (Anderson & Brion, 2014). When most of the district hospitals did not have doctors, it was justified as legitimate that COs could occupy the key positions of power amidst an acute shortage of doctors. This is why, since 1980, COs have held key positions of power in the healthcare. In contrast, today, with the number of doctors employed in the health sector having drastically increased, doctors have claimed or occupied their pre-eminent position in the health sector. It is justified for doctors to enjoy higher degrees of autonomy, responsibility, authority, and social status as compared to other health workers. This explains why the power that doctors wield in the health sector is currently maintained as legitimate.

iii. Loss of power

According to Anderson and Brion (2014), contextual factors beyond the control of those holding power may lead to the loss of power. As I demonstrated, restructuring processes through decentralisation, EHRP, and functional reviews, over which COs had no control, gradually culminated in the slipping of power from COs to doctors. This is the power that COs have acquired and maintained since the 1980s. Hence, I argue that the slippage of power is a situation against which COs feel disenchanted, frustrated, and depressed. As I also demonstrated, the COs feel that doctors 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' dominance of key positions of power, suitably qualified COs are deliberately side lined when it comes 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 the unbundling of the CO position, despite resistance from the COs. Such feelings of disenchantment, frustration and depression lead to OS and burnout among COs.

Overall, I have made a connection between the restructuring process and the exercise of power in Malawi. Beyond what is articulated in the literature I consulted, I have provided new knowledge in the context of Malawi on the connection between power and restructuring in the health sector. I have demonstrated that restructuring in the health sector in Malawi also led to the loss of power for some groups of workers (COs), while other groups of workers (doctors) simultaneously acquire it. I have further demonstrated how the process of losing power to another group of workers (COs) amidst restructuring, ultimately increased the risk of OS and burnout among those (COs) from whom power slips away.

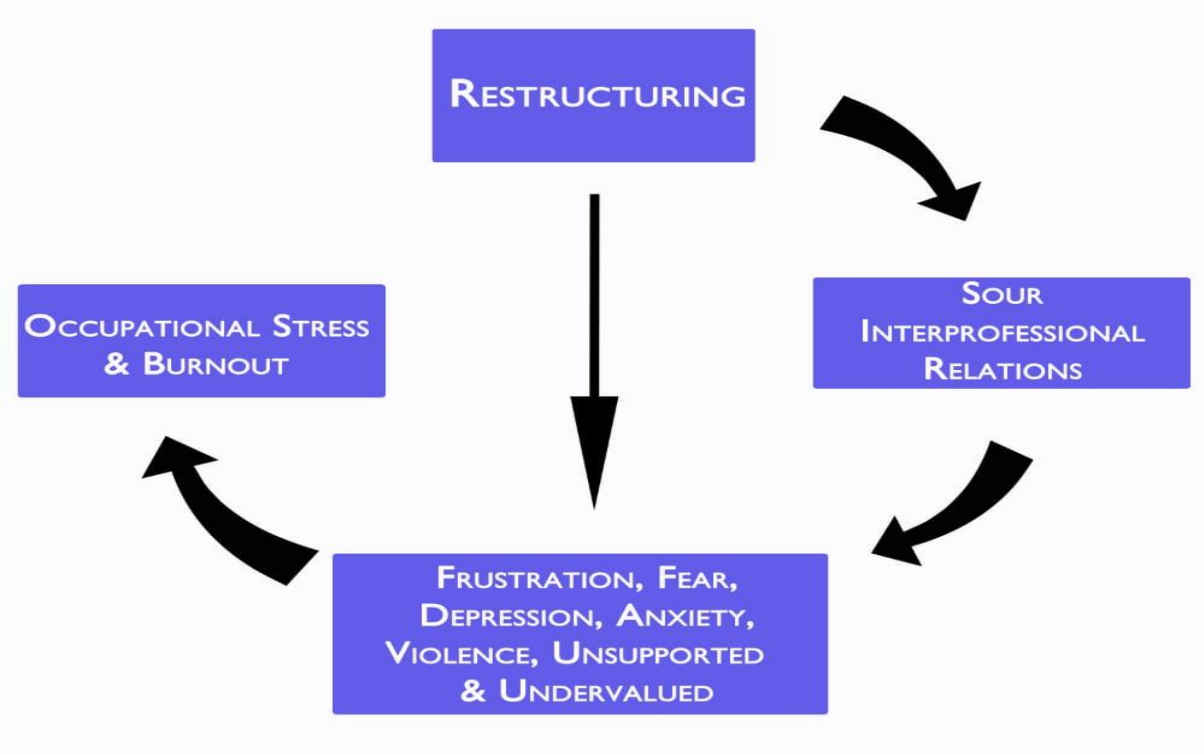
6.4.2. Identity crisis

Identity is a contested terrain over which individuals can wage a protracted struggle (Jenkins, 1996). Some studies show that identities among workers can affect their motivation, satisfaction, performance on the job, and loyalty to the employer (Ashforth & Mael, 1989; Dutton et al., 1994; Mael & Ashforth, 1992; Whetten & Godfrey, 1998). The COs who possess diploma qualifications regard the unbundling of the CO position as a demotion and an outright stripping of their identity as clinical officers. As I demonstrated in this chapter, the unbundling of the CO position, therefore, resulted in

an identity crisis among COs holding diplomas, which they continue to resist. I further illustrated that this identity crisis caused deep-seated disenchantment, frustration, and depression with the entire restructuring of health services, leading to an escalation of OS and burnout among COs. This may ultimately result in a decline in motivation, satisfaction, and performance on the job among COs as I illustrate in Chapter 9. In this chapter, I have provided evidence that draws an association between restructuring of health sector in Malawi and identity crisis. I have demonstrated that restructuring in the health sector has also led to an identity crisis among certain groups of workers (COs) that ultimately aggravates OS and burnout.

Both the loss of power and the identity crisis created by the unbundling of the CO position contributed to tensions, conflicts, and resentment among COs toward doctors (as CO supervisors) and the Ministry of Health (as employers). Such an atmosphere of tensions, conflict, and resentment provided fertile ground for soured interprofessional relations between COs and doctors. As I demonstrated in Chapter 5, sour interpersonal relations caused feelings of frustration, depression, and anxiety and were undervalued and unsupported among COs. COs also experienced violence from doctors and nurses through verbal aggression and bullying due to sour interprofessional relations. Ultimately, such an atmosphere of soured interprofessional relations aggravated OS and burnout among COs.

Figure 16-6: How restructuring negatively affects occupational stress and burnout



As shown in Figure 16-6 above, there are two ways in which restructuring increases the risk of OS and burnout among COs. Firstly, restructuring can directly cause feelings of frustration, fear, depression, anxiety, violence, and being undervalued and unsupported. Secondly, as shown in Figure 16-6, restructuring can also indirectly cause such feelings through soured interprofessional relations. Ultimately, such feelings result in OS and burnout, as shown in Figure 16-6.

6.4.3. Task shifting: source of occupational stress

From the discussions in this chapter, I conclude that *task shifting* in the form of using the COs as substitutes for medical doctors since 1976 subsequently became a source of OS and burnout among the COs. *Task shifting* (involving doctors to help the COs) provides a conducive environment for OS and burnout to emerge and exacerbate among the COs. As I demonstrated in this chapter, task shifting as far as COs are concerned has involved a loss of power among the COs, consequently the subjugation of the COs to power through control and identity crisis. On one hand, the experience of losing power, being subjugated to power through control and identity crisis are sources of OS among the COs. On the other hand, the experience of losing power, being subjugated to power through control and identity crisis have contributed to the exacerbation of sour interprofessional relations between COs and medical doctors. I

demonstrated that the exacerbation of sour interprofessional relations ultimately aggravates OS and burnout among COs.

Furthermore, the discussions in this chapter also confirm that, in the course of *task shifting*, the COs are deprived of sufficient supervision and support they require from their superiors due to soured interprofessional relations. Consequently, insufficient supervision and support exacerbate OS and burnout among the COs. This is consistent with Jiskoot (2008), Dovlo (2004), and McAuliffe, Manafa, et al. (2009). The authors concurred that in the course of *task shifting*, the COs are provided with inadequate resources, recognition, and support by doctors and hospital management, which leaves them demotivated.

6.5. Summary

In this chapter, I demonstrated that restructuring aggravated OS and burnout among COs at public hospitals before the COVID-19 pandemic emerged. I discussed that restructuring was implemented through three processes, namely: decentralisation, implementation of EHRP, and functional reviews. Against this backdrop, I considered restructuring a psychosocial hazard from outside the confines of the workplace. I also applied conceptual frameworks on power offered by various authors to demonstrate a connection between restructuring and poor interprofessional relations between COs and doctors. In the next chapter, I continue challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare by discussing COVID-19 responses. I categorise COVID-19 responses as examples of psychosocial hazards from outside the workplace.

.

Chapter 7

Occupational stress and burnout at public hospitals during the COVID-19 pandemic

7.1. Introduction

An outbreak of a new infectious disease known as COVID-19 was first detected in China in December 2019 (Gao et al., 2020; Iannone et al., 2020; Tsamakis et al., 2020). Caused by a virus known as SARS-CoV-2 (Bahl et al., 2020; Gao et al., 2020), COVID-19 was declared by the World Health Organisation (WHO) on 11 March 2020 as a global pandemic (Iannone et al., 2020; Mahajan & Sharma, 2020). On 2 April 2020), Malawi reported the first three COVID-19 cases to WHO (Li et al., 2021; Thekkur et al., 2021). By 14 April 2020, 16 more cases with two deaths had been registered in the country (Minister of Health, 14 April 2020). In this chapter, I advance two arguments. Firstly, I postulate that the COVID-19 pandemic emerged when health workers in general and COs in particular at public hospitals, were already grappling with OS and burnout. As I discussed in chapters 5 and 6, OS and burnout that COs experienced before COVID-19 emerged, emanated from a combination of psychosocial hazards. These psychosocial hazards include excessive workloads, long hours of work, poor interprofessional relations, and restructuring. To some extent, the COs' role in combating the COVID-19 pandemic, was hindered by OS and burnout to which they had been exposed by a combination of the above-mentioned psychosocial hazards.

Secondly, in this chapter, I continue to challenge the three implicit assumptions posed by the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare. I continue the challenge by using empirical evidence drawn from the experiences of COs during the COVID-19 pandemic. I argue that COVID-19 responses were psychosocial hazards from outside the workplace that predisposed health workers in general and COs in particular to OS and burnout. Among others, COVID-19 responses were manifested through the introduction of new processes on the job, new working procedures, and new tasks at public hospitals. Furthermore, as I illustrate in this chapter while responding to the COVID-19 pandemic, new problems and challenges emerged for health workers in

general. These new problems and challenges further increased the risks of OS and burnout among COs at public hospitals.

7.2. National COVID-19 responses

Before the first three COVID-19 cases were registered in Malawi on 2 April 2020 (Li et al., 2021; Thekkur et al., 2021), some steps had already been undertaken by the government as immediate responses to the COVID-19 pandemic. On 7 March 2020, the Head of State of the Republic of Malawi, Prof. Peter Mutharika established a special cabinet committee on COVID-19 and declared a state of national disaster on 20 March 2020 (Head of State of Malawi, 20 March 2020; Minister of Health, 14 April 2020). Thereafter, on 1 April 2020, the Minister of Health Hon. Atupele Muluzi declared the COVID-19 pandemic a formidable disease (Minister of Health, 14 April 2020).

On 9 April 2020, under section 31 of the Public Health Act, the Minister of Health announced Public Health (Corona Virus Prevention, Containment and Management) Rules which were gazetted on the same day (Minister of Health, 9 April 2020, 14 April 2020). Various containment measures to reduce transmission of coronavirus through minimising human-to-human contact were introduced under the Public Health (Corona Virus Prevention, Containment and Management) Rules (Li et al., 2021; Minister of Health, 9 April 2020, 14 April 2020). Schools and colleges remained closed for six months until September 2020, public gatherings and events were limited to fewer than 100 individuals, sitting capacity for public transport was reduced by 60 per cent, and restrictions were imposed on the number of employees physically reporting for duties at workplaces (Minister of Health, 9 April 2020, 14 April 2020; United Nations, 27 March 2020). Furthermore, wearing face masks in public, regular hand washing, sanitiser use, social isolation and disinfection of workplaces became mandatory (Minister of Health, 7 August 2020, 9 April 2020). The coming of commercial flights and foreign nationals into the country were halted, however all borders remained open for freight and returning residents who were subjected to a mandatory 14-day quarantine (Minister of Health, 9 April 2020; United Nations, 27 March 2020). The Public Health (Corona Virus Prevention, Containment and Management) Rules also stipulated the roles of public health authorities and various measures that could be imposed as part of COVID-19 responses (Minister of Health, 9 April 2020, 14 April 2020).

On 14 April 2020, the Minister of Health announced a national lockdown with effect from 18 April 2020 for 21 days (Minister of Health, 14 April 2020). There were protests against the impending national lockdown particularly among workers in the informal economy and civil society activists. There was a general feeling that a lockdown would choke the informal economy and eventually pose a catastrophic impact on the livelihoods of the masses who heavily relied on activities of the informal economy for income. On 18 April 2020, a court injunction was obtained against the impending lockdown (High Court of Malawi, 2020). Subsequently, an amendment to the Public Health (Corona Virus Prevention, Containment and Management) Rules was gazetted on 7 August 2020 (Minister of Health, 7 August 2020). Finally, on 10 September 2020, the national lockdown as a preventive and containment measure for the coronavirus was declared unconstitutional by the High Court (High Court of Malawi, 2020). Nevertheless, a 6-hour night curfew from midnight remained in force until the end of 2021 (Minister of Health, 28 November 2021).

On 29 April 2020, the Head of State of the Republic of Malawi Prof. Peter Mutharika transformed the cabinet committee on COVID-19 into a Presidential Taskforce which incorporated more stakeholders including representatives of political parties, trade unions and civil society organisations (Malawi Government, 2022b). Co-chaired by the Minister of Health, the Presidential Taskforce on COVID-19 is responsible for coordinating inter-governmental preparedness and response efforts during the COVID-19 pandemic (Malawi Government, 2022b). The secretariat of the Presidential Taskforce is located in the Office of the President and Cabinet (Malawi Government, 2022b). On 13 February 2022, the new Head of State of the Republic of Malawi Dr Lazarus Chakwera fired and suspended top officials of the Presidential Taskforce on COVID-19 for allegedly failing to account for funds spent on combating the pandemic (Head of State of Malawi, 13 February 2022). Among those fired was a co-chairperson of the Presidential Taskforce Dr John Chuka a medical doctor by profession. He was immediately replaced with Dr Wilfred Chalamira Nkhoma a CO with professional background.

Since 9 April 2020, Public Health (Corona Virus Prevention, Containment and Management) Rules have been amended several times depending on the situation of

the COVID-19 pandemic in the country, regionally and globally. By November 2021 the amendments had been implemented as shown in Figure 17-7 below.

Figure 17-7: Amendments to Corona virus prevention, containment and management rules by November 2021.



Adapted from Minister of Health (27 August 2021) and Minister of Health (28 November 2021).

In addition to the amendments shown in Figure 17-7 above, the Minister of Health (28 November 2021) further announced new measures on international travel with immediate effect as follows:

1. All arriving travellers including Malawi nationals would be required to show a negative polymerase chain reaction (PCR) test result that was no more than 72

hours old or a valid electronicCOVID-19 complete immunisation certificate at the point of entry in Malawi;

2. Arriving travellers without an electronic certificate at the point of entry would be required to receive the COVID-19 vaccine freely administered at the points of entry;
3. 10-day quarantine at own cost would be imposed on those who failed to produce a valid electronic COVID-19 certificate and refused the COVID-19 vaccine at the point of entry.

Starting from 1 June 2022, travellers fully vaccinated were no longer required to produce negative PCR test results (Minister of Health, 9 June 2022). Upon arrival in Malawi, visitors who were either not completely vaccinated or who did not have a valid electronically verifiable COVID-19 immunisation certificate were required to present negative PCR test results that were no more than 72 hours old (Minister of Health, 9 June 2022). In public, the use of face masks, frequent hand washing, the use of hand sanitisers and social isolation remained mandatory though no longer strictly enforced amidst significantly low levels of COVID-19 infections and deaths nationally, regionally and globally. The Minister of Health (7 October 2022) announced that with effect from 10 October 2022, the wearing of face masks would no longer be mandatory except inside health facilities, prison cells and public transport vehicles or vessels. In the same announcement, the Minister of Health also mentioned that the limitation on the number of people gathering at any place would also be lifted with effect from 10 October 2022 (Minister of Health, 7 October 2022). Nevertheless, the government continued to encourage the masses to receive COVID-19 vaccinations or get booster shots for those already vaccinated.

7.2.1. Re-organisation of work at public hospitals

The national responses to the COVID-19 pandemic led to the re-organisation of work at the five public hospitals in compliance with Public Health (Corona Virus Prevention, Containment and Management) Rules.

7.2.1.1. Introduction of new methods of working

Among others, the reorganisation of work at the five public hospitals in response to COVID-19 involved the introduction of new approaches to attending patients, guardians, and visitors; new working procedures; and additional daily tasks for health

workers. For instance, at the entrance of each hospital, a team was introduced. Each team was comprised of at least 1 nurse, 1 CO, 1 medical assistant, and 1 security guard. Anyone (including the staff) was screened for temperature right at the entrance by the team (s). Right at the entrance, there were also facilities for conducting COVID-19 tests on individuals who showed symptoms of COVID-19 like coughing, sore throats, high temperatures, breathing difficulties, etc. Inside the premises of the hospital, hand washing facilities were provided at entry points into the buildings. The wearing of face masks, social distancing, and frequent hand washing within the hospital premises became mandatory. The hospital staff was required to administer or monitor compliance with COVID-19 guidelines by patients, guardians, and visitors to public hospitals. This became an extra task for health workers at public hospitals in the wake of the COVID-19 pandemic. There were also information and communication materials posted around the hospital premises on COVID-19 preventive and containment measures.

Another change that was implemented at the five public hospitals in response to the COVID-19 pandemic was the handling of dead bodies of COVID-19 patients and the conduct of burials for deaths related to COVID-19. For every death related to COVID-19, only health workers were allowed to ferry the corpse from the hospital mortuary straight to the graveyard and conduct burial within 24 hours after death with no more than 10 mourners in attendance (Minister of Health, 7 August 2020).

7.2.1.2. COVID-19 Treatment Units

Another change that was implemented at the five public hospitals in response to the COVID-19 pandemic, was the establishment of COVID-19 Treatment Units (CoTUs) for the admission of COVID-19 patients. In the CoTUs, there would be team (s) comprising at least 1 nurse, 1 CO and 1 ward attendant plus 1 security guard. In the wake of a resurgence of COVID-19 in January 2021, the Ministry of Health established a makeshift hospital for COVID-19 in each of the four major cities namely: Zomba, Lilongwe, Mzuzu and Blantyre (Malawi Government, 2022a).

The number of team members in the CoTUs or COVID-19 makeshift hospitals was adjusted accordingly to match the number of COVID-19 patients in admission. In the case of Mulanje District Hospital, Nkhatabay District Hospital and Queen Elizabeth

Central Hospital, CoTUs were allocated ambulance (s) specifically for COVID-19 patients. The team (s) in the CoTUs/makeshift hospital worked in shifts. At the four district hospitals, teams were assigned shifts of 3-7 days during which the team members would work and stay in the CoTUs. In contrast, at Queen Elizabeth Central Hospital, the team (s) worked on a day/night shift of 7 days while operating from home on daily basis until the end of a shift. Guardians and visitors were not allowed in the CoTUs or makeshift hospitals. While in the other patients' wards, only one guardian was allowed at a time and visitors were completely barred to come inside the patients' wards. Everyone was required to observe social distance within the premises of the hospital.

"What we have also witnessed being introduced at our hospital as part of COVID-19 responses, is the introduction of COVID-19 Treatment Units. These units are staffed by splitting the already existing health workers in other departments/units. This has worsened the problem of excessive workloads in the departments/units which we were already grappling with before COVID-19 emerged. And you know, there is a risk allowance in cash that is paid to those who do a shift in the COVID-19 Treatment Units. So, everyone wants to go and work there to earn an extra income" (Interview, 01/CO/05R).

At the time of data collection, the teams working in the CoTUs/makeshift hospitals were entitled to risk allowances, whose amounts varied according to one's grade in the civil service. At the end of a shift, the team leader for the shift, who was normally a CO, prepared and submitted a report for the entire shift to the COVID-19 coordinator as a supervisor of the CoTUs. The report, among others, highlighted the number of patients admitted and discharged, the number of team members, the challenges the team members faced during the entire shift, and recommendations where necessary.

7.2.1.3. Aggravation of excessive workloads

The responses to the COVID-19 pandemic aggravated the pre-existing problem of excessive workloads and long hours of work at public hospitals in various ways. Firstly, the COVID-19 protocols that were introduced at public hospitals stipulated extra tasks for health workers. For instance, the COVID-19 protocols required all staff to administer or monitor compliance with COVID-19 preventive measures by patients, guardians and visitors to public hospitals. In addition, each hospital established separate ward (s) or unit (s) for admission of COVID-19 patients called CoTUs as

discussed above. These CoTUs were staffed by health workers split from other departments/units which were already confronted with a shortage of staff. This worsened the problem of excessive workloads in the departments/units where the staff deployed to work in the CoTUs were sourced.

Secondly, COVID-19 infections did not spare the hospital workers. When a health worker tested positive for COVID-19 or was in close contact with a person who had tested positive or was suspected to have contracted COVID-19, that worker was required to start a 14-day mandatory isolation. In some instances, a department of eight would have almost half gone into self-isolation for 14 days, leaving the remaining half to shoulder the workload for the other half. Upon completing a 14-day self-isolation, one was required to get a negative result for the COVID-19 test to be cleared to return to work. In some instances, COs and health workers, in general, would test positive again after a 14-day self-isolation, which meant going for an extra 7 days in self-isolation to get a negative result afterwards. The COVID-19 mandatory isolation worsened the prevailing problem of excessive workloads and long hours of work amid a shortage of staff at public hospitals.

"If your colleagues have tested positive for COVID-19, it means they are out for 14 days of isolating themselves. And on the ground, it will just be a few of you working under pressure to cover for those in isolation. Such a situation causes stress to you. Then you are further stressed that you can be the next to test positive for COVID-19 after them. So, the coming of COVID-19 has worsened the situation of stress among us" (Focus group discussion, 05B).

Thirdly, during focus group discussions, the COs confirmed cases of stigma against staff who had just recovered from COVID-19. At the start of the COVID-19 pandemic, anyone infected with COVID-19 would be labelled as a potential super spreader of coronavirus who should be avoided. Such stigma was also rife at workplaces, including healthcare facilities. For instance, at the five public hospitals, there were instances in which the remaining staff tended to shun coworkers coming from COVID-19 self-isolation, fearing that the colleagues would spread COVID-19 in the department or unit despite being cleared following a negative COVID test.

"It was stressing that If you ever tested positive for COVID-19 before, you would face discrimination from fellow workmates at the hospital upon returning to duty. That kind of treatment you wonder, how come fellow health workers who should have known better about this pandemic, would act that way against each other" (Interview, 03/CO/5R).

The COVID-19 protocols for the hospitals were amended in late December 2021 to allow staff who tested positive for COVID to continue performing duties instead of going into isolation. As a result, some coworkers would feel uncomfortable closely interacting with colleagues who were known to have tested positive for COVID-19. Upon recovery from COVID-19 or after completing a mandatory self-isolation or disclosing one's COVID-19 status after testing positive, some COs would prefer to report for duty late, knock off earlier, or abscond from duty altogether to avoid stigma at the workplace. This worsened the problem of excessive workloads and long hours of work among the remaining staff in departments, where some experienced stigma related to their COVID-19 status and then opted to report for duty late or knock off earlier.

"Like here at our hospital, there is a circular that was sent to all of us on the amendment of COVID-19 guidelines as the beginning of the new year (2022). The circular stipulated that all of us should nonetheless report for duties when we tested positive of COVID-19 or suspected that we were infected. As long as we were asymptomatic. Most of us became concerned and worried that we were being highly exposed to COVID-19 by mingling with colleagues at the workplace who should have been in isolation for 14 days. That was another source of fears, anxieties and stress among clinical officers and hospital staff in general. Of course, we understood the reason behind, that was to do with shortage of staff as most us were testing positive and going into isolation for 14 days. Very few health workers were available to work. So, it was indeed better for those who had no symptoms to report for duties to cover up" (Interview, 05/CO/5R).

7.3. Impact on occupational stress and burnout

When the COVID-19 pandemic emerged, COs at public hospitals had been experiencing OS and burnout due to a combination of psychosocial hazards that I discussed in chapters 5 and 6. These psychosocial hazards include excessive workloads, long hours of work, poor interprofessional relations, and restructuring. When the pandemic emerged, the COs were already grappling with incidences of overworking with little or no time to rest, prolonged exhaustion, and fatigue due to excessive workloads and long hours of work. Such incidences contributed to OS and

burnout among COs. Furthermore, as a result of excessive workloads and long hours of work before the COVID-19 pandemic, COs were confronted with challenges to attend to personal commitments like family errands and leisure activities. Such a conflict between time for work and personal commitments had aggravated OS among some COs before the COVID-19 pandemic. As I also discussed in chapters 5 and 6, before the COVID-19 pandemic, there had also been poor interprofessional relations and restructuring processes that contributed to feelings of frustration, depression, anxiety, resentment, and being undervalued and unsupported among COs. Ultimately, such feelings aggravated OS and burnout among COs. Against this backdrop, the COVID-19 pandemic found COs already experiencing OS and burnout as a result of excessive workloads, long hours of work, poor interprofessional relations, and restructuring.

To some extent, the COs' capacity to effectively perform their duties during the COVID-19 pandemic was hindered by the OS and burnout to which they had been exposed before COVID-19 emerged. The implementation of COVID-19 responses exacerbated OS and burnout, both of which COs were already dealing with. In Chapter 9, I demonstrate how OS and burnout hindered the capacity of COs to effectively execute their roles before and during the pandemic. For now, in this section, I focus my attention on illustrating how responses to COVID-19 exacerbated OS and burnout among COs. However, in responding to the COVID-19 pandemic, new problems and challenges emerged for health workers. These new problems and challenges also increased the risks of OS and burnout among COs at public hospitals. I also discuss how these new problems and challenges increased the risks of OS and burnout among COs in this section.

7.3.1. Shortage of PPEs and lack of lifesaving equipment

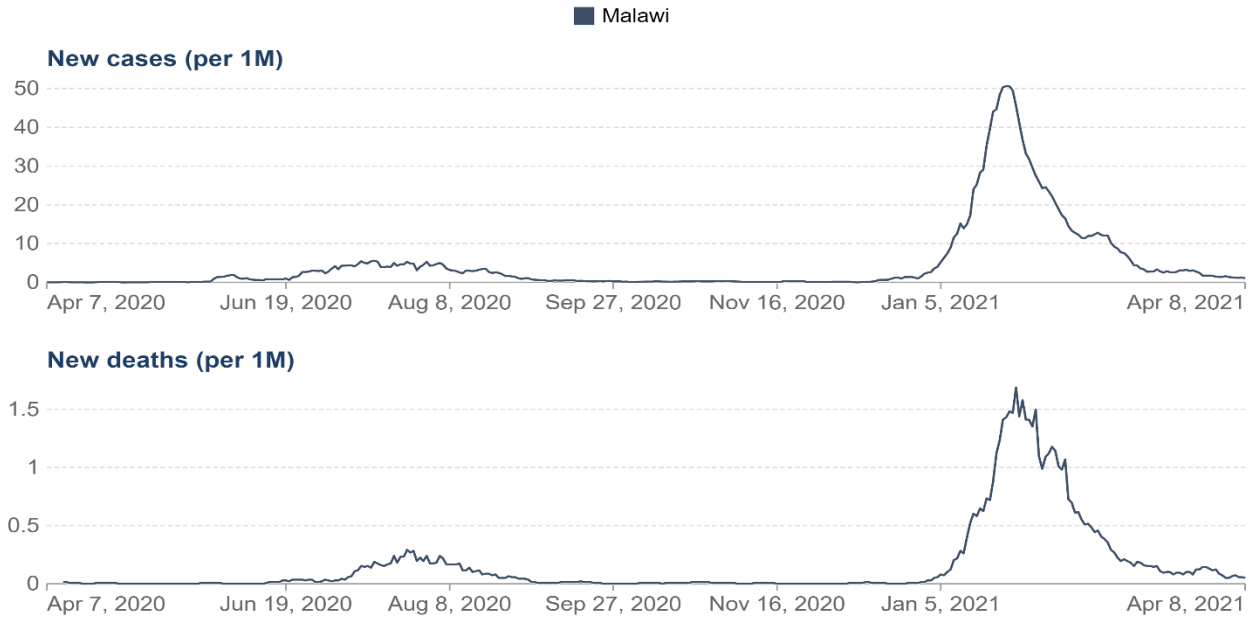
Interviews and focus group discussions with COs and document analysis confirmed that at the beginning of the COVID-19 pandemic, health workers in Malawi were faced with new workplace challenges and problems related to the COVID-19 pandemic. These new challenges and problems include inadequate PPEs for health workers and a lack of lifesaving equipment for COVID-19 patients. The inadequate PPEs and lifesaving equipment exacerbated feelings of depression, fear, and anxiety among COs. Ultimately, such feelings aggravated OS and burnout among COs. For instance,

during the first 9 months of the pandemic, public hospitals had inadequate PPEs against COVID-19, e.g., face masks, aprons, and face shields. Health workers, particularly those on the front line, were therefore exposed to a high risk of contracting COVID-19 in the course of duty.

"At the beginning of COVID-19, as health workers at this hospital, we were stressed. One reason for this stress was that the PPEs like face masks and sanitisers were not adequate. We would be working in this hospital without cushioning ourselves with PPEs. Sometimes you would be attending to patients with COVID-19 yet yourself you are not putting on any PPEs. This is how some of us including myself contracted the coronavirus in the course of duty. Even when you recovered from COVID-19, the shortage of PPEs still instilled fear in you that you would catch the coronavirus again and possibly die or infect other workmates or family members" Interview, 01/CO/05.

The shortage of PPEs instilled a sense of fear, depression, and anxiety among the COs, making them more vulnerable to COVID-19 than the general public. Furthermore, COs felt they were also putting others at work and home at high risk of COVID-19 infection by working without adequate PPEs. the sense of fear, depression, and anxiety caused by inadequate PPEs, heightened OS, and burnout, particularly during the early months of the COVID-19 pandemic.

Figure 18-7: Daily confirmed new COVID-19 cases & deaths per million people during 1st & 2nd waves



Source: World on data (2022)

Lack of lifesaving equipment like oxygen and oxygen cylinders also caused fears, depression, and anxieties among COs, particularly during the first and second waves of the COVID-19 pandemic.

"During the early months into the COVID-19 pandemic, at the public hospital, we had a shortage of oxygen and oxygen cylinders which critical COVID-19 patients would need to be assisted with breathing. During that period, we lost some COVID-19 patients whose lives would have been saved if we had sufficient amounts of oxygen and what have you. That scenario instilled fears and anxieties in all of us health workers particularly those on the frontline treating COVID-19 patients. That period was traumatising and stressful, to say the least." (Interview, 05/CO/05).

Figure 18-7 shows new cases and deaths during the first and second waves of the COVID-19 pandemic in 2020 and 2021. During the first and second waves of the pandemic, public hospitals had limited capacity to provide lifesaving equipment for critically ill COVID-19 patients with breathing difficulties. This contributed to the increased number of COVID-19-related deaths at public hospitals, which could have been prevented. The increasing number of COVID-19 deaths amidst a lack of lifesaving equipment at public hospitals, as shown in Figure 18-7 above, caused

feelings of fear, depression, and anxiety among COs. Ultimately, such feelings led to an exacerbation of OS and burnout among COs.

"Of course, the numbers of COVID-19 patients and deaths have now significantly gone down at our hospital and nationally, but there was a period when we were losing many patients daily at our hospital because we didn't have oxygen supplies for COVID-19 patients and PPEs were also not adequately available. To say the truth, that experience, was stressful for the staff." (Interview, 04/CO/05).

In response to this, HRHC threatened to stage an industrial action if the government did not swiftly act to provide adequate lifesaving equipment and PPEs at the health facilities (Human Resources for Health Coalition, 15 January 2021). The problem of inadequate lifesaving equipment and PPEs was alleviated when NGOs, private companies, and individuals of goodwill collaborated to mobilise financial resources to purchase and distribute the necessary equipment to public hospitals. This sort of collaboration started around January 2021, amidst the peak of the third wave.

7.3.2. The work environment in COVID-19 Treatment Units

During interviews and focus group discussions, COs described the work environment in the COVID-19 Treatment Unit (CoTUs)/makeshift hospital as generally stressful. When a team started a 3- to 7-day day or night shift in a CoTUs/makeshift hospital, it entailed being on duty beyond a normal 8-hour shift. It also entailed attending to COVID-19 patients 24 hours a day for 3–7 days. This further entailed no leisure and little time for one to sit down and rest since most cases in the CoTUs and makeshift hospitals were often critical, requiring constant observation. The COs who ever worked in the CoTUs or makeshift hospitals also testified of having witnessed critically ill COVID-19 patients struggling to breathe and dying in agony, especially when the equipment to assist with breathing was not available. Such a working experience in the CoTUs/makeshift hospitals caused fears, depression, and anxiety among COs, leading to the exacerbation of OS and burnout. The fears, depression, and anxiety would be heightened further when COs in the CoTUs/makeshift hospital eventually caught the infection and subsequently went into admission as COVID-19 patients.

Figure 19-7: Outside the COVID-19 Treatment Unit, Kamuzu Central Hospital on 18 Jan 2021.



Source: Masina (25 January 2021)

Secondly, the use of PPEs in the COVID-19 Treatment Unit/makeshift hospital also contributed to the exacerbation of OS and burnout among COs. Throughout the 3–7 days or night shift in the CoTUs/makeshift hospital, team members were required to put on PPEs for 24 hours. Among others, these PPEs included: surgical and non-surgical masks, gloves, goggles, face shields, gumboots, and gowns, as shown in Figure 19-7 above. The COs testified that adherence to the use of PPEs (shown in Figure 19-7) for a prolonged time in the CoTUs or makeshift hospitals was monotonous and burdensome.

"Whenever you are assigned duties in the COVID-19 Treatment Unit, you are supposed to put on PPEs for 24 hours throughout the entire shift of 7 days. Now imagine putting on goggles, face shields and face masks for 24 hours every day for 7 days. My colleagues and I have complained of physical discomfort caused by these PPEs. I can cite this as another source of stress when working in the COVID-19 Treatment Units" (Interview, 02/CO/05).

The use of PPEs in the CoTUs/makeshift hospitals became a source of physical discomfort, especially gloves, goggles, face shields, and face masks. During interviews, COs associated such physical discomforts with the exacerbation of OS.

Despite adherence to the use of PPEs, some members of the team working in the CoTUs, subsequently contracted the coronavirus. This cast doubt on the quality and effectiveness of PPEs in providing the necessary protection against the coronavirus. Such doubts heightened fears and anxiety among the COs that they would nevertheless contract coronavirus despite strict adherence to the use of PPEs. Such fears and anxieties exacerbated OS and burnout among COs at public hospitals.

Thirdly, the management of the CoTUs also caused feelings of frustration, depression, anger, resentment and marginalisation that exacerbated OS and burnout among the COs in particular and health workers in general. Working on a shift in a CoTUs/makeshift hospital was considered an incentive because one would earn an extra income through a daily risk allowance. In many instances, the shifts in the CoTUs/makeshift hospital were rotating among a handful of health workers. COs complained that there were no transparent and fair criteria for staff deployment to the CoTUs/makeshift hospital. At Balaka, Chikwawa and Mulanje District Hospitals, for instance, some could be assigned duties in the CoTUs 3-4 times when others in the same cadre had not worked there before. This became a source of anger and resentment among health workers who had never been deployed to CoTUs. They felt marginalised for being denied a rare opportunity to earn an extra income when others would be deployed to CoTUs for 3-4 times. Some COs who had never worked in the CoTUs/makeshift hospital also felt less valued by superiors for being side lined on the deployment to the CoTUs/makeshift hospital. The COs therefore associated such anger, resentment, and feelings of being marginalised and less valued with the exacerbation of OS.

"Another thing is that our COVID-19 coordinator seems to have no data on who has already worked at the COVID-19 Treatment Unit before, because some of us, this is our first time working at the COVID-19 Treatment Unit while others have been there for 4 times or more. Am I ware about some clinical officers who have never been deployed to work in the COVID-19 Treatment Unit. That is not fair at all" (Interview, 02/CO/05).

Those who had worked in the CoTUs/makeshift hospitals nevertheless experienced an exacerbation of OS due to frustration and depression over delays in the disbursement of COVID-19 risk allowances. Normally, members of a team were

supposed to receive their risk allowances as they commenced a shift in a CoTUs/makeshift hospital or upon completion of a shift. The purpose of the risk allowance was to enable one to use the money for cushioning from possible risks associated with close and prolonged contact with COVID-19 patients. However, some COs were frustrated and depressed that one would wait for 3–5 months to finally receive the allowances in cash, from which a tax was deducted. The COs mentioned that they were infuriated because the Minister of Finance had announced in Parliament in June 2019 that any risk allowance would no longer be subjected to tax. However, taxes were still being deducted on risk allowances for COVID-19. This was one of the COVID-19-related grievances raised by PAUM and HRHC with the Ministry of Health since COVID-19 pandemic emerged (Human Resources for Health Coalition, 15 January 2021). During interviews and focus group discussions, some COs partly associated OS and burnout with such grievances.

In January 2022, at Chikwawa District Hospital, members of a team were frustrated and depressed after a 7-day/night shift to learn that the risk allowances had been cut by 50 per cent without consultation with the staff or prior notice. They were informed that COVID-19 was transforming from being a pandemic to a normal illness like all other infectious diseases. As such, the approach to COVID-19 was being streamlined along with other illnesses in terms of intensity. Hence, the DHMT started a process of gradually phasing out the risk allowances for COVID-19. Unfortunately, the team that went into the shift during the first week of January 2022 was not duly informed about this decision to reduce the risk allowance by 50 per cent. The team members only realised with frustration that the risk allowances were reduced after they had already completed the shift in the COTU. During interviews and focus group discussions, some COs considered such frustration and depression as partly contributing to the exacerbation of OS and burnout.

Fourthly, the diet for staff in the CoTUs/makeshift hospitals was another source of frustration and depression, leading to the exacerbation of OS and burnout among COs. While team members working on a shift in the CoTUs or makeshift hospital were provided meals three times a day, in some instances, the diet was imposed on them. Besides, in many cases, the meals were not delivered on time. During interviews,

some COs indicated that some had to make arrangements for meals to be prepared at their respective homes.

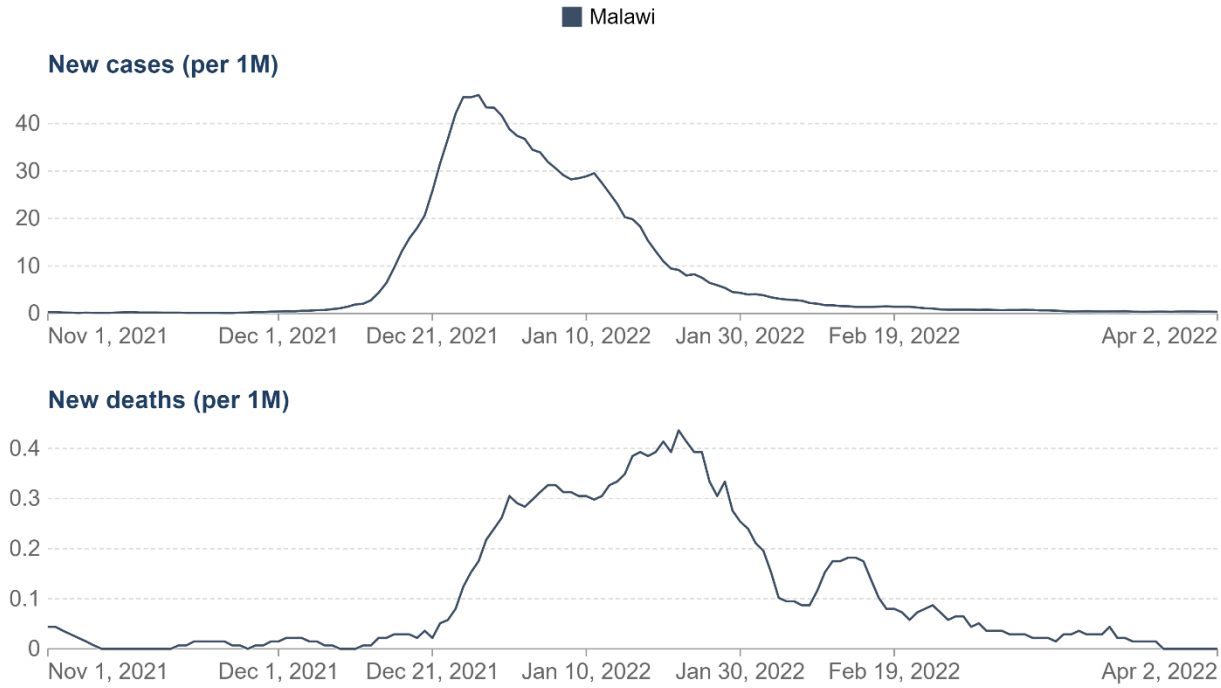
"I don't know other hospitals. But a COVID-19 Treatment Unit at the hospital where I work, provide meals for the staff that is on a shift. But the meals are terrible in terms of quality. When I was deployed to work there, I had to make some arrangements for meals to be prepared from my home and be brought to the COVID-19 Treatment Unit for me. That meant extra costs for me. You know working in the COVID-19 Treatment Units is already stressful and now to be given bad meals, that just worsened the stress. They need to improve the quality of meals for the staff working in the COVID-19 Treatment Units" (Interview, 03/CO/04).

Some team members incurred costs on meals and courier services for delivery of their meals at the CoTUs daily during the entire shift. Furthermore, some COs complained about the lack of essential items such as gumboots, washing powder for laundry, and air time for communication while working in the CoTUs. As a result of this, the COs working in the CoTUs started to feel frustrated and depressed over the diet, delays in the delivery of meals, and lack of essential items. Such frustrations and depression exacerbated OS and burnout among COs.

Lastly, periodic amendments of COVID-19 guidelines at the five hospitals were also associated with aggravation of OS and burnout. Before the Omicron variant emerged in November 2021, COVID-19 guidelines stipulated that when a team completed a shift in CoTUs or makeshift hospital, the team members should test for COVID-19. Even if the result came out negative, they were all supposed to proceed into 14 days of isolation to monitor the symptoms in case one of them contracted the coronavirus during a shift. After 14 days in isolation, they would then resume their regular duties. However, at the time of data collection, this COVID-19 preventive measure was not being implemented due to shortages of staff at the five hospitals. As such, straight from a shift at the CoTUs or makeshift hospital, members of the team were resuming their regular duties without undergoing the COVID-19 test or 14 days of isolation. This became a source of fear, depression, and anxiety among the COs that they would contract the coronavirus while on a shift and eventually infect fellow workers and their families at home. Such fears, depression, and anxieties exacerbated OS and burnout among COs at the five public hospitals.

"When a clinical officer is coming out of a shift in the COVID-19 Treatment Unit, you are supposed to go for self-isolation for at least 14 days which doesn't happen at our hospital here. We stopped having staff from COVID-19 Treatment Unit going straight into 14-day isolation as it used to happen during the early days of COVID-19 pandemic. But then, if you are exposed during your shift in the COVID-19 Treatment Unit, you might be infected as well and then obviously you might infect more people at your workplace and home. So, you become stressed to say you might infect your patients, your colleagues as well as your family members at home. This is how working in a COVID-19 Treatment Unit means in terms of stress"- (Focus group discussion, 04B).

Figure 20-7: Daily confirmed new COVID-19 cases & deaths per million people (Nov 2021-April 2022).



Source: Word on data (2022)

Amidst the rapidly increasing number of new COVID-19 cases and deaths in the wake of the fourth wave caused by the Omicron variant as shown in Figure 20-7, the COVID-19 guidelines for hospital staff were amended in early January 2022. Among others, the guidelines were amended as follows:

1. Hospital staff who tested positive for COVID-19 but did not show any symptoms were no longer required to go into 14-day isolation. Instead, they were directed to continue reporting for duty as normal (Queen Elizabeth Central Hospital, 3 January 2022). This was a measure to avoid increasing number of health

workers going into isolation upon testing positive of COVID-19, thereby heaping the burden of excessive workloads on the remaining staf reporting for duties.

2. Hospital staff who were not wearing proper PPEs at the time they came into close contact with a COVID-19 patient (s) or someone suspected to have had COVID-19 were no longer required to go for testing or go into isolation unless they showed symptoms (Queen Elizabeth Central Hospital, 3 January 2022).

In both scenarios, the hospital staff were directed to continue reporting for duty as normal amidst rising COVID-19 cases and deaths as shown in Figure 20-7 and the reintroduction of tighter restrictions to contain the Omicron variant wave (World Bank, 2021). Though such amendments were welcomed by COs as measures to partly address the shortage of staff; fears, depression, and anxieties were heightened among some COs. For instance, some COs felt they would be infected by fellow staff who had COVID-19 but were still coming to work. Such fears, depression, and anxieties exacerbated OS and burnout among COs at public hospitals. However, at this stage, the health workers were encouraged to receive COVID-19 vaccines. Health workers were among the priority groups in the COVID-19 vaccination campaign.

7.3.3. Violence against health workers

Violence against health workers also exacerbated OS and burnout among COs in the wake of the COVID-19 pandemic. Violence against health workers increased amidst reorganisation of work at the hospitals in response to the COVID-19 pandemic. A requirement that only health workers should conduct burials of COVID-19-related deaths within 24 hours and with no more than 10 mourners in attendance (Minister of Health, 7 August 2020) was culturally intolerable in some rural communities. There were instances in the districts of Balaka, Mchinji, Zomba, and Kasungu in 2020 and 2021 where community members assaulted health workers who were transporting COVID-19 dead patients to burial sites (Masina, 12 February 2021; Pensulo, 13 May 2020). In Balaka, COs mentioned a case in which community members physically attacked the health workers, snatched the corpse, and conducted a normal burial ceremony according to local customs.

“If someone had died from COVID-19, it was the health workers who were supposed to take the dead body to the graveyard and conduct burial. So, during that Balaka incident, the community members by force demanded the dead body from health workers to conduct a

funeral ceremony. Health workers had to flee with the dead body to a police station for their safety. The people run a mock, jumped into the ambulance and took the dead body out of the coffin, removed the material that is used to wrap a dead body when it is a COVID-19-related death, put back the corpse in the coffin and then carried the coffin to the village for a proper burial ceremony" (Interview, 03/CO/5R).

Misconceptions about the COVID-19 pandemic that were rife on social media also contributed to the escalation of violence against health workers. Some health workers were physically attacked for merely performing their duty of enforcing COVID-19 preventive measures within hospital premises. For instance, barring the entry of guardians or visitors into CoTUs/makeshift hospitals was misconstrued by some as an act to conceal nefarious activities that health workers were indulging in with COVID-19 patients. Some guardians would still attempt violent acts to force their way into CoTUs to be close to their relatives during admission. Some guardians or visitors would perpetrate violence on health workers in protest against COVID-19 preventive measures at public hospitals, such as the wearing of face masks and social distancing, based on misconceptions and rumours surrounding COVID-19 (Mzungu, 6 March 2021).

"You know, it is very funny at the same time frightening that ordinary people out there are accusing us health workers of deliberately spreading coronavirus. And they are physically attacking us right here at the hospital and in the communities, yet we are there to offer the healthcare they need. To say the truth, during this pandemic, we are living in constant fear and trauma as health workers because of all these unfounded rumours about COVID-19 which are pointing to us as the most evil people in the world. This is just adding salt on the psychological wounds of stress and burnout we were already experiencing before this pandemic emerged" (Interview, 01/CO/5R).

Rumours were also rife that, with instructions from the government, health workers were deliberately infecting patients with the coronavirus and poisoning COVID-19 patients to death. It was speculated that the reason was to bloat COVID cases and deaths for the government to attract funds from international cooperating partners in the name of combating COVID-19 and then divert the funds elsewhere. Such misconceptions and rumours surrounding COVID-19 led to acts of violence against health workers, such as physical assaults, refusal to access public transport, forced

evictions from rented houses, and verbal aggressions in the communities (Masina, 12 February 2021; Mzungu, 6 March 2021; Pensulo, 13 May 2020).

"During this COVID-19 pandemic, some of us clinical officers and health workers, in general, are living in constant fears and depression. We are being subjected to acts of violence at this hospital by patients and visitors and in the communities as well. Some members of communities are accusing us of deliberately spreading the coronavirus. We can't freely engage in the community as we used to do before COVID-19 emerged. By and large, we feel unsafe to be identified as a health worker in the community. COVID-19 pandemic has taught us an important lesson that it is stressful to be a health worker amidst a pandemic" (Interview, 03/CO/05).

Acts of violence against health workers prolonged feelings of fear, depression, and anxiety among COs. Such prolonged feelings led to the exacerbation of OS and burnout among COs. Health workers raised concerns about their safety in public, particularly in districts where incidences of violence against health workers had erupted amidst the COVID-19 pandemic. For instance, the HRHC demanded that public hospitals reintroduce the provision of transport for health workers to ferry them from their respective homes to work and back as a safety measure against violence against health workers (Human Resources for Health Coalition, 15 January 2021).

7.3.4. Diversion of resources

During interviews, some COs mentioned that the entire campaign against the COVID-19 pandemic contributed to the escalation of OS and burnout among COs. Since the first three COVID-19 cases were reported in Malawi on 2 April 2020 (Li et al., 2021; Thekkur et al., 2021), for two years the government had been preoccupied with curbing the pandemic. The COs testified that simultaneously, the vigour to fight against other infectious diseases that had always been among the leading causes of disability-adjusted life years (DALYs), e.g., malaria, HIV/AIDS, and tuberculosis, significantly declined. At the five district hospitals, the COs observed that available resources, priorities, and attention of the DHMTs were diverted from malaria, HIV/AIDS, tuberculosis (TB), etc. towards combating the COVID-19 pandemic. For instance, COs at Mulanje District Hospital testified that during the COVID-19 pandemic, the hospitals registered a sharp increase in outpatients defaulting on TB and HIV/AIDS treatment

due to the de-escalation of regular surveillance services. At the five district hospitals, TB case detection, HIV testing services, and the number of new patients registered for TB and HIV/AIDS treatment sharply declined during the first 12 months of the COVID-19 pandemic.

"When COVID-19 emerged, much attention was shifted to the COVID-19 pandemic. It is our observation that this shift of attention is at the expense of the focus on other illnesses on which as a nation we had already made significant strides. I am talking about TB and HIV/Aids for example. I work in a department that deals with TB/HIV Aids patients at this hospital. So yes, we will soon combat this COVID-19 given all the attention currently going on it. But soon, we will be faced with other serious health problems among the population coming in because we neglected the fight against other illnesses like TB and HIV/Aids in the name of combating COVID-19. We expect more and more stress after this pandemic." (Interview, 01/CO/05).

The diversion of attention raised fears, depression, and anxieties among the COs that, despite strides in curbing the COVID-19 pandemic, cases of other infectious diseases like TB, HIV/AIDS, and malaria may drastically increase. Finally, the increased workload of COs and health workers to respond to the resurgence of TB, HIV/AIDS, and malaria cases as a result of the diversion of resources, priorities, and attention to COVID-19 may place additional strain on their workload. The President of PAUM, as a key informant who spoke on behalf of COs, associated such fears, depression, and anxieties with the escalation of OS and burnout at the public hospitals amidst the COVID-19 pandemic. It was further observed by PAUM that the diversion of resources, priorities, and attention away from other infectious diseases towards the COVID-19 pandemic also worsened the shortage of essential drugs and supplies at public hospitals. The essential drugs and supplies, among others, included: lignocaine, diclofenac, ephedrine, tetracycline eye ointment, vitamin K, vitamin A, iodine, codex, chlorhexidine, cotton wool, surgical blades, nasal gastric tubes, urine bags, sterile gloves, scrub suits, theatre gowns, blood, blood bags, blood pressure machines, etc. (Association of Malawian Midwives and National Organisation of Nurses and Midwives of Malawi, 11 January 2022). Some COs mentioned that the attention and resources needed to ensure some essential drugs and supplies were readily available at the hospitals would be diverted towards curbing the pandemic. The COs and the President

of PAUM concurred that some patients died of deaths that could have been prevented if shortages of essential drugs and supplies had not been aggravated by the diversion of resources, priorities, and attention towards the COVID-19 pandemic. As a result of the worsening shortage of essential drugs and supplies amidst the COVID-19 pandemic, COs experienced feelings of fear, depression, and anxiety. Such feelings ultimately exacerbated OS and burnout.

7.4. Discussion

In this section, I articulate my interpretation of the results on responses to the COVID-19 pandemic as psychosocial hazards from outside the workplace. In this section, I also demonstrate at conceptual and empirical levels how the results of my study relate to the literature.

7.4.1. Mentally unprepared to respond to the COVID-19 pandemic

Results of my study show that before the COVID-19 pandemic emerged, health workers in general and COs, in particular, were already experiencing mental health problems like OS and burnout. This is consistent with studies conducted on the mental health of health workers during the COVID-19 pandemic. Singh et al. (2021) revealed that, amidst the COVID-19 pandemic, the prevalence of mental health issues such as stress, anxiety, and depression was higher among health workers compared to the general population. Other studies have also confirmed that during the COVID-19 pandemic, health workers at public hospitals, particularly in emergency and intensive care services, were highly exposed to psychological pressure (Cullen et al., 2020; International Labour Office, 2020; Semo & Frissa, 2020; Tsamakis et al., 2020; Zhang et al., 2020). When the COVID-19 pandemic emerged, COs were mentally challenged to effectively perform their duties as far as OS and burnout were concerned. The OS and burnout that COs had already experienced before the COVID-19 pandemic, hindered their capacity to effectively contribute to efforts to curb the pandemic.

As I discussed in chapters 5–6, some factors cumulatively contributed to OS and burnout among COs at five public hospitals before the COVID-19 pandemic emerged. These contributing factors are excessive workload, long hours of work, poor interprofessional relations, and restructuring. These factors had already caused or increased the risks of OS and burnout among COs at public hospitals before the COVID-19 pandemic emerged. The emergence of the COVID-19 pandemic intensified the already pre-existing problem of OS and burnout among COs. In a way, the COs were dealt a double blow. The first blow was that the already pre-existing problem of

OS and burnout experienced before the COVID-19 pandemic emerged, was exacerbated during the pandemic. In other words, the extreme pressures of work to which the COs were exposed before the COVID-19 pandemic emerged were intensified during the pandemic. The second blow was the COVID-19 pandemic itself, which did not spare the health workers in terms of infections and deaths.

7.4.2. Reorganisation of work at public hospitals

As I discussed in this chapter, the result of the responses to the COVID-19 pandemic was the reorganisation of work at public hospitals through the introduction of new processes, working procedures, and tasks. I argue that these new processes, working procedures, and tasks intensified the problem of excessive workloads and long hours of work at public hospitals. The intensification of excessive workloads and long hours of work at public hospitals ultimately exacerbated OS and burnout among COs. The results of my study support Singh et al. (2021); Cullen et al. (2020); Semo & Frissa (2020); International Labour Office (2020); Tsamakis et al. (2020); and Zhang et al. (2020). These authors illustrated that amidst the COVID-19 pandemic, stress, anxiety, and depression were more common among health professionals due to drastic increases in workload following a dwindling number of staff as other health workers fell ill or went into quarantine. These results further extend the finding by Zhang et al. (2020) that overtime work, irregular hours, and overwork contribute to mental health problems for frontline health workers dealing with the COVID-19 pandemic.

The results of my study also show that violence against health workers increased amidst the reorganisation of work at the hospitals in response to the COVID-19 pandemic. Communities resorted to violence against health workers. Some health workers were physically attacked for merely performing their duty of enforcing COVID-19 preventive measures within hospital premises, e.g., wearing face masks and social distancing. These results confirm studies by Chersich et al. (2020) and Tsamakis et al. (2020), who argued that during pandemics, some patients and guardians become unwilling to comply with safety precautions or collaborate with health staff. The authors further concluded that uncooperative patients and guardians eventually resort to violent attacks or aggressive actions against health workers. The results of my study further show that some misconceptions and rumours surrounding COVID-19 also led to acts of violence against health workers, such as physical assaults, refusals to access public transport, and forced evictions from rented houses. These results qualify

Zapf et al. (1996) and Cole et al. (1997), who argued that, among others, changes at workplaces through restructuring increased the risk of violence at workplaces, including bullying, aggression, and threatening behaviours. The findings corroborate the findings of Kearns, McCarthy, and Sheehan (1998) and Lee (2002), who linked occupational violence to aspects of work reorganization. The results of my study confirm that acts of violence against health workers during the COVID-19 pandemic created feelings of fear, depression, and anxiety among COs. Such prolonged feelings led to the exacerbation of OS and burnout among COs.

7.4.3. Shortcuts on health and safety requirements

COVID-19 responses led to cutting corners on health and safety requirements as hospital management and health workers continued to grapple with excessive workloads and long hours of work amidst the already existing challenge of staff shortages. Before the Omicron variant emerged in November 2021, COVID-19 guidelines stipulated that when a team completed a shift in the CoTUs or makeshift hospital, the team members should test for COVID-19. Even if the results were negative, they were all supposed to be isolated for 14 days to monitor symptoms in case one of them contracted COVID-19 during a shift. After 14 days in isolation, they would then be cleared of COVID-19 and resume their regular duties. However, when I was conducting data collection, this health and safety requirement was being flouted due to shortages of staff at the five hospitals. As such, straight from a shift in the CoTUs or makeshift hospital, members of the team resumed their regular duties without undergoing a COVID test or 14 days of isolation. This shortcut on health and safety requirements instilled more fears, depression, and anxieties among COs that ultimately exacerbated OS and burnout.

In addition, amidst the rapidly increasing number of new COVID-19 cases and deaths in the wake of the fourth wave caused by the Omicron variant, the COVID-19 guidelines for hospital staff were amended in early January 2022. The hospital staff who tested positive for COVID-19 were allowed to report for duty as long as they were asymptomatic. Such an amendment, which made sense in terms of addressing the challenge of staff shortages, legitimised a shortcut to health and safety requirements as far as COVID-19 safety measures were concerned. This shortcut on health and safety requirement instilled more fears, depression, and anxiety among COs that ultimately exacerbated OS and burnout.

During the first 11 months of the COVID-19 pandemic, public hospitals faced challenges due to inadequate PPEs against COVID-19, e.g., face masks, aprons, and face shields. Health workers, particularly those on the front line, were still compelled to perform their normal duties despite being exposed to a high risk of contracting COVID-19 in the course of duty. The shortage of PPEs instilled a sense of fear, depression, and anxiety among the COs, making them more vulnerable to COVID-19 than the general public. This supports Cullen et al. (2020) argument that during the COVID-19 pandemic, health workers were further prone to fear, depression, and anxiety as they worked under the continuous threat of getting exposed to and infected by COVID-19 amidst a lack of sufficient PPEs. Compelling the hospital staff to work without adequate PPEs amidst the pandemic is another good example of cutting corners on health and safety requirements.

Abdulraheem et al. (2012) and Akagbo et al. (2017) argued that health workers tend to feel that their work schedules are further loaded by adhering to standard precautions such as the use of PPEs. For example, wearing PPEs that cover the entire body (or a considerable portion of it) may trap heat and sweat, restricting the body's protective function of evaporative cooling, and thereby causing breathing difficulties for some health workers (International Labour Office, 2020; Tsamakis et al., 2020). This is consistent with the results of my study. I discerned that frontline health workers in CoTUs (including COs) found the prolonged use of PPEs to be burdensome. Hence, there is a possibility for health workers in general and COs, in particular, to cut corners with health and safety requirements as far as standard precautions for the COVID-19 pandemic are concerned.

In the final analysis, I concur with Kumar and Nayar (2020) that, in the wake of a pandemic, the mental well-being of health workers should be regarded as critically important as managing the health of the infected population. This entails that as the government prioritised testing, reducing transmission, vaccinations, and critical care of COVID-19 patients, mental health and psychosocial support for health workers should have been integrated into COVID-19 responses (Chersich et al., 2020; Christopher et al., 2020; Cullen et al., 2020; Semo & Frissa, 2020; Singh et al., 2021).

7.5. Summary

In this chapter, I demonstrated that when the COVID-19 pandemic emerged, COs were already confronted with challenges related to OS and burnout that hindered their capacity to effectively perform their roles amidst the COVID-19 pandemic. I also demonstrated that COVID-19 responses were psychosocial hazards from outside the workplace that aggravated OS and burnout among COs through reorganisation of work at public hospitals. In the next chapter, I continue challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare by turning to another psychosocial hazard from the confines of the workplace. This psychosocial hazard is the absence of OSH management systems.

Chapter 8

Policy and theoretical perspectives on occupational stress & burnout at public hospitals

8.1. Introduction

In chapters 5–7, I discussed psychosocial hazards that caused or increased the risks of OS and burnout among COs before and during the COVID-19 pandemic. These psychosocial hazards are excessive workloads, long hours of work, poor interprofessional relations, restructuring, and COVID-19 responses. To a greater extent, these psychosocial hazards are currently inevitable and may take a long time to be alleviated at public hospitals. For instance, the government's budgetary constraints to fill existing vacancies in the public sector that contribute to excessive workloads and long hours of work are perennial problems that the country may continue to grapple with for years to come. Given the power dynamics between COs and medical doctors since 1980, interprofessional rivalries, tensions, and conflicts between the two groups are unavoidable. Restructuring through decentralisation and functional reviews in the health sector, intended to improve efficiency in healthcare, are currently ongoing. Against this backdrop, I argue that psychosocial hazards can hardly be eradicated. COs and health workers at public hospitals will likely continue to grapple with these psychosocial hazards for the foreseeable future. However, the negative impacts of these psychosocial hazards on the mental well-being of COs and health workers in general, can be minimised in the immediate and short term. In this chapter, I discuss how these negative impacts can be minimised in the immediate and short term.

Having identified the above-mentioned psychosocial hazards at public hospitals, I sought to investigate if there were organisational efforts to minimise or avoid the impacts of the psychosocial hazards on the mental well-being of the hospital staff. I discovered that at the five public hospitals, there were no organisational efforts to regularly identify OSH hazards. Neither were there organisational efforts to assess the impact of various OSH hazards on the mental health of hospital staff and then devise measures for mitigation. In this chapter, I argue that the lack of such organisational efforts is a sign of a poor safety culture at public hospitals. Consequently, COs at public hospitals are overwhelmed with frustrations, fears, and anxieties that their work

environment is unsafe to a greater extent. Such frustrations, fears, and anxieties over safety and health at work ultimately exacerbate OS and burnout among health workers. Against this backdrop, I further argue that the absence of organisational efforts to avoid or minimise the negative impacts of psychosocial hazards exacerbated OS and burnout among the hospital staff before and during the COVID-19 pandemic. The absence of such organisational efforts is therefore a psychosocial hazard from the confines of the workplace. Finally, in this chapter, I use a theoretical lens to continue challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare. In this regard, I argue that the factors identified by COs as sources of OS and burnout, constitute job demands that interact with job resources to influence job engagement or disengagement among COs.

8.2. Occupational safety and health (OSH) management system

One factor that characterises the five public hospitals in Malawi is the non-existence of an occupational safety and health (OSH) management system. OSH management systems are a logical and coordinated approach for dealing with health and safety risks at the workplace (International Labour Organisation, 2001, 2011). OSH management systems are used as a framework to regularly monitor and improve performance and compliance with OSH regulations in efforts to eliminate or reduce OSH hazards at the workplace (ibid.). The absence of an OSH management system at public hospitals entails that there are no organisational efforts to regularly identify OSH hazards or assess the impact of OSH hazards on the mental health of hospital staff. It also entails that there are no organisational efforts to devise measures to mitigate the OSH hazards.

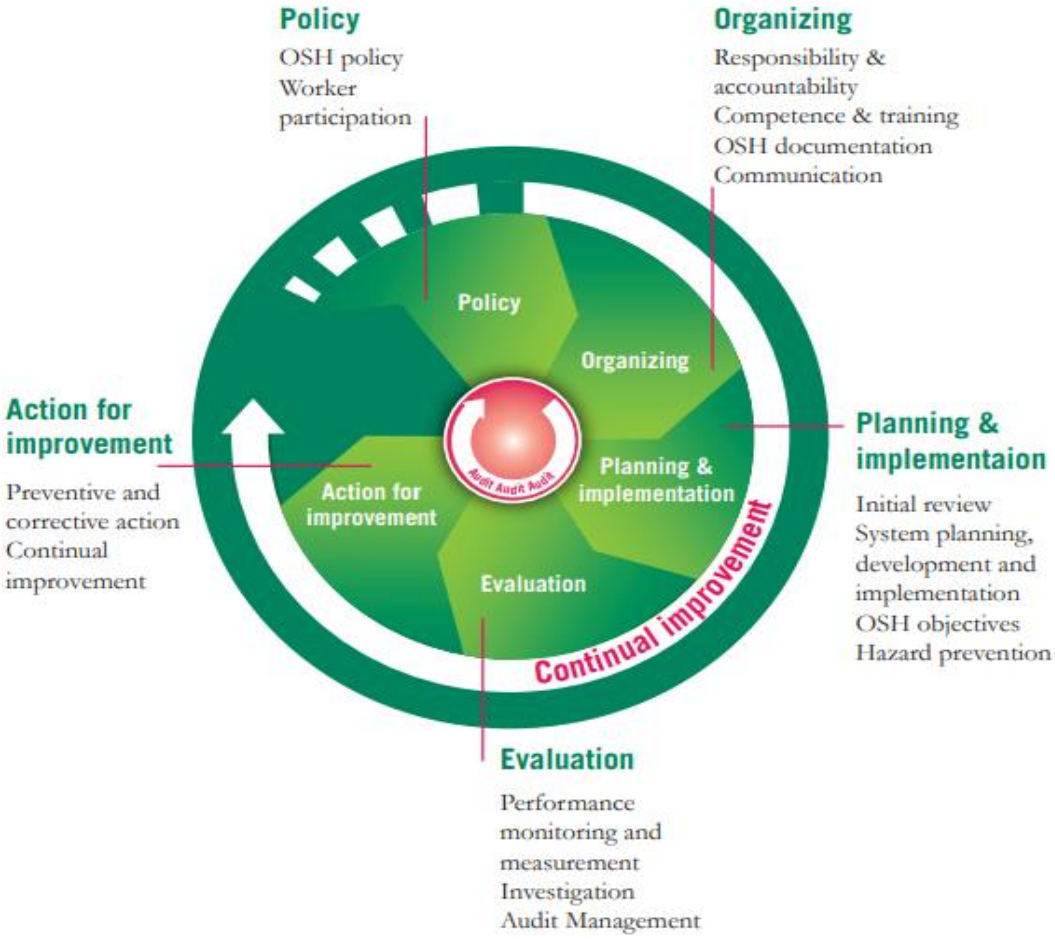
The immediate supervisors of COs concurred that COs' concerns on OS and burnout at public hospitals were valid. However, some immediate supervisors of COs indicated that OS and burnout at public hospitals was partly perpetuated due to lack of proactiveness among the COs. The immediate supervisors further mentioned that there was a tendency among COs to complain about OS and burnout while at the same time lacking the urge to engage the relevant structures at public hospitals on OSH hazards in general and OS and burnout in particular. The immediate supervisors of COs also mentioned that they anticipated COs to be proactive to recommend

practical solutions to the hospital management on how to effectively address OS and burnout.

"Of course, here at our hospital we don't have what is called OSH management system or a comprehensive policy OSH. However, we have an officer that we call Clinical & Medical Coordinator. This one is directly responsible for coordinating the healthcare service delivery at this hospital. We expect the clinical officers to consult or report their concerns around stress and burnout to this officer for remedial action to be taken swiftly. But these clinical officers do not engage this officer on OSH related matters. I can tell you that I once served as a Clinical & Medical Coordinator for over 5 years. During this period, I can't recall any incident when clinical officers brought to my attention or engaged me on issues related to OSH let alone stress and burnout. To some extent, it is pretty much the clinical officers who are at fault that they choose to suffer in silence with stress and burnout. Yes, stress and burnout are real but the clinical officers never bring these issues with the relevant officer (s) here" (Interview, supervisor 05).

Figure 21-8 shows elements of the OSH management system. An employer should show commitment and facilitate the establishment and implementation of an OSH management system that consists of key elements such as policy, organising, planning and implementation, evaluation, and action for improvement, as shown in Figure 21-8 (International Labour Organisation, 2001, 2011).

Figure 21-8: Elements of OSH management system



Source: International Labour Organisation (2011).

8.2.1. Policy

None of the five public hospitals had a comprehensive OSH policy specifically designed to promote the safety and health of the staff from all kinds of work-related injuries, accidents, ill health, and diseases. However, I discovered that the five public hospitals were implementing a government policy known as the *National Carers Workplace Policy*. The policy was launched by the Ministry of Health in December 2020 amidst the COVID-19 pandemic. The policy provides for the protection and support of health workers who are at risk of infectious and non-communicable diseases in the course of duty (Malawi Government, 2020b). This policy is an extension of the *2005 Care of Carers HIV/AIDS Workplace Policy* and supplements the *2006 Infection Prevention and Control Policy and Guidelines* (ibid).

During the interviews and focus group discussions I had with COs, I found out that not many of them knew about the *National Care of Carers Workplace Policy*. The policy is not readily accessible to all health workers at the five public hospitals. However, a few COs admitted that they had heard about the previous version of the policy. Their understanding was that the *National Care of Carers Workplace Policy* was still limited to assisting HIV/AIDS-affected or infected health workers. This suggests that there was little or no consultation and effective communication with COs during the drafting and launch of the *National Care of Carers Workplace Policy*.

"This Care of Carer Workplace policy focuses on the health workers who are suffering from illnesses like Hepatitis-B and HIV/Aids, but nothing else concerning stress and burnout or other occupational safety & health hazards in general. And most of us are not aware of this policy. Most of the staff here may have heard about it but not really about what its contents. I am talking about this district hospital where I am, I don't know about other health facilities" (Interview, 02/CO/04).

In Malawi, there is also a *National Mental Health Policy* that was launched by the Ministry of Health in April 2020 amidst the COVID-19 pandemic. The goal of this policy is to improve the mental health status of the population (Malawi Government, 2020c). Health workers at the hospitals are among the key stakeholders in the implementation arrangement for the policy (ibid).

"To be honest with you, at public hospitals mental health for staff is not a priority at all. Unlike in the private sector, at public hospitals, we don't have mental health personnel who are directly responsible to assist the staff with mental health problems like stress and burnout. The only services that are available on mental health issues, target the general public. These services are not designed to attend to occupational stress and burnout. Because of the stigma attached to mental illness, this leads to the hospital staff being paranoid or shy to put themselves among members of the general public seeking help on mental health just like any other outpatients" (Interview, 05/CO/02).

When COs were asked to rank the five categories of OSH hazards in terms of the severity of the problem to them, 18 out of 25 referred to psychosocial hazards as the most critical, while biological, chemical, physical, and ergonomic hazards were weighted as problems of relatively lesser concern. However, as far as public hospitals

are concerned, there are policy responses confined to biological hazards, i.e., *Care of Carers HIV/AIDS Workplace Policy of 2005, Infection Prevention and Control Policy and Guidelines of 2006, Standard Operating Protocol on the COVID-19 pandemic.* In contrast, no policy intervention has ever been formulated to address psychosocial hazards at health facilities, which most COs ranked as more critical as compared to the other four OSH hazards, i.e., chemical, physical, biological, and ergonomic hazards.

8.2.2. Organising

At the five public hospitals, I discovered a lack of commitment, responsibility, and leadership for the protection of health workers from all five categories of OSH hazards. For instance, at the five public hospitals, there was no designated office, unit, or department assigned by the Ministry of Health with authority for the development, implementation, and reporting of aspects of the OSH management system. No hospital had an officer or focal person representing either management or the workers who would be liaisons between the hospital staff and management on safety and health matters.

"Occupational safety & safety is one of the neglected areas at public hospitals. I can tell you that we don't have a unit or department responsible for occupational safety & health in public hospitals. I have never seen or heard about a focal person or office dealing with occupation safety & health hazards at a public hospital since I joined the Ministry of Health over 10 years ago coming from an organisation in the private sector where there was one"
(Interview, 05/CO/05).

I further found out that none of the five public hospitals had a procedure for documentation of all OSH hazards and risks arising from various activities and processes at the workplace. For instance, when I requested for data on injuries and accidents that happened at the five hospitals as recently as 2020 and 2021, I was informed that the hospitals did not keep such OSH records. Instead, I was directed to check such records at the police stations. Even the records on OSH at the Ministry of Labour do not contain data on occupational illnesses, injuries, or accidents from hospitals. The inspections, monitoring, and reporting on occupational illnesses, injuries, and accidents by the Ministry of Labour do not cover hospitals. This is

because, by law, the coverage of OSH regulations excludes service sectors like healthcare. Furthermore, at the five public hospitals, there were no workplace platforms on OSH through which the hospital staff and management would consult each other, discuss, and jointly develop interventions to promote safety and health at the hospitals. In the absence of such workplace platforms on OSH, there were no discussions, consultations, negotiations, or joint actions between hospital staff and management towards addressing health and safety problems, including OS and burnout.

8.2.3. Planning & implementation

I established that at the five hospitals, there were no procedures to identify and regularly assess OSH hazards or risks to health workers at a particular hospital. The five public hospitals did not have preventive and protective measures to either eliminate, control, or minimise psychosocial, physical, and ergonomic hazards. I also established that management at the five hospitals did not organise and conduct training at the workplace or elsewhere to raise awareness and drill staff on how to perform job activities safely and avoid or minimise risks to their health. The key informants also stated that in the absence of OSH training, most hospital employees would be unaware of what they should and should not do in terms of safety and health while performing their duties.

Furthermore, there was no communication on the overall performance of OSH at the five public hospitals. The COs disclosed that communication on OSH at the five public hospitals was poor. Except for biological and chemical hazards, there were no communication materials provided in all departments warning the hospital staff, patients, and visitors about the five categories of OSH hazards and stipulating necessary preventive measures. In addition, when an accident or injury happened in one department or unit, health workers in other departments or units at the same hospital would not be aware of the incident or the preventive measures taken to avoid recurring of an accident.

8.2.4. Evaluation

None of the five hospitals had procedures in place to regularly monitor, measure, and record the hospital's performance on all five categories of OSH hazards. For instance,

no periodic OSH audits were being conducted to determine the extent of safety and health at the hospitals as a basis for action for improving OSH performance and compliance. The COs indicated that when accidents like fires occurred at the hospital, they were treated like police cases whose investigations were conducted by the police. There were no further efforts by management and workers to jointly conduct thorough workplace investigations to gather and analyse the information surrounding occupational accidents. Furthermore, there were no efforts to identify OSH risks and control measures and then develop necessary action plans for implementation to prevent reoccurring of occupational accidents, injuries, and diseases.

8.3. Discussion

In this section, I articulate my interpretation of the results on the absence of OSH management systems at public hospitals. I also demonstrate how the results of my study conceptually and empirically relate to the literature. Finally, to complement the conceptual and empirical discussions, I apply perspectives drawn from the attribution theory and job demands and resources (JD-R) model I discussed in chapter 3.

8.3.1. Poor safety culture

As far as policy is concerned, at the five public hospitals, OSH hazards in general and psychosocial hazards, in particular, are primarily regarded as challenges for the individual worker to grapple with. There are no clearly defined roles and responsibilities of the hospital management or any other hospital staff in dealing with OSH hazards at public hospitals, such as reporting on unsafe conditions. The lack of clearly defined roles and responsibilities in OSH is a demonstration that safety for hospital staff is not ranked as a high priority. This qualifies an observation by Guadix et al. (2015), who argued that psychosocial risks are rarely considered during strategic planning and decision-making processes in most workplaces in developing countries.

The absence of an OSH management system perpetuates a reactive rather than a proactive approach to safety and health problems at the five public hospitals. The absence of OSH management systems at the five hospitals is therefore an indicator of a poor safety culture at the five public hospitals. Hence, occupational accidents, injuries, and illnesses, including OS and burnout, are prone to recur at public hospitals in the absence of an OSH management system. The health workers, including COs, are therefore overwhelmed with frustrations, fears, and anxieties that their work environment is unsafe in the absence of an OSH management system. The COs are

perpetually concerned that they are increasingly susceptible to injuries, ill health, and possibly death due to a lack of safety procedures in the absence of OSH management systems. Such concerns and feelings of frustration fears, and anxieties over safety and health at work ultimately exacerbate incidences of OS and burnout among COs at public hospitals. The exemption of healthcare in OSH regulation, may explain why there are no OSH management systems at public hospitals.

Day et al. (2017) and Leka and Iavicoli (2017) argued that workplace changes are unavoidable. However, the negative impacts of the organisational changes on the workers can be avoided (Day et al., 2017). In support of Day et al. (2017), the impacts of psychosocial hazards can be avoided by setting up OSH management systems at public hospitals. One of the components of OSH management systems is OSH risk assessment in general or psychosocial risk assessment in particular (International Labour Office, 2001, 2001). To minimise the impacts of excessive workloads, long hours of work, poor interprofessional relations, restructuring, and COVID-19 responses on the mental health of hospital staff, psychosocial risk assessments can be conducted periodically. Such psychosocial risk assessments may identify the specific impacts of these psychosocial hazards on the mental well-being of health workers and then recommend ways to avert the identified impacts. When implementing restructuring processes and responses to pandemics in the health sector, the mental well-being of health workers should also be regarded as critically important. As the Ministry of Health implemented decentralisation, functional reviews, and COVID-19 responses, it would be prudent to integrate mental well-being and psychosocial support for health workers in the implementation processes. OSH management systems provide tools for the integration of mental well-being and psychosocial support for health workers during the implementation of restructuring, functional reviews, and COVID-19 responses. Among others, these tools include OSH policy, workplace mental health policy, and psychosocial risk assessment.

8.3.2. Framework for a comprehensive OSH Policy

I propose a framework for a comprehensive OSH policy for the health sector in general and public health facilities in particular. The results of my study confirm that public hospitals do not have comprehensive OSH policies designed to promote the safety and health of the staff from work-related injuries, accidents, ill health, and diseases. The results of my study are therefore consistent with Delgado et al. (2020), Thomas

et al. (2020), and Moyo et al. (2015). Delgado et al. (2020) observed that OSH policies are not available at most health facilities in developing countries. In some instances, OSH policies, if available, are inadequate to offer sufficient protection for health workers (Thomas et al., 2020). Moyo et al. (2015) concurred that the formulation and implementation of OSH policies, which should facilitate the prevention and management of OS and burnout among others, remained constrained in the private and public sectors in Southern Africa.

Furthermore, Baldwin et al. (1997) found that, among a cohort of junior doctors in Britain, most of them had no clear idea of the OSH services offered at their respective hospitals. The researchers also revealed that most of the junior doctors could not mention any occupational health doctor by name and did not know where to find the OSH department at their hospital. This gives the impression that at hospitals in Britain, there are OSH services, including OSH departments that are staffed by officials who have expertise in OSH. This is not consistent with the results of my study. The results of my study show that at the public hospitals in Malawi, OSH services are not provided to the hospital staff. Neither are there OSH departments or OSH experts at public hospitals in Malawi.

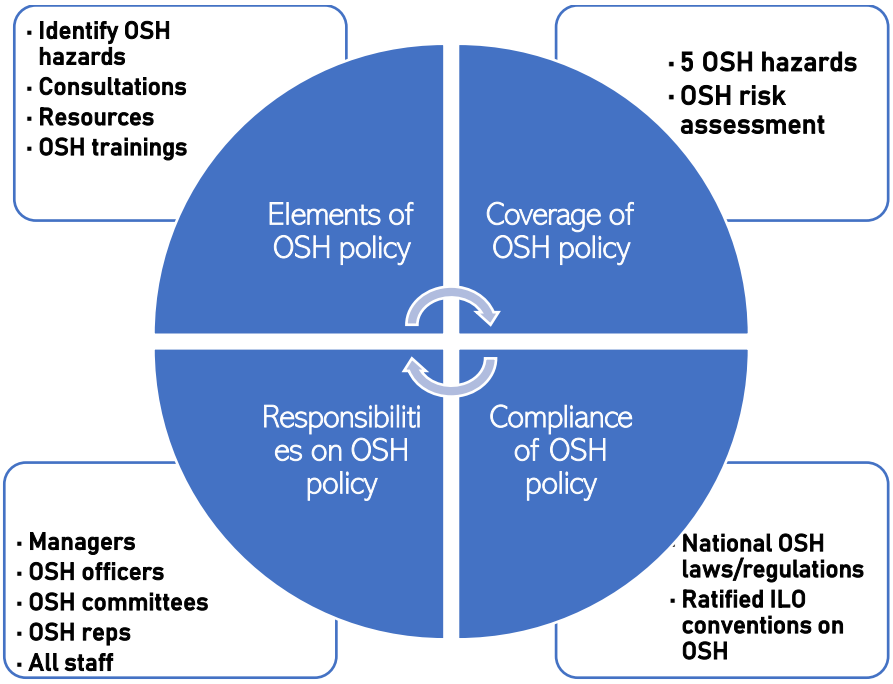
Nonetheless, public hospitals in Malawi are implementing the *National Care of Carers Workplace Policy*, which was launched in December 2020 during the COVID-19 pandemic. Although the *National Care of Carers Workplace Policy* has a common goal of promoting occupational safety and health (Malawi Government, 2020b), the focus is biased toward biological hazards in health facilities. The policy provides little or no cushion to the health workers against other categories of OSH hazards, i.e., chemical, physical, ergonomic, and psychosocial hazards. While the *National Care of Carers Workplace Policy* acknowledges stress among health workers to some extent, the perspective is limited and reactive rather than proactive. For instance, the policy views stress and burnout as psychological problems emanating from one's "exposure to an infectious disease, suffering from a disease, or an experience from a disaster or crisis" (Malawi Government, 2020b, p. vii). The response that the policy stipulates as a solution to curb stress and burnout is to establish psychological first aid and mental health services at all public health facilities. This is more of a medical treatment after stress and burnout have already affected the individual rather than a preventive measure to avoid or reduce stress and burnout among health workers. The policy does

not provide for measures such as an OSH management system that can be utilised to prevent or minimise psychosocial hazards or other factors that would put health workers at risk of suffering from stress and burnout.

Furthermore, the *National Care of Carers Workplace Policy* is expected to be implemented at healthcare facilities. However, the policy does not stipulate how the it should be implemented at each health facility. For instance, the policy does not specify which department/unit and staff at each health facility should be responsible for the coordination of the implementation of the policy, how a coordinator for the implementation of the policy at the workplace should be selected, the role of employees and management at each health facility in the implementation of the policy, or mechanisms on how employees and management at each health facility can play to effectively implement the policy.

Against this backdrop, I argue that there should be a comprehensive policy on OSH for the health sector in general and public health facilities in particular. Figure 22-8 (below) shows elements of a comprehensive OSH policy that I propose. The comprehensive OSH policies should be aimed at protecting the safety and health of all health workers by preventing injuries, ill health, diseases, and incidents related to the five categories of OSH hazards in compliance with OSH statutes and ILO conventions on OSH ratified by the Malawi Government. A comprehensive OSH policy should further make provisions for conducting OSH risk assessments along the five categories of OSH hazards, allocating adequate resources for implementing the policy, and providing OSH training targeted at all health workers.

Figure 22-8: Proposed elements of a comprehensive OSH policy



In addition, as shown in Figure 22-8 (above), a comprehensive OSH policy for the health sector should spell out the key responsibilities of the managers, workers, OSH staff, OSH representatives, and OSH committees in the implementation of the policy. At each public hospital, there should be a department or unit on OSH staffed by officers with expertise in OSH. The OSH department or unit should be directly responsible for the coordination of the implementation of a comprehensive OSH policy in consultation with hospital management and staff through an OSH committee. An OSH committee should be bipartite, consisting of representatives nominated or appointed by both hospital staff and management. My significant contribution in this thesis at the policy and practical level is therefore the conceptualization of a framework for a comprehensive OSH policy for public health facilities, as shown in Figure 22-8 (above). The International Labour Organisation (2001, 2011) from which I partly derived the proposed framework shown in Figure 22-8 (above), provide further guidance and reference materials required for the development of a comprehensive OSH policy.

8.3.3. Mental health policy

The mental health of the staff at the five hospitals is not a key priority requiring special attention by hospital management. However, each public hospital has mental health services that target the general public. Generally, the COs and hospital administrators who were interviewed concurred that at the national level, mental health was not

accorded the prominent focus that was given to other illnesses. This explains why, even at the hospital level, the mental health of the hospital staff takes a back seat when it comes to setting priorities for intervention. Chersich et al. (2020); Christopher et al. (2020); Cullen et al. (2020); Semo & Frissa (2020); and Singh et al. (2021) recommended the implementation of mental health policies that should, among others, provide for psychosocial risk assessment and appropriate interventions to alleviate OS and other mental health problems at the workplace. The results of my study reveal that Malawi is implementing a *National Mental Health Policy* that was launched by the Ministry of Health in April 2020 (Malawi Government, 2020c).

However, the *National Mental Health Policy* does not explicitly articulate mental health problems in the workplace. For instance, the policy is silent on OS and burnout. It does not provide for specific interventions to mitigate OS and burnout and promote mental health at workplaces, e.g., psychosocial risk assessment, workplace mental health policies and support programs, etc. The *National Mental Health Policy* should be revised such that the prevention of psychosocial hazards becomes a priority or mandatory for workplaces, including public hospitals. For instance, the revised *National Mental Health Policy* should provide for specific interventions to mitigate OS and burnout and promote mental well-being at workplaces. The revised policy should also require workplaces to regularly conduct a psychosocial risk assessment and formulate and implement workplace mental health policies or psychosocial support programmes.

8.3.4. Application of theory

As I demonstrated in Chapter 3, there are social theories that can be applied to explain OS and burnout among COs at public hospitals in Malawi. In this section, I apply theoretical perspectives drawn from attribution theory and the job demands-resources (JD-R) model to enrich the understanding of OS and burnout among COs. Using the attribution theory, I demonstrate how COs themselves explain OS and burnout at public hospitals. Thereafter, I use the JD-R model to provide my interpretation of what COs identified as causes of OS and burnout at public hospitals.

8.3.4.1. Attribution theory

I use attribution theory to demonstrate that as far as psychosocial hazards are concerned, there are divergent attributions for OS and burnout between management

and COs. As I discussed in chapter 3, human beings have a proclivity to explain events, their behaviour, and the behaviour of others—a phenomenon known as attribution (DeJoy, 1994; Gyekye, 2010). Gyekye (2010) further highlighted those characteristics of the individual workers and the characteristics of the work environment, are the two parameters through which workers and supervisors/managers made causal explanations on occupational accidents, injuries, diseases. In their testimonies on experiences with OS and burnout at public hospitals, COs provided explanations on the causes of OS and burnout at public hospitals. The immediate supervisors of COs who I interviewed also gave causal explanations for OS and burnout among COs. I refer to such causal explanations for OS and burnout by both COs and their immediate supervisors as *attributions*.

The COs attributed OS and burnout to aspects of the work environment at the public hospitals:

1. Excessive workload
2. Long hours of work
3. Poor inter-professional relations
4. Restructuring
5. Responses to the COVID-19 pandemic
6. Absence of OSH management systems.

These aspects of the work environment constitute psychosocial hazards that cause or exacerbate OS and burnout among COs. Before the COVID-19 pandemic, COs attributed OS and burnout to excessive workload, long hours of work, poor inter-professional relations, and restructuring in the health sector. When the COVID-19 pandemic emerged, on the attributions for OS and burnout, COs added responses that were formulated and implemented to combat the COVID-19 pandemic. This entails that attributions by COs on OS and burnout have not been static. Instead, the attributions by COs to OS and burnout were modified in the wake of the COVID-19 pandemic. In a way, this is consistent with Weiner (2008) who argued that attributions are not static but rather dynamic.

Furthermore, COs also attributed OS and burnout to the absence of OSH management systems at public hospitals before and during the COVID-19 pandemic. The absence of OSH management systems heightened fears, frustrations, and

depression over a poor safety culture. The absence of OSH management systems is an example of a psychosocial hazard for which hospital management and the Ministry of Health may have direct responsibility in terms of formulation and implementation. The attributions by COs may determine interventions that should be implemented to prevent OS and burnout at public hospitals. The COs felt they had little or no role in avoiding the psychosocial hazards at public hospitals, to which they attributed OS and burnout. Instead, COs suggested it was the direct responsibility of the Ministry of Health as the employer and the government in general as a regulator to devise ways to mitigate and avoid the psychosocial hazards at public hospitals.

However, as I demonstrated in Chapter 3, the application of attribution theory by Gyekye (2010) is confined to the explanations for which employers have a primary responsibility to intervene. Hence, Gyekye (2010) did not go beyond the workplace environment in his analysis of attributions by workers and managers. In contrast, the results of my study suggest that workers and managers can draw attributions beyond the workplace environment when providing causal explanations for OS and burnout. In my study, I have unearthed some factors beyond the direct responsibility of hospital management and the Ministry of Health to intervene. Some health workers including the COs, can possibly attribute OS and burnout to such factors. Firstly, a shortcoming in the framing of OSH regulation in terms of its narrow scope and coverage, which I discovered, is an overarching factor beyond the control of hospital management and Ministry of Health. Some health workers and COs in particular can attribute OS and burnout to the narrow scope and coverage of OSH regulation, which neglects psychosocial hazards and exempts healthcare. The hospital management and Ministry of Health cannot unilaterally broaden the scope and coverage of OSH regulation to incorporate psychosocial hazards and healthcare.

Secondly, in my study, I found that the government is faced with budgetary constraints to recruit more health workers to fill the existing vacancies in the health sector, partly due to the implementation of neoliberal conditionalities of the IMF and World Bank. Excessive workloads and long hours of work pose psychosocial hazards that are partly associated with the government's budgetary constraints to recruit more staff and neoliberal conditionalities. Some health workers can possibly attribute OS and burnout at public hospitals to the government's budgetary constraints and neoliberal conditionalities. The government's budgetary constraints and neoliberal

conditionalities are factors outside the hospitals, which hospital management and the Ministry of Health have no direct responsibility to address. In addition, in my study, I discovered that under restructuring, which is another psychosocial hazard, there is decentralisation. Decentralisation is a process over which hospital management and the Ministry of Health have no direct control. For instance, decentralisation was decided by legislators through an act of parliament. The COs partly attributed OS and burnout to decentralisation. As such, to get a more comprehensive understanding of OS and burnout, one needs to broaden the analysis of possible attributions by workers and managers beyond the confines of the workplace.

In chapter 3, I indicated that one key feature of the attribution theory is that attributions are vulnerable to biases and errors, hence they may not be accurate (Gyekye, 2010). I then highlighted the following five attribution biases and errors: fundamental attribution error (FAE), optimism bias, self-serving bias, false consensus effect, and actor-observer bias, as conceptualised by Ross (1977), Caponecchia (2010), Shepperd et al. (2008), Mullen et al. (1985), and Malle (2006), respectively. In this section, I have established that it is possible for workers to go beyond the work environment when making causal explanations for OS and burnout. It is therefore possible for COs to commit the error or bias of ignoring factors outside the workplace and limiting attributions to the work environment. In other words, external factors like the narrow scope and coverage of OSH regulation, government's budgetary constraints, neoliberal conditionalities, and decentralisation can be ignored by COs when making attributions. As a result, I coin and add one bias to the five attribution errors and biases. I call it *work environment bias*. I define *work environment bias* as:

> *the tendency to attribute occupational accidents, injuries, and illnesses—or psychosocial hazards—to factors within the confines of a workplace while ignoring external factors.*

My significant contribution to scholarship at the theoretical level is therefore, the identification of an additional bias in attribution, which I coin *work environment bias.* This confirms that attributions on OS and burnout by COs are also vulnerable to biases and errors just like attributions by workers and managers on occupational accidents, injuries and diseases as highlighted by Gyekye (2010). This further entails that some attributions that COs can make on OS and burnout at public hospitals may also be devoid accuracy.

The immediate supervisors of COs concurred with COs on attributing OS and burnout to excessive workloads, long hours of work, responses to the COVID-19 pandemic, restructuring and absence of OSH management systems at public hospitals. None of the immediate supervisors of COs mentioned sour interprofessional relations between doctors and COs when testifying about the causal explanations for OS and burnout. However, the immediate supervisors of COs also attributed OS and burnout to individual factors which none of the COs highlighted. Some immediate supervisors of COs accused COs for not being proactive to report and engage the relevant officials at public hospitals on concerns related to OSH and OS/burnout in particular. Hence, some challenges associated with OSH hazards in general and OS in particular, were partly regarded by some immediate supervisors of COs as individual problems that did not require the intervention of the employer. In this regard, a fundamental attribution error (FAE), as discussed by Ross (1977), can be linked to the results of my study.

Ross (1977) conceptualised a fundamental attribution error as a tendency for some people to attribute occupational accidents, injuries, and illnesses to individual factors as opposed to the characteristics of the workplace. This is consistent with the results of my study. This is also consistent with the view by Heider (1944) on attributions. Heider (1944) argued that people had the propensity to attribute behaviour to dispositional elements like individuals rather than situational factors like the physical or social environment. Hence, I argue that there is a possibility of a fundamental attribution error to be committed by the immediate supervisors of COs and hospital management when explaining OS and burnout at public hospitals. This may partly explain why hospital management at the five public hospitals did not show responsibility to facilitate a safe working environment in the absence of OSH management systems. This, therefore, entails that some attributions that immediate supervisors of COs can make on OS and burnout at public hospitals, may also not be accurate.

The use of attribution theory has helped to unearth and understand the divergent meanings that hospital management and COs attach to OS and burnout at public hospitals. Such meanings are expressed through what is referred to as attributions. Furthermore, the attributions by the hospital management and COs are not captured in government policies related to OS in particular and OSH at health facilities in general

namely: the *National Mental Health Policy* and *National Carers Workplace Policy*. Both policies are silent on the attributions of OS and burnout raised by both the hospital management and COs. Instead, the *National Carers Workplace Policy* assumes that OS and burnout emanate from the psychological effects of injuries and illnesses that health workers suffer due to physical, chemical and biological hazards. Furthermore, both the *National Mental Health Policy* and *National Carers Workplace Policy* do not attribute OS and burnout to psychosocial hazards. This entails that there are also divergent attributions of OS and burnout between the hospital management and COs on the one hand and the two policies on the other hand.

More importantly, the *National Mental Health Policy* does not explicitly articulate mental health problems in the workplace while the psychosocial hazards are neglected by the *National Carers Workplace Policy*. This, therefore, puts to question the drafting processes of the two policies:

1. Were the health workers including COs consulted to provide their insights on OS and burnout?
2. If the health workers were consulted during the drafting processes, why were their attributions of OS and burnout left out?

It is also possible that while health workers may have been consulted during the drafting processes of the *National Mental Health Policy* and *National Carers Workplace Policy,* their attributions of OS and burnout were ultimately ignored in the final versions of the two policies. This may explain why the attributions of OS and burnout by the COs are not reflected in the two policies. This may also further explain why the *National Carers Workplace Policy* does not address psychosocial hazards at health facilities, which most COs ranked as more critical as compared to the other four OSH hazards, i.e., chemical, physical, biological, and ergonomic hazards.

8.3.4.2. Job demands-resources (JD-R) model

I apply the job demands-resources (JD-R) model to substantiate that there is an environment of OS and burnout at public hospitals that is a reality among COs. The JD-R model, therefore, helps me identify the specific job demands and job resources in a hospital setting that influence burnout and engagement among COs. As I discussed in Chapter 3, JD-R model is a dual-process model through which job demands and job resources interact to influence burnout and engagement (Hall et al., 2010; Hall et al., 2013; Zablah et al., 2012). As shown in Figure 23-8 (below), I

categorise excessive workloads, long hours of work, poor inter-professional relationships, restructuring, COVID-19 responses, and the absence of OSH management systems as job demands among COs. In the wake of the COVID-19 pandemic, long hours of work in CoTUs, prolonged use of PPEs while in CoTUs, and extra tasks related to COVID-19 are examples of additional high job demands that COs grappled with. While the implementation of decentralisation, EHRP, and functional reviews are specific job demands under restructuring.

The job demands require physical and psychological efforts by the COs to adapt. A drastic increase in these job demands can aggravate OS and burnout among COs through prolonged emotional exhaustion, depersonalization, and reduced personal accomplishment. The prolonged emotional exhaustion, depersonalization, and reduced personal accomplishment may ultimately lead to disengagement from the job.

Figure 23-8: Conceptual framework on job demands among clinical officers



In contrast, good supervision, support, and recognition from superiors; good inter-professional relations; work-life balance; and adequate medical supplies and equipment like PPEs are job resources among COs. Furthermore, power through cooperation that promotes good inter-professional relations, as I discussed in Chapter 6, is another job resource among COs. Adequacy of these job resources can reduce OS and burnout by minimising emotional exhaustion, depersonalization, and reduced personal accomplishment. If emotional exhaustion, depersonalization, and reduced personal accomplishment are minimised by adequate job resources, burnout can be reduced thereby enhancing engagement on the job among COs.

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 such as excessive workloads, long hours of work, poor interprofessional relations restructuring, COVID-19 responses, and the absence of OSH management systems. Subsequently, such a struggle to cope with high job demands aggravates emotional exhaustion, depersonalization, and reduced personal accomplishment which negatively affect COs' attitudes on the job. Finally, disengagement from the job results from negative attitudes on the job that are exacerbated by emotional exhaustion, depersonalization, and reduced personal accomplishment among the COs.

The narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts services like healthcare give the impression that at public hospitals, there is no interaction between job demands and job resources that can influence burnout. I have demonstrated that there are job demands and job resources at public hospitals that interact to influence burnout among the COs. Such an interaction between job demands and job resources, therefore, confirms that there are psychosocial hazards at public hospitals in Malawi.

8.4. Summary

In this chapter, I demonstrated that at public hospitals in Malawi, there are no OSH management systems. As such, there are no organisational efforts to regularly identify OSH hazards, assess the impact of OSH hazards on the mental health of hospital staff, and then develop and implement measures for mitigation. The absence of OSH management systems is a psychosocial hazard from the confines of the workplace that exacerbated OS and burnout among COs before and during the COVID-19 pandemic. I also illustrated how psychosocial hazards, to which COs attribute OS and burnout, constitute job demands that interact with job resources in a hospital setting to influence engagement and disengagement from the job. In the next chapter, I continue challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare by demonstrating how OS and burnout negatively impact individual COs and the health of the population.

Chapter 9

Impacts of occupational stress & burnout on clinical officers and health outcomes

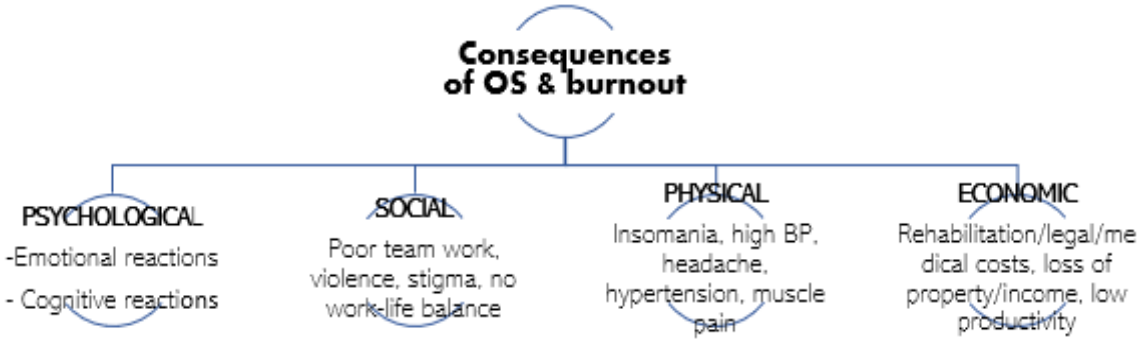
9.1. Introduction

In chapters 5–8, I established that before and during the COVID-19 pandemic, there was a combination of psychosocial hazards that caused or increased the risks of OS and burnout among COs at public hospitals. In this chapter, I have two tasks as I continue to challenge the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare. The first task is to draw a connection between OS and the quality of life among COs. I postulate that OS and burnout among COs at public hospitals negatively affect the COs' quality of life and job performance. The second task is to draw a connection between OS among COs and the quality of health in the general population. I argue that the poor quality of services provided by COs due to OS and burnout, leads to poor health among the masses who rely on healthcare provided free of charge at public hospitals. This is how the impacts of OS and burnout on COs are consequently externalised to the general public. Hence, I argue that psychosocial hazards at public hospitals, which are a breeding ground for health problems among COs through OS and burnout, ultimately impinge on health outcomes. I have coined a term *impact shifting* to refer to the externalisation of the impacts of OS and burnout on COs to the general public.

9.2. Impact of occupational stress and burnout

During interviews and focus group discussions, COs and key informants associated emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout with poor quality of life among COs. Poor quality of life as a result of OS and burnout manifested itself, among other things, through a number of consequences that I classified into four dimensions. These dimensions are psychological consequences, physical consequences, social consequences, and economic consequences as shown in Figure 24-9 below.

Figure 24-9: Impact of occupational stress & burnout on clinical officers.



9.2.1. Psychological consequences

As shown in Figure 24-9 above, there are two aspects under the psychological consequences of emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout among COs at the five public hospitals. These two aspects are emotional effects and cognitive effects.

9.2.1.1. Emotional effects

OS and burnout through emotional exhaustion, depersonalisation and reduced personal accomplishment, were associated with emotional effects. COs concurred that, among others, the following feelings were emotional effects associated with OS and burnout: panic attacks; frustrations; anxieties; depression; irritability; mood swings; excess worrying; feelings of worthlessness, defensiveness, and anger. Subsequently, some COs resorted to drug and substance abuse as a solution to temporarily suppress such emotional effects as frustration, anxiety, depression, irritability, and excessive worrying. Examples were given of some COs who indulged in excessive alcoholism even during working hours. For such COs, excessive drinking momentarily helped them forget their worries and feel relieved from the burdens of frustration, anxiety, depression, and irritability.

"Stress and burnout can be terrible. It affects one's personal life. Colleagues inject themselves with drugs from this hospital. We have seen colleagues starting a habit of smoking and drinking heavily because of stress and burnout at this hospital" (Interview, 03/CO/01).

COs further indicated that absenteeism was another step that other COs would take in response to the emotional effects of OS and burnout, such as frustrations, depression, feelings of worthlessness, and anger. This was partly corroborated by the consultants who were hired in 2018 to conduct a functional review of the central hospitals. In their findings, the consultants reported that there was rampant absenteeism among health workers, including COs at the central hospitals (Malawi Government 2018a). The consultants further indicated that other hospital staff reported to work late and knocked off before the end of their shifts. The COs associated some incidences of substance abuse, absenteeism, reporting for work late, and knocking off early with the emotional effects of OS and burnout. In an interview, one CO from Chikwawa District Hospital mentioned that during some emergency cases, COs on duty would not be available because they had not reported for work or had knocked off early. Other COs at Chikwawa District Hospital further associated cases of *presenteeism* with the emotional effects of OS and burnout. For instance, some COs with emotional symptoms of OS and burnout would be reporting for work every day and knocking off without performing any duties. Examples were given of two COs with emotional symptoms of OS and burnout who were coming to work every day only to spend the entire working hour on phone calls, social media, drinking tea, and sleeping.

"We had a fellow clinical officer at this district hospital. He would be reporting for duties every day like the rest of us. But he would be doing nothing related to his duties. Sometimes, he could be seen sleeping in one of the rooms here at the hospital as the rest of us were busy with our duties. When you asked him what was his problem, he would not explain other than saying he was stressed." (Interview, 02/CO/03).

During an interview, a CO from Chikwawa District Hospital highlighted that this tempted some COs on duty to take bribes from patients. He mentioned that some COs active on duty would demand money from patients for services that would have been rendered by colleagues with emotional symptoms of OS and burnout who opted to spend working hours sleeping. In such situations, patients or guardians would rather pay a bribe to another CO to be assisted.

*"Sometimes we have incidences of unexpected deaths or unintended injuries here at our hospital. This is partly due to stress among our cadre of clinical officers. For instance, sometimes there would be an emergency requiring urgent attention but you find that no clinical officers on duty are available to attend to the emergency. Some clinical officers would just be moving around on the premises and not assisting patients. Now you see, some patients travel long distances to seek health services only to find that there is no one to assist them on that day after waiting and waiting. Such patients or their guardians would start pleading with any other clinical officer around to assist them even though such clinical officers are not assigned to work in that particular section/unit on that day. In such a situation, some clinical officers would demand money from patients/guardians for them to leave their assigned duties for the day to assist the patients in a way covering up for fellow clinical officers on duty in that section/unit but are not available to perform duties" (*Interview, 02/CO/05).

Other COs highlighted *quiet quitting* as another response to the emotional effects of OS and burnout, such as frustrations, depression, feelings of worthlessness, and anger. In this regard, the COs explained that as a result of OS and burnout, some of them would resort to sticking to the minimum requirements of the COs' duties in a particular department or unit. Under any circumstances, COs affected by OS and burnout would not devote more time, effort, or enthusiasm to their jobs than was required by the job description.

*"You know when stress and burnout take their toll on you, the hospital as your workplace becomes toxic. Whenever you are at work, you just don't feel like working. And when it is time to knock off, you are quick to leave and go home even when there are unfinished assignments for you. You lose that urge to put any extra effort into the job. Even when you are at home, the thought of leaving home to go to work puts you off, you just wish it was a public holiday or weekend so that you don't report for work and dedicate your time to something else" (*Focus group discussion, 02B).

A CO in Chikwawa gave an example that when it was time to knock off, some COs would not hesitate to leave the workplace immediately, even though there would be unfinished tasks like attending to a few patients remaining in the queue. He went on to say that some COs would rather abandon the few patients still in line and ask them

(patients) to return to the hospital for medical assistance the next day, simply because the time to knock off had passed.

9.2.1.2. Cognitive effects

The COs mentioned memory lapses, forgetfulness, lack of attention, and poor concentration while on duty as some of the cognitive effects of OS and burnout. Some medical errors and mistakes among COs were associated with the cognitive effects of emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout.

"It is difficult to explain the impacts of stress or what you call burnout, I am not an expert on mental health. But what I can confirm is that working in a hospital is stressful and burnout is inevitable. Maybe, I can't describe it in a way that you can understand, but I feel stressed every day I come to work. Stress is like fever which can become terrible and sometimes you find that it subsidises on its own. I can feel the stress by experiencing some memory lapses. This has happened to me even at home. Sometimes, it may not be me but I can observe elements of stress and burnout in colleagues I work with. Some colleagues start to act strangely like forgetting things easily and having poor concentration when you are working together. It is possible that my colleagues also observe the same aspects of stress in me as we work together, I would not know. These would be ways through which stress or burnout takes a toll on us" (Focus group discussion, 01B).

Table 9-9 below shows some of the medical errors and mistakes that COs associated with memory lapses, forgetfulness, lack of attention, and poor concentration as a result of OS and burnout.

Table 9-9 Types of medical errors and mistakes

Diagnostic	Treatment	Preventive	Other
-Diagnosis delays or errors -Failure to properly execute indicated tests -Conducting outdated tests	-Errors in conducting surgical procedures or tests -Delays to provide recommended treatment -Errors in giving right prescription for medication	-Poor monitoring of treatment -Inadequate follow-ups on treatment	-Communication breakdown (verbal or written errors)

One CO at Queen Elizabeth Central Hospital referred to situations when some COs left surgical sponges, tools, or devices inside a patient's stomach during a caesarean operation due to fatigue, lack of attention, or poor concentration. Other COs gave examples of COs being reported for disciplinary actions at the Medical Council of Malawi for various medical errors and mistakes due to fatigue, lack of attention, and poor concentration. Some health workers including COs faced lawsuits from patients for medical errors and mistakes.

"A few years ago, here at our district hospital, we had a tragic scenario associated with lack of attention and poor concentration on the job. A female colleague was on duty when one guardian came with a seriously ill patient who required urgent medical attention. She told the guardian to go outside and wait for her while she went into another room. The guardian kept on coming to the colleague to report that the patient was struggling with life and needed urgent attention. The colleague did nothing to assist until the patient died. This was a death that could have been avoided if the colleague had swiftly acted with the urgent attention and concentration that the case deserved the moment the guardian approached her in the first instance. The guardian took the matter further, the colleague faced disciplinary action, was found at fault and sanctioned" (Interview, 02/CO/05).

Apart from the actual medical errors and mistakes are shown in Table 9-9 above, during focus group discussions, the COs at Chikwawa District Hospital also mentioned *near misses*. Near misses are incidents that do not cause harm to a patient (World Health Organization, 2011). The COs at Chikwawa District Hospital also associated near misses with cognitive effects emanating from OS and burnout. I also discovered that the COs rarely reported the medical errors and mistakes shown in Table 9-9 above, as well as near misses to their superiors. The COs at Chikwawa District Hospital mentioned that they feared punishment, disciplinary action, litigation, and possibly losing their jobs if they reported medical errors, mistakes, and near-misses. As a result, the majority of medical errors and mistakes, as shown in Table 9-9, and near misses went unreported at the five public hospitals.

"As I mentioned earlier when you asked me if we had a policy on occupational safety and health, we don't have a mechanism to monitor and report on occupational safety and health hazards as well as medical errors and mistakes. Of course, we are urged to alert our superiors whenever there is an error or mistake. But sometimes colleagues are punished for

being honest. You find that when you report an error or mistake, it becomes a big issue that superiors would question your competence possibly leading to a rebuke or disciplinary action against you. So, we would sometimes rather not report these errors and mistakes unless it is a case that even if you don't report, it would still be known by the superiors like an error or mistake that leads to a death of a patient" (Interview, 02/CO/05).

9.2.2. Social Consequences

The COs associated the emotional and cognitive symptoms of OS and burnout discussed above with social consequences. Irritability, defensiveness, anger, and mood swings as emotional reactions on the one hand and memory lapses, forgetfulness, lack of attention, and poor concentration as cognitive reactions on the other hand impeded work relations at the hospital. COs mentioned that it was always challenging for one to collaborate with workmates when they were irritated, defensive, angry, undergoing mood swings and memory lapses, forgetfulness, lack of attention, and lack of concentration. The COs also mentioned that the spirit of teamwork was hindered by an atmosphere of anger and irritation among some colleagues, leading to tensions and conflicts. Furthermore, some COs failed to consult each other to avoid negative responses from workmates.

"…I have been stressed since yesterday. At this hospital, we work as teams such that we always consult each other on several issues and that is what I tried to do with my fellow clinical officers yesterday who had referred some patients to me. When I approached them to consult on those referrals, I was put off by the negative manner they responded to me… I found myself returning the patients that were referred to me and my colleagues were not happy about it. Since then, there has been tension between my colleagues and myself" (Focus group discussion, 02A).

Patients would also experience verbal aggression and bullying from COs suffering from OS and burnout. Some COs experiencing anger and irritation as a result of OS and burnout would insult or shout at the patients during medical consultations. As a result, patients would fail to open up to the COs about their health issues, resulting in misdiagnosis or incorrect prescriptions.

OS and burnout negatively affected work-life balance among COs. Some COs struggled to allocate adequate time for personal commitments like family errands, studies, and leisure activities. OS and burnout hindered the quality of the CO's life by posing a conflict between work and time for family and other personal commitments outside official duties. Irritability, anger, mood swings, memory lapses, lack of attention, and poor concentration, therefore, inhibited COs' enjoyment of their out-of-work lives. For instance, it would be difficult for COs to cooperate with others at church or in the family when they were irritated, angry, or undergoing mood swings, memory lapses, forgetfulness, lack of attention, and poor concentration as a result of OS and burnout. The COs mentioned allegations of some hospital staff indulging in domestic violence. Anger and irritation, as emotional reactions of OS and burnout, were identified by COs as possible contributing factors to the alleged incidences of domestic violence among health workers.

"My colleagues talked about the effects of stress in terms of mood swings, irritation, poor concentration and memory lapses. I can't anything more on the list. But what I can comment is that from work we go home with all these negative effects. It is not like when we knock off from work, all these negative effects of stress and burnout are left at work and you go home free of all these effects my friends have mentioned. No, you find that even when you are at home you are also moody, angry, irritated and start shouting at people at home. That affects your life at home. Our families and possibly friends also get to shoulder these effects of stress and burnout that come from work" (Focus group discussion, 01D).

Some COs suffering from OS and burnout as forms of mental health problems faced stigma from fellow health workers. The COs mentioned that when one started to show strange behaviours like irritability, defensiveness, anger, mood swings, memory lapses, etc. as emotional and cognitive reactions of OS and burnout, workmates tended to avoid you. For instance, some superiors and fellow workers regarded those showing such strange behaviours emanating from OS and burnout as unreliable and less productive in comparison with other health workers. Hence, COs suffering from OS and burnout experienced discrimination from both superiors and fellow workers. Ultimately, other COs found absenteeism, presenteeism, quiet quitting, reporting for work late, and knocking off early as solutions to avoid stigma from fellow health workers.

"One thing is that we all understand stress to be a type of mental problem. Remember, in society, there is a stigma on mental illness in general. Now when you start showing symptoms of stress and burnout like memory lapses, mood swings, and irritability some workmates start to label you as mentally ill. That kind of a label is demeaning and demoralising. And you start feeling shunned by colleagues in the teams and even bosses shun you. When there is an opening for training somewhere, the boss will shun you because you are a mentally ill person and therefore unreliable just because they have detected some symptoms of stress and burnout in you. And that stress or burnout becomes your problem to deal with alone. You are never assisted by the bosses in terms of management of that stress and burnout" (Focus group discussion, 04C).

9.2.3. Physical consequences

The COs also associated the psychological consequences, such as emotional and cognitive effects, with physical consequences. The COs indicated that as a result of the emotional effects such as frustrations, anxiety, depression, and excessive worries, they sometimes experienced severe headaches and loss of appetite. Some health problems emanating from loss of appetite that were mentioned by the COs included unintentional weight loss and ulcers. I classified unintentional weight loss and ulcers as examples of physical consequences of OS and burnout. Other COs highlighted excessive drinking and substance abuse as temporary remedies for emotional effects, which would ultimately render one susceptible to other health problems. The health problems associated with excessive drinking and substance abuse include high blood pressure, heart disease, stroke, and liver diseases, which I referred to as additional examples of physical consequences.

"Working in the hospital is extremely stressful. I can remember some instances in which I ever experienced stress and burnout. While seeing patients, I couldn't pay attention and concentrate any more to the point that to avoid making mistakes and errors, I could just go somewhere to sit down, literally doing nothing while patients were waiting in queues for my assistance. I can tell you, some cases of injuries among clinical officers and the staff here in general, are attributed to loss of attention and concentration" (Interview, 04/CO/01).

Memory lapses, forgetfulness, lack of attention, and poor concentration as cognitive effects of OS and burnout were identified by the COs as contributing factors to some accidents and injuries among health workers. For instance, such injuries would result

from accidents like falls, slips, trips, and contact with objects or equipment such as needle sticks and blades. In this regard, the injuries are additional examples of the physical consequences of OS and burnout.

9.2.4. Economic consequences

The COs and key informants mentioned that there were economic consequences of OS and burnout to both the individual COs and the government as the employer of the COs. Examples were given of accidents at the hospitals like fires that razed parts of Balaka District Hospital, Mulanje District Hospital and Mangochi District Hospital on 31 July 2020, 15 February 2016 and 15 April 2018 (and again on 14 November 2019) respectively (Kasolola, 15 August 2019; Khamula, 14 November 2019; Malawi24, 31 July 2020; Nyasa Times, 15 February 2016). The accidents were allegedly attributed to a lack of attention and poor concentration among the hospital staff that led to failure to take precautionary measures before the accidents occurred. The lack of attention and poor concentration linked to such accidents can be associated with OS and burnout among the hospital staff in general. Ultimately, using taxpayers' money, the government incurred the costs of rehabilitation following damages to the property due to fires.

Secondly, following OS and burnout-related mistakes and errors leading to serious injuries or loss of life of a patient, the government would be liable to pay compensation when the plaintiff succeeded in litigation. Thirdly, COs also highlighted that the productivity of COs who resorted to absenteeism and presenteeism due to OS and burnout dwindled. Nevertheless, such COs remained on the payroll. Absenteeism and presenteeism ultimately became a cost to the government by paying full salaries to COs who were not performing their duties.

"When you are stressed and burned out, your productivity goes down, especially those who resort to coming to work and do nothing until they knock off or stop coming to work completely as a result of stress and burnout. But such colleagues find that they are still being paid full salaries for no work. When you are suffering from lack of sleep and high blood pressure because of too much stress and burnout, it certainly affects your job performance in the end. You may sometimes fail to come to work or you come to work while feeling sleepy because at night you can't sleep to rest. That way your productivity also declines"
(Focus group discussion, 04D).

Fourthly, some COs indicated that when one suffered serious injuries or illnesses related to insomnia, high blood pressure, hypertension, muscle tension or pain, or severe headaches as a result of OS and burnout, it eventually became a financial cost to the individual COs. Some COs would sometimes seek medical attention at private clinics using money from their pockets, given the acute shortage of drugs and supplies at public hospitals. Lastly, I established from the President of PAUM, a key informant who spoke on behalf of the COs, that some disciplinary actions COs faced were related to medical errors and mistakes associated with OS and burnout. Sometimes, while waiting for a disciplinary hearing or outcome, one is put on indefinite suspension without pay. The Medical Council of Malawi can revoke a licence to practice if they a CO is found guilty of medical mistakes and errors. In both scenarios, one loses a source of income (salary).

9.3. Discussion

In this section, I articulate my interpretation of the study results regarding the impacts of OS and burnout on the quality of life and health care services of the COs (both individually and collectively) on the one hand and the quality of health in the wider population on the other hand. In this section, I also demonstrate at conceptual and empirical levels how the results of my study relate to the literature. Finally, to complement the conceptual and empirical discussions, I apply perspectives drawn from the fundamental cause theory I previously discussed in Chapter 3.

9.3.1. Poor quality of life

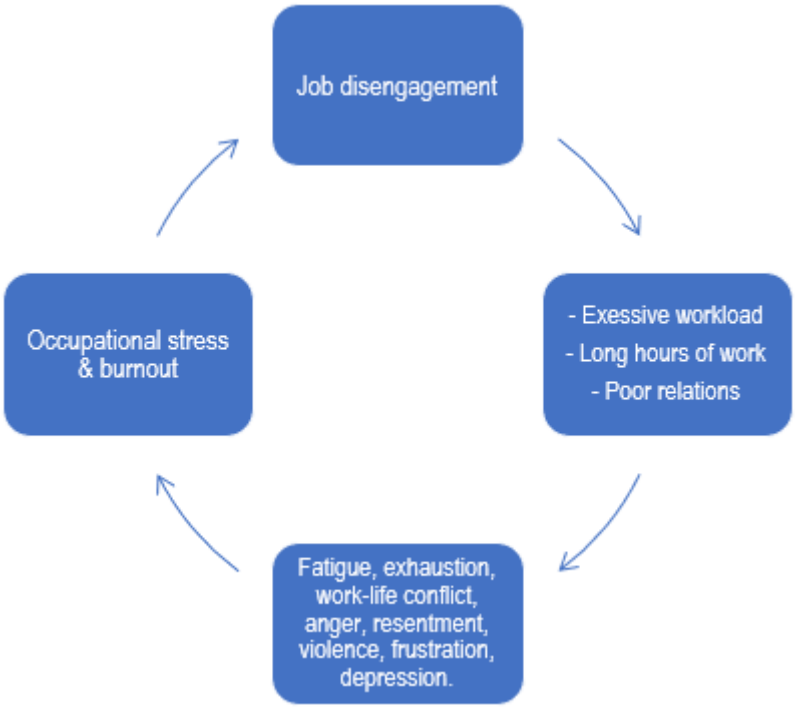
The results of my study show that emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout impair the quality of life of the individual COs psychologically, physically, socially, and economically. The emotional and cognitive effects emanating from the psychological consequences of OS and burnout contribute to medical errors and mistakes. Among others, medical errors and mistakes include: diagnosis delays or errors; failure to properly execute indicated tests; conducting outdated tests; errors in conducting surgical procedures or tests; delays in providing recommended treatment; errors in giving the right prescription for medication; and poor monitoring of treatment. This validates Kamaloo et al. (2017) and Kim et al. (2019) claim that some medical errors among health workers are caused by OS and burnout. As a result, the negative effects of OS and

burnout lead to poor quality services provided by the COs. The results of my study substantiate the studies by Goetz et al. (2015) and Gosseries et al. (2012), which asserted that OS and burnout negatively affect the quality of the personal lives of health workers and the quality of their services. Bhatia et al. (2010) (p. 731) also stated that OS and burnout "can reduce the enjoyment of life, cause hypertension and cardiac problems, reduce immunity, contribute to substance abuse, lead to frustration and irritability, and reduce the overall status of mental and physical wellbeing." Lin et al. (2014); Pikó (1999); Rivera et al. (2020); and Wichert (2002) further indicated that OS and burnout were also associated with gastric complaints, nervous disturbances, chronic fatigue, headaches, sleep disorders, breast cancer, stroke, and increased consumption of tranquillizers and sleeping tablets. I packaged the negative effects of OS and burnout highlighted by Bhatia et al. (2010), Lin et al. (2014), Pikó (1999), Rivera et al. (2020), and Wichert (2002) into two categories. These two categories are the psychological and physical consequences of OS and burnout as shown in Figure 24–9.

9.3.2. Job disengagement

The results of my study show that among the consequences of emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout is disengagement from the job. The COs are disengaged from the job through presenteeism, absenteeism, quiet quitting, reporting to work late, and knocking off early as a result of OS and burnout. Disengagement from the job exerts pressure on other COs, thereby exacerbating OS and burnout in those who are not yet disengaged. Figure 25-9 shows how disengagement from the job among COs as a result of OS and burnout exacerbates OS and burnout in fellow COs.

Figure 25-9: Job disengagement causing stress and burnout on fellow clinical officers



As shown in Figure 25-9 above, when some COs are disengaged from the job through presenteeism, absenteeism, reporting to work late, and knocking off early as a result of burnout, extra pressure is exerted on the workmates. The pressure is exerted in the form of excessive workloads and long hours of work. For instance, fellow COs are eventually compelled to perform tasks that were supposed to be undertaken by the COs who are disengaged from the job to fill the gaps. This results in tensions and conflicts over the uneven distribution of tasks between those disengaged from the job and colleagues who are pressured to cover up for those disengaged. The tensions and conflicts may lead to poor relations between those disengaging from the job and those not disengaging. This is consistent with Arandjelovic et al. (2010) who found that workers experiencing OS and burnout ultimately pose negative impacts on their coworkers by disrupting job tasks and triggering personal conflicts.

Poor relations between those disengaging and those not disengaged from the job, can also lead to acts of violence in the form of bullying and verbal aggression over the unfair distribution of tasks (as show in Figure 25-9). Subsequently, the colleagues who are covering up are likely to experience more fatigue, exhaustion, work-life conflicts, anger, resentment, frustrations, and depression. Such feelings may aggravate OS and burnout in the colleagues covering up for the coworkers who are already disengaged.

Ultimately, the colleagues covering up for workmates who are already disengaged, may themselves become susceptible to disengagement from the job due to OS and burnout. In a way, the results of my study qualify research on nurses in the United States of America by McHugh et al. (2011), which associated burnout with job dissatisfaction. The authors argued that job dissatisfaction as a result of OS and burnout contributed to the poor quality of healthcare. In my study, job dissatisfaction among the COs as a result of OS and burnout was manifested through job disengagement. The results of my study further support Asante et al. (2019), who found that OS and burnout were associated with diminished performance capacity, decreased job interest, absenteeism, a lack of concern for the organization, and a decline in the quality of healthcare. In my study, decreased job interest, absenteeism, and a lack of concern for the organization as highlighted by Asante et al. (2019), were ways in which COs showed job disengagement. The results of my study further qualify Bradley et al. (2015), who revealed that OS among mid-level health workers in Malawi emanated from high workloads with which they could not cope. The authors further argued that as a result of OS, the mid-level health workers in Malawi subsequently experienced demotivation and disengagement from the job.

However, the results of the study reveal two dimensions that are not articulated in the literature. Firstly, presenteeism and quiet quitting as forms of disengagement from the job following OS and burnout have not been highlighted in the literature that I consulted. The results of my study indicate that other ways through which COs suffering from OS and burnout disengaged from the job were through presenteeism and quiet quitting. This means that some COs suffering from OS and burnout reported for work every day and knocked off without performing any duties. Instead of performing their duties, such COs spent the entire working hours on phone calls, social media, drinking tea, and sleeping. In terms of quietly quitting, other COs suffering from OS and burnout would rather do the minimum tasks required as stipulated on their job descriptions and put in no extra time or effort on their job.

Secondly, another dimension that is not highlighted in the literature I consulted is the dual roles of some factors associated with OS and burnout. Frustrations, depression, anxiety, irritability, anger, and resentment, on the one hand, and poor inter-professional relations, stigma, and work-life conflict, on the other, are both causes and

consequences of burnout and OS. In other words, the results of my study reveal that some factors identified as sources of OS and burnout among COs can also be considered as psychological and social consequences of OS and burnout. On one hand, frustrations, depression, anxiety, irritability, anger, resentment, poor inter-professional relations, and work-life conflict trigger OS and burnout among COs at public hospitals. On the other hand, through disengagement from their jobs, OS and burnout among COs at public hospitals also cause frustration, depression, anxiety, irritability, anger, resentment, poor inter-professional relations, and work-life conflict.

9.3.3. Cholera outbreak amidst COVID-19 pandemic

Psychological, physical, and social consequences of OS and burnout negatively affected the COs' capacity to effectively respond to a national outbreak called cholera. On March 3, 2022, amidst the COVID-19 pandemic, the Ministry of Health declared a cholera outbreak in Malawi following the detection of a cholera case in Machinga district, which is situated in the southern region of the country (International Federation of Red Cross and Red Crescent Societies, 17 September 2022; World Health Organization, 27 April 2022). Cholera is an acute watery diarrheal infection caused by ingesting a bacterium called *vibrio cholerae* that is found in contaminated water or food (Deen et al., 2020; Holmgren, 1981; Morris Jr. & Black, 1985). It is extremely virulent, particularly in communities that are exposed to unsafe drinking water and poor sanitation (Deen et al., 2020; Holmgren, 1981).

Among the national responses to the cholera outbreak, was the establishment of cholera treatment units (ChTUs) at health facilities across the country, including public hospitals as shown in Figure 26-9 below (International Federation of Red Cross and Red Crescent Societies, 17 September 2022; UNICEF, 12 January 2023; World Health Organization, 30 March 2022). COs and other health workers were assigned to work in the ChTUs. By the end of August 2022, the country had reported 67 deaths and 1,736 cases of cholera, thus representing a case fatality rate of 3.85 per cent (International Federation of Red Cross and Red Crescent Societies, 17 September 2022). This rate is over three times higher than the benchmark set by the WHO, which estimates the case fatality rate for cholera at 1 per cent or less when treatment is optimal (International Federation of Red Cross and Red Crescent Societies, 17 September 2022; World Health Organization, 30 March 2022). On 5 December 2022,

the Head of State of the Republic of Malawi, Dr Lazarus Chakwera, declared cholera a public health emergency (Minister of Health, 5 December 2022). Within a space of four weeks after the declaration of cholera as a public health emergency, the country recorded 6,760 new cases, 318 deaths, and a 3.35 per cent case fatality rate (Episcopal Conference of Malawi and Malawi Council of Churches, 13 January 2023; UNICEF, 12 January 2023).

Figure 26-9: Inside a Cholera Treatment Unit in Blantyre



Source: Nyasa Times (31 December 2022)

When the cholera outbreak was declared on 3 March 2022, the COs at public hospitals had been experiencing emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout due to a combination of psychosocial hazards that I discussed in chapters 5-8. These psychosocial hazards include excessive workloads, long hours of work, poor interprofessional relations, restructuring, COVID-19 responses, and the absence of OSH management systems. The declaration of cholera as a public health emergency on 5 December 2022 was promulgated when COs were already confronted with the consequences of OS and burnout. At this juncture emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout were already contributing to poor quality of life among COs through psychological, social, physical, and economic

consequences, as demonstrated in this chapter. To some extent, the poor quality of life among the COs caused by OS and burnout led to poor quality services by the COs in responding to the cholera outbreak vis-à-vis duties in the ChTUs. The COs' capacity to effectively perform their duties in curbing the cholera outbreak was therefore hindered by the negative impacts of OS and burnout to which they had been exposed before the outbreak.

9.4. Impact shifting to the general public

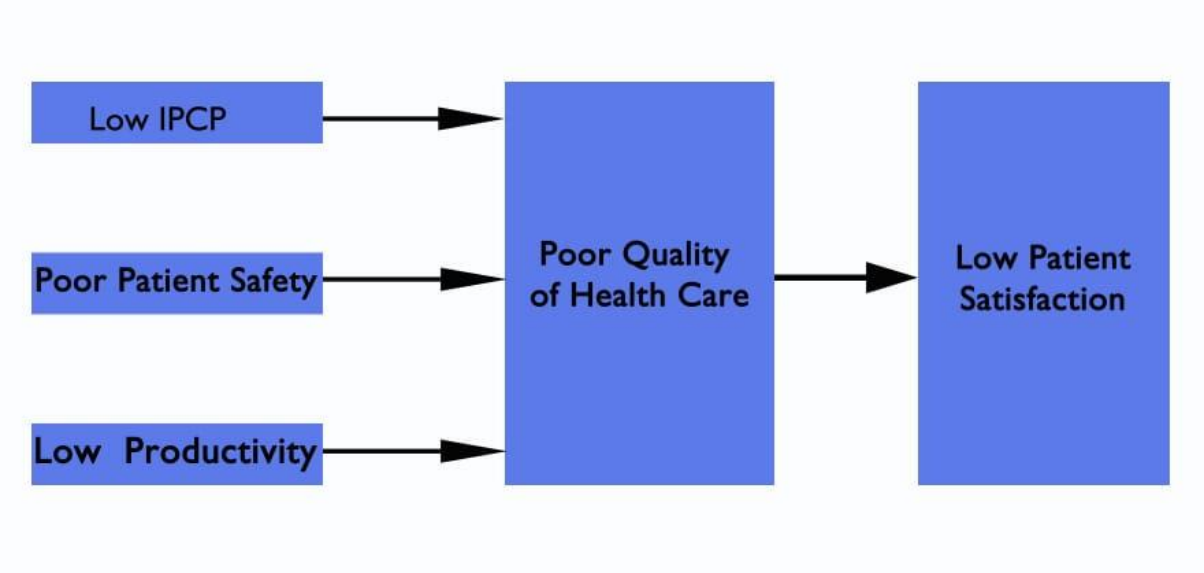
In this section, I draw a connection between OS and burnout among COs and the quality of health in the general population. I argue that the poor quality of healthcare services provided by COs due to OS and burnout leads to poor health among the masses who rely on healthcare provided free of charge at public hospitals. I demonstrate in this section that the impacts of OS and burnout are not only felt by COs as individuals. The psychological, physical, and social consequences of OS and burnout among COs are eventually externalised to the patients through the poor quality of services by the COs. Against this backdrop, my significant contribution in this thesis is the coining of the term *impact shifting* which I use to illustrate the externalisation of the consequences of OS and burnout among COs to the general public.

9.4.1. Patient Satisfaction

The impact of OS and burnout among COs on the health of the population can be manifested through the poor quality of healthcare services rendered by COs (both individually and collectively). The poor quality of health care services provided by COs as a result of OS and burnout has a negative effect on patient satisfaction. Patient satisfaction is the congruence between the patient's expectations of hospital services and the patient's perceptions of the actual hospital services received (Heidegger et al., 2006; Ozturk et al., 2020; Prakash, 2010). Some studies have established a direct connection between the quality of healthcare and patient satisfaction, such that patient satisfaction has become a key indicator of the performance of a health system (Batbaatar et al., 2017; Pascoe, 1983). For instance, the Ministry of Health identified patient satisfaction as one of the main indicators for tracking health outcomes in Malawi (Malawi Government, 2018c). In 2018 the Ministry of Health set a target that by 2022, at least 80 per cent of patients seeking medical attention at public healthcare facilities in Malawi should be satisfied with the services received (Malawi Government,

2018c). Figure 27-9 (below) shows how the quality of healthcare can be negatively affected by three factors associated with OS and burnout.

Figure 27-9: Conceptual framework on occupational stress & burnout and patient satisfaction



As shown in Figure 27-9 (above), I identified three factors associated with OS and burnout that can negatively affect the quality of services rendered by COs. The three factors are low interprofessional collaborative practice (IPCP), poor patient safety, and low productivity among COs. Ultimately, the poor quality of services provided by the COs contributes to low patient satisfaction as shown in Figure 27-9 (above).

9.4.1.1. Interprofessional collaborative practice

As discussed in the previous section, poor quality services among COs partly emanate from job disengagement. Job disengagement subsequently hinders collaboration among health workers at a hospital. Collaboration among health workers, also referred to as interprofessional collaborative practice (IPCP), is vital for fostering a synergy that ensures effective, safe, and high-quality healthcare (Gittell et al., 2013; Green & Johnson, 2015; Paul & Peterson, 2002). As a result, collaboration or more specifically IPCP, has become an essential component in efforts to promote high-quality healthcare (Gittell et al., 2013; Paul & Peterson, 2002). IPCP improves healthcare quality by increasing efficiency, skill mix, and responsiveness, and making room for more holistic services, innovation, and creativity (Green & Johnson, 2015). The WHO has drawn direct connections between IPCP and better outcomes in family health, fight against infectious diseases, humanitarian efforts, and responses to pandemics and national outbreaks (World Health Organization, 2010a). IPCP in a hospital setting

is therefore a cornerstone of the quality of healthcare (Chodzaza et al., 2020; Cullati et al., 2019; Nwobodo et al., 2022).

The results of my study show that on one hand, emotional exhaustion, depersonalisation and reduced personal accomplishment as forms of OS and burnout lead to negative attitudes on the job among the COs. On the other hand, psychological, social, and physical consequences of OS and burnout also trigger negative attitudes toward the job among COs. For some COs, such negative attitudes on the job ultimately lead to disengagement from the job. The disengagement from the job, among others, is manifested through drug and substance abuse, absenteeism, presenteeism, quiet quitting, knocking off early from work, and reporting for work late. Job disengagement entails that COs scheduled to be on duty at a particular time or on a particular day are either not available or not willing to perform their duties because they lack enthusiasm, and hence they detach themselves from the workplace. Since they lack enthusiasm and further detach themselves from the workplace, COs who are disengaged from the job may not be willing to share ideas, knowledge, and experience with colleagues. As such, it becomes difficult for such COs to collaborate with fellow workmates at the hospital through IPCP. This leads to poor efficiency, responsiveness, innovation, and creativity in the delivery of healthcare. In this regard, the findings of my study build on the work of Arandjelovic et al. (2010) and Kim et al. (2019), who found that workers experiencing OS and burnout had a negative impact on their coworkers by causing personal conflicts and disrupting job tasks.

The results of my study further qualify Hall et al. (2016). The authors argued that OS and burnout, which among others manifest through fatigue, irritability, and reduced cognitive functioning, exert pressure on team relationships, leading to more distanced staff. Personal conflicts, disruption of job tasks, and pressure on teamwork as a result of OS and burnout may encourage health professionals to work individually or in isolation as opposed to IPCP. Hurdles on IPCP due to job disengagement related to OS and burnout, may lead to mistreatment or non-treatment of patients that may culminate in poor patient satisfaction and poor quality of health in the wider population. This supports a finding by Cullati et al. (2019) that conflicts among health professionals that may inhibit IPCP, were associated with poor patient care through neglect of the patients and delays in providing treatment.

Chodzaza et al. (2020) conducted a study on the perspectives of midwives and other health professionals towards IPCP in the maternity department at Queen Elizabeth Central Hospital, which was one of the study sites for my doctoral research. The researchers found that, among others, the hectic environment of the maternity wards, along with frustrations and OS, negatively impacted the health workers' efforts in IPCP. This is consistent with the results of my study. The results of my study show that the emotional and cognitive effects of OS and burnout among COs also hinder IPCP at public hospitals. Irritability, defensiveness, anger, and mood swings as emotional reactions on the one hand and memory lapses, forgetfulness, lack of attention, and poor concentration as cognitive reactions on the other hand, pose a negative effect on work relations at the hospital. It is challenging for one to effectively collaborate with workmates when they are irritable, defensive, angry, and undergoing mood swings, memory lapses, forgetfulness, lack of attention, and poor concentration as a result of OS and burnout. The spirit of teamwork within the framework of IPCP is inhibited by an atmosphere of anger, mood swings, and irritation. COs experiencing emotional and cognitive effects of OS and burnout cannot effectively collaborate with other health workers like doctors and nurses in efforts to deliver the highest quality of health care to the wider population. Hence, OS and burnout hamper COs and other health workers at the hospitals from working collaboratively together as teams towards a common goal of providing quality healthcare and improving patient satisfaction. This means COs suffering from OS and burnout cannot effectively play their expected roles within the framework of IPCP.

IPCP became a critical tool for responding to the COVID-19 pandemic (Donnelly et al., 2021; Fernandes et al., 2021; Wulandari et al., 2022). IPCP was considered a prerequisite for coping with the complex problems associated with the COVID-19 pandemic (Fernandes et al., 2021). In Indonesia, IPCP significantly contributed to the reduction of the spread of COVID-19 and mortality rates associated with the COVID-19 pandemic (Wulandari et al., 2022). The COVID-19 pandemic required rapid and effective responses that could only be possible through IPCP (Donnelly et al., 2021; Fernandes et al., 2021). Against this backdrop, I add that even the cholera outbreak which has become a public health emergency in Malawi since 5 December 2022, required rapid and effective responses within the framework of IPCP. Before the COVID-19 pandemic and cholera outbreak emerged, COs were already experiencing

the impacts of OS and burnout, like job disengagement and cognitive and emotional effects. The job disengagement and cognitive/emotional effects to which COs were already exposed before the COVID-19 pandemic and cholera outbreak emerged, hindered their participation in IPCP during the pandemic and the outbreak. Hence, when the COVID-19 pandemic and cholera outbreak emerged, COs were challenged in terms of their capacity to effectively respond towards curbing the pandemic and the outbreak within the framework of IPCP. For instance, during the pandemic, health workers were compelled to do extra tasks beyond the minimum requirements of the job. Some health workers would be compelled to dedicate time beyond normal working hours to attend to tasks related to the COVID-19 pandemic. Some COs who were already negatively affected by OS and burnout before the pandemic and were considering quiet quitting, would not be able to put in the extra time and effort on the job during the pandemic. Those undertaking presenteeism or absenteeism, would not be available to perform the tasks in concert with other health workers amidst the pandemic. In a way, quiet quitting, absenteeism, and presenteeism as a result of OS and burnout among COs, hindered effective collaboration between COs and other health workers within the framework of IPCP that was required in responding to the COVID-19 pandemic and cholera outbreak.

9.4.1.2. Poor patient safety

Patient safety can be connected with OS and burnout among COs. Increased risks to OS and burnout among COs, lead to an exacerbation of risks for patients in terms of harm and adverse health outcomes. Patient safety is considered a cornerstone of high-quality health care (Mitchell, 2008). The World Health Organisation (2011, p. 81) defines patient safety as “the reduction of the risk of unnecessary harm associated with healthcare to an acceptable minimum.” In this chapter, I discussed that memory lapses, forgetfulness, lack of attention, and poor concentration while on duty are cognitive effects of OS and burnout among COs. Some medical errors and mistakes committed by COs are associated with memory lapses, forgetfulness, lack of attention, and poor concentration. In essence, medical errors and mistakes are harmful to patients that provide no health benefit (Mitchell, 2008; World Health Organization, 2011). Such unnecessary harm should therefore be avoided in the hospital setting (Mitchell, 2008; World Health Organization, 2011). The impacts of OS and burnout on COs are partly externalised to patients through the unnecessary harms caused by medical errors and mistakes, i.e., *impact shifting*. Hence the medical errors and

mistakes that COs commit in the course of duty due to the cognitive effects of OS and burnout are a manifestation of poor patient safety.

According to the World Health Organisation (9 March 2019), patient harm through medical errors and mistakes is the world's 14th biggest cause of death. In low-income countries like Malawi, the rate of harm to patients resulting from medical errors and mistakes is estimated at 8 per cent, of which 83 per cent is preventable (World Health Organisation, 9 March 2019). Even a near miss that could have led to unnecessary harm to a patient, is regarded as a patient safety incident (World Health Organisation, 2011). Patient safety requires that all players involved in healthcare, be patient safety-minded (Emanuel et al., 2009). To prioritise patient safety, hospital management, employees, and the Ministry of Health should work together to reduce or eliminate factors associated with medical errors and mistakes, such as OS and burnout. Interventions to minimise or eliminate the impact of psychosocial hazards on the mental well-being of hospital staff, should therefore become mandatory in the provision of healthcare.

The results of my study confirm that in the absence of OSH management systems, most of the medical errors, mistakes, and near-misses (including those that are associated with OS and burnout) are not reported. The COs fear punishment, disciplinary action, litigation, and losing their jobs if they report medical errors, mistakes, and near misses. Hence, there is no proper documentation of the medical errors and mistakes and no records of the measures taken to minimise or eliminate errors and mistakes at the five public hospitals. As such, failure to report and document medical errors and mistakes increases the risks to patient safety since medical errors and mistakes are prone to recur. In this regard, the results of my study qualify London et al. (2014). The authors argued that employees who are cognisant of potential harm in the workplace, are sometimes reluctant to report for fear of exposure and victimisation by superiors that may culminate in job losses.

Successful efforts to minimise incidences of OS and burnout, may lead to the avoidance of a myriad of medical errors, mistakes, and near-misses associated with the cognitive effects of OS and burnout. Such efforts can therefore promote patient safety at public hospitals and ultimately contribute to better quality healthcare. Since

the cognitive effects of OS and burnout are associated with medical errors, mistakes, and near misses, patients cannot be safe from harm if COs are increasingly predisposed to OS and burnout. However, COs are more likely to experience feelings of frustration, depression, and anxiety as a result of guilt consciousness after committing medical errors, mistakes, and near misses, the majority of which go unreported. The threats of disciplinary actions and lawsuits for committing medical errors, mistakes, and near-misses may exacerbate such feelings. The exacerbation of such feelings may further aggravate OS and burnout. Ultimately, to the detriment of patient safety, a cycle of medical errors, mistakes, and near misses concerning OS and burnout among COs is likely to emerge and persist.

From the results of my study, anger, mood swings, and irritation among COs as emotional effects of OS and burnout are connected to violence against patients in the form of verbal aggression and bullying. Some COs experiencing anger, mood swings, and irritation as a result of OS and burnout, may insult or shout at the patients during medical consultations. As a result, during consultations, patients may feel intimidated or discouraged from discussing their health problems with COs, resulting in misdiagnosis, incorrect drug prescriptions, incorrect tests, and other medical errors and mistakes. Misdiagnosis, wrong prescriptions, wrong tests, and other medical errors are manifestations of poor patient safety. This is consistent with Kim et al. (2019), who found that in Malawi and South Africa, burnout led to acrimonious relationships between health workers and patients. The researchers further found that such acrimonious relationships between health workers and patients, emanating from burnout, ultimately contributed to poor patient satisfaction.

9.4.1.3. The decline in productivity on the job

OS and burnout can also be connected with a decline in productivity among COs. The decline of productivity among COs poses a negative impact on the quality of healthcare at public hospitals, culminating in poor patient satisfaction. As I discussed in the previous section, among the impacts of OS and burnout are physical consequences, which encompass injuries, high blood pressure, hypertension, muscle tension or pain, and severe headaches. Suffering from injuries and illnesses as physical consequences of OS entails that one is a patient requiring medical treatment. Hence, as a patient, your performance at work is negatively affected. A study by

Prasad et al. (2004) found that illnesses among workers interfere with job performance by reducing an individual's productivity. Cockburn et al. (1999) argued that illnesses in conjunction with taking treatment harm one's ability to function at work. Pransky et al. (2005) conducted a study in which they demonstrated that suffering from headaches had a negative impact on an individual's productivity at work. Building on Cockburn et al. (1999) and Pransky et al. (2005), I argue that as a result of the physical consequences of OS and burnout, a CO can miss working hours due to absenteeism and presenteeism. The more a CO is on absenteeism and presenteeism due to injury or illness in a hospital setting characterised by excessive workloads, the more work piles up. Hence, a CO being away from work for days due to an injury or illness related to OS and burnout entails that the CO's productivity at work declines as demonstrated by Prasad et al. (2004), Cockburn et al. (1999), and Pransky et al. (2005). This is consistent with Guadix et al. (2015) who confirmed that psychosocial hazards among others, hinder performance-related outcomes within organisations such as productivity.

Declining productivity due to physical consequences of OS and burnout, may negatively affect patient satisfaction through non-treatment or delays in receiving treatment because the COs on duty are on absenteeism or presenteeism. Non-treatment or delays in receiving treatment on the part of the patients are indicators of poor quality of healthcare at public hospitals. If COs are free from the physical consequences of OS and burnout, it entails fewer cases of absenteeism and presenteeism among COs. It further entails COs becoming more productive as compared to when they are absent due to injuries or illnesses. Being free from the physical consequences of OS and burnout also means that COs are more motivated to work than when they are suffering from any kind of injury or illness. I, therefore, argue that the COVID-19 pandemic and cholera outbreak in Malawi required rapid and effective responses among the COs. The rapid and effective responses would be intensified through high productivity among COs, enhanced by minimising or eliminating the harmful consequences of OS and burnout at public hospitals. In the final analysis, by providing a work environment in which risk factors for OS and burnout are systematically and regularly monitored, minimized, or eliminated, the hospital staff is likely to work more effectively and safely. The COs, who are far less affected by OS

and burnout, would be less prone to making medical errors and mistakes and more likely to avoid causing unnecessary harm to patients.

Furthermore, the COs who are far less affected by OS and burnout would be more engaged on the job and become more productive. Having more productive COs who are more engaged on the job and inflict no harm on patients, entails high quality of healthcare and optimum patient satisfaction. In this regard, the results of my research are consistent with the findings of two studies on patient satisfaction conducted in Malawi by Sinyiza et al. (2022) and Creanga et al. (2017). Both Sinyiza et al. (2022) and Creanga et al. (2017) confirmed that the quality of healthcare was a key predictor of patient satisfaction: the better the quality of healthcare, the higher the patient satisfaction, and conversely. The results of my study further substantiate a study conducted on nurses in the United States of America by McHugh et al. (2011). The researchers revealed that burnout and job dissatisfaction were connected with lower patient satisfaction and poor healthcare. OS and burnout can therefore prevent COs from providing healthcare experience that both COs and patients may desire. This ultimately may lead to a decline in the degree of patient satisfaction, which is one of the important indicators for health outcomes designated by the Ministry of Health.

9.4.2. Application of the fundamental cause theory

In this section, I continue with the interpretation of the results by applying perspectives drawn from the fundamental cause theory, which I introduced in Chapter 3 (a literature review). The fundamental cause theory can be applied to enrich the explanation of the impact of psychosocial hazards at hospitals on the quality of life of individual COs, COs' performance on the job and health in the wider population. I have two intentions for using the fundamental cause theory. Firstly, I demonstrate that the psychosocial hazards at public hospitals are a fundamental cause of some health problems among COs. Secondly, I use the fundamental cause theory to argue that psychosocial hazards at public hospitals constitute social determinants of health in the wider population.

9.4.2.1. Direct impact on clinical officers

The fundamental cause theory states that certain social conditions are fundamental causes of health problems among individuals (Link & Phelan, 1995; Phelan & Link, 2013; Phelan et al., 2004). From the results of my study, I argue that there is a peculiar

social phenomenon that is a fundamental cause of poor quality of life among COs. The public sector employs 1,045 COs out of 2,935 established positions, thus representing a 64 per cent vacancy rate for COs (Malawi Government, 2018b) and a CO-patient ratio of 0.82 COs per 10,000 of the population (Malawi Government, 2018c). According to the World Health Organisation (2006), a country with less than 25 health professionals (i.e., doctors, nurses, and others) per 10,000 population cannot achieve adequate coverage of critical primary health care interventions. This means that even if all established positions for COs are filled, the country will not exceed 2 COs per 10,000 of the population. The 0 per cent vacancy rate as far as COs' established positions are concerned, is still far below the recommended threshold of 10 health professionals per 10,000 of the population. The COs find themselves in a social condition characterised by excessive workloads and long hours of work amidst insufficient high vacancy rates for COs at public hospitals. Such a social condition is a breeding ground for OS and burnout, which ultimately lead to various health problems among COs. Even if such health problems are eradicated, an association of excessive workloads, long hours of work, OS and burnout with health problems will re-emerge. As such, the social condition that breeds OS and burnout can defy efforts to eliminate the health problems emanating from OS and burnout when attempts to do so, solely target the health problems while ignoring the social condition itself.

Within the framework of the fundamental cause theory and building on the discussions from chapters 5–8, I conclude that:

1. Psychosocial hazards at public hospitals constitute a social condition that influences health problems among COs through multiple risk factors revolving around OS and burnout. These psychosocial hazards are mainly excessive workloads and long hours of work amidst insufficient number of COs working at public hospitals. Such a social condition for health problems through OS and burnout, is exacerbated by a combination of other psychosocial hazards such as poor interprofessional relations, restructuring, COVID-19 responses, and the absence of OSH management systems.
2. Some resources can be used to minimise the impact of psychosocial hazards and avoid health problems emanating from OS and burnout among COs at public hospitals. As discussed in Chapter 8, comprehensive OSH policy in

particular or OSH management system in general are good examples of such resources.

3. The association between psychosocial hazards and health problems caused by OS and burnout among COs, can persist over time as highlighted in this chapter and in chapters 5-8 in which I illuminated this association within two periods i.e., before and after the COVID-19 pandemic.

I refer to the health problems caused by OS and burnout as psychological and physical consequences of OS and burnout. The health problems under psychological consequences include emotional and cognitive disorders, while the physical consequences include insomnia, high blood pressure, hypertension, muscle pains, headaches, injuries, etc. These health problems among COs, emanating from OS and burnout, ultimately lead to poor quality of healthcare rendered by COs.

From the fundamental cause theory (as discussed in this section) and the JD-R model (as discussed in Chapter 8), three ideas can be extrapolated. Firstly, adequate job resources and low job demands are vital for COs at public hospitals to avoid OS and burnout, thereby maintaining their good health and providing quality services. Conversely, inadequate job resources coupled with excessive job demands render COs highly susceptible to OS and burnout. Subsequently, OS and burnout cause various health problems among COs. Put differently, the conditions of work at public hospitals as far as psychosocial hazards are concerned, contribute to various illnesses including mental health disorders among the COs. The psychosocial hazards are therefore a fundamental cause of health problems among COs at public hospitals.

Secondly, OS and burnout can also lead to health inequalities between COs showing symptoms of mental disorders like OS and burnout and other health workers without the symptoms. “Accumulating evidence shows that stigma has health-harming consequences that build health disparities between those who are stigmatised and those who are not” (Link et al., 2018, p. 1). For instance, in society, there is a stigma against forms of mental illnesses such that those suffering from mental disorders are sometimes discriminated against (Henderson et al., 2013; Singh et al., 2021; Thornicroft et al., 2007). The results of my study show that COs suffering from OS and burnout as forms of mental health problems faced stigma from fellow health workers, including superiors. Furthermore, most people with a diagnosis of a mental disorder

like stress are reluctant to seek primary health care due to stigma (Henderson et al., 2013; Thornicroft et al., 2007). Against this backdrop, I conclude that COs with mental problems like OS and burnout are predisposed to poor health as compared to other health workers and members of the general public without OS and burnout.

9.4.2.2. Impact shifting to the general public

The results of my study confirm that psychosocial hazards at public hospitals constitute social determinants of health. Social determinants of health is a term that refers to a "complex and interlocking web of macro-level factors-'the conditions in which people are born, grow, live, work, and age'- that affect a population's health" (Kentikelenis, 2017, p. 299). This means that social factors play important roles in shaping health across a wide range of health indicators in the wider population (Armenti et al., 2023; Braveman & Gottlieb, 2014). Work is recognised as a social determinant of health such that the manner in which work is designed and managed, may have an enormous impact on health in the wider population (Armenti et al., 2023). I already demonstrated that the negative effects of OS and burnout are not confined to individual COs. The negative effects are consequently externalised to the patients and the general public through the poor quality of services rendered by COs experiencing OS and burnout. I coined a concept *impact shifting* to refer to a process of externalising the negative effects of OS and burnout among COs to patients and the general public. In light of this, I contend that the impact of psychosocial hazards on individual COs is a social determinant of health in the general population.

There are two implications that I draw from the fundamental cause theory in light of the socio-economic context of Malawi that I depicted in Chapter 2. The majority of the population is engaged in low-paid, vulnerable, and informal work with meagre wages, no job security, and no medical insurance, and struggles to meet the cost of basic needs like health care (International Labour Organisation, 2014; Laterza, 2016; Meagher, 2016; Molokwane & Chinguwo, 2019). I already demonstrated that one of the consequences of OS and burnout is the poor quality of life among COs, which negatively affects the quality of healthcare at public hospitals. Most of those affected by the poor quality of healthcare at public hospitals, would therefore be the majority of the population with low socio-economic status. This majority relies on public hospitals for health care services, which are provided free of charge. This majority cannot afford

the financial costs of healthcare at private hospitals within the country or abroad. This may ultimately lead to poor health in the general population, particularly among those with low socio-economic status.

Secondly, people with access to resources have less risk of health problems and can maintain good health as they can use their resources to access better healthcare from private hospitals or abroad. While those with little resources (the majority of the population) rely on public hospitals for free health services, where they are attended to by COs who are highly vulnerable to OS and burnout. Some of these COs, may experience job disengagement and commit medical errors and mistakes as a result of OS and burnout, to which they are exposed at public hospitals. Health inequalities in society between those with high socio-economic status and those with low socio-economic status are therefore prone to escalate as far as access to quality healthcare is concerned. Hence, the psychosocial hazards that cause health problems among COs through OS and burnout, constitute social determinants of health which interact and accumulate over time, leading to deep and pervasive health inequalities in the wider population. I therefore conclude that, as far as OS and burnout are concerned, there is *impact shifting* of the negative effects of OS and burnout among COs to patients and the general public.

Finally, in the context of social determinants of health, the results of my study reveal the powerful role of social factors such as psychosocial hazards in shaping the health and well-being of workers in particular and the wider population in general. More importantly, the relationships between the psychosocial factors and health are complex, dynamic, and interactive such that the cumulative impacts may only manifest decades after exposure to the psychosocial hazards. Put differently, I have demonstrated how the design and management of work as far as psychosocial hazards are concerned, may have an enormous impact on health in the wider population. This is despite that psychosocial hazards and service sectors like healthcare are exempted and neglected respectively in Malawi as far as OSH regulation is concerned.

9.5. Summary

In this chapter, I demonstrated that OS and burnout contribute to poor quality of life among COs mainly through psychological, social, and physical consequences. The COs are confronted with a social condition characterised by excessive workloads and long hours of work amidst too few staff at public hospitals. Such a social condition is a fundamental cause of health problems related to OS and burnout that ultimately lead to poor quality of life among COs. I used the concept of *impact shifting* which I coined, to illustrate that the negative effects of OS and burnout among COs, are ultimately externalised to patients and the general public through poor quality of healthcare in three ways. Firstly, medical errors and mistakes associated with the cognitive effects of OS and burnout, pose unnecessary harm to patients in the course of accessing healthcare. Secondly, job disengagement associated with the cognitive and emotional effects of OS and burnout, hinders efforts for collaboration between COs and other health workers at public hospitals. Lastly, the physical consequences of OS and burnout, pose a negative impact on productivity at work among COs. In the next chapter, I present an overall conclusion and recommendations of the study drawn from the discussions in chapters 5–9.

Chapter 10

Conclusion and Recommendations

10.1. Introduction

In this chapter, I present an overall conclusion drawn from the discussions in chapters 5–9. Thereafter, I highlight key recommendations at the research level derived from the limitations that I identified with my study. In this chapter, I also provide actionable recommendations at the policy and practical levels for consideration by the government, workers, and other stakeholders. The argument that I advance in this chapter is that policy interventions that were introduced to address various challenges in the health sector, indirectly contributed to increased risks of OS and burnout among COs. The increased risks of OS and burnout were manifested through emotional exhaustion, depersonalisation and reduced personal accomplishment. Such policy interventions are task shifting, implementation of neoliberal conditionalities, locum programme, EHRP, decentralization, and COVID-19 responses. The increased risks of OS and burnout among COs associated with these policy interventions, are externalised to the patients through poor quality services provided by COs and ultimately poor patient satisfaction, as I demonstrated in Chapter 9.

10.2. Policy interventions

Policy interventions were introduced to address various challenges in the health sector. Some of the policy interventions are associated with fundamental changes in the health sector, such as the introduction of new processes on the job, new working procedures, new tasks, or revised organisational structures. As COs grapple with such fundamental changes, they experience OS and burnout through emotional exhaustion, depersonalisation and reduced personal accomplishment. OS and burnout consequently affect the quality of the COs' lives. In this section, I provide a snapshot of the connection between such policy interventions and OS and burnout among COs.

10.2.1. Task shifting

The introduction of a cadre of mid-level health professionals called COs in 1976, was a policy response to address an acute shortage of medical doctors in Malawi (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014; Jiskoot, 2008; McAuliffe, Bowie, et al., 2009; Mkandawire et al., 2008; Muula, 2009; Muula, 2009). This is a type of task shifting in which certain authorities and

responsibilities designated for medical doctors, were delegated to COs with lesser clinical training and skills than medical doctors. There are benefits of task shifting in relation to the use of COs as substitutes for medical doctors in Malawi. Firstly, it takes 7 years for one to train and graduate as a qualified medical doctor with a BSc degree, while it only takes 4 years to satisfy all requirements for clinical practice as a CO (Gajewski et al., 2019; Grimes et al., 2014; Jiskoot, 2008; Mkandawire et al., 2008; Muula, 2009). In addition, the remuneration for COs after training is far lower than that of medical doctors. It is therefore relatively less costly and quicker to train COs as compared to medical doctors, making it more cost-effective to use COs as substitutes for medical doctors.

Secondly, Malawi did not have an institution of higher learning to locally train medical doctors until 1991, when the College of Medicine was opened (Broadhead & Muula, 2002; Muula et al., 2016). In the short to medium term, it was prudent to begin task shifting by introducing a cadre of COs as substitutes for medical doctors, while the government explored the feasibility of establishing a medical school in the country. Finally, because of their academic qualifications, which are not internationally recognised, COs have a lesser propensity for migrating abroad as compared to doctors whose qualifications are internationally accredited. Hence, by investing in training COs as substitutes for medical doctors, the government is assured of the readily availability of COs' services in the long term, as compared to doctors, whose skills are highly demanded both domestically and abroad.

Some studies have glorified task shifting under which the COs are delegated duties conventionally designated for medical doctors (Bradley & McAuliffe, 2009; Chilopora et al., 2007; Gajewski et al., 2019; Grimes et al., 2014; McAuliffe, Bowie, et al., 2009; McAuliffe, Manafa, et al., 2009; Muula, 2009; Sanyahumbi et al., 2017). These studies concur that the surgical outcomes of less qualified COs are comparable to medical doctors' surgical outcomes. These studies provide evidence that although COs possess fewer qualifications and skills as compared to doctors, COs are just as good as doctors in the course of task shifting.

However, despite the benefits of task shifting concerning the use of COs as substitutes, there are negative impacts of task shifting on individual COs, patients, and the general public. The COs are trained for a shorter period and acquire fewer skills than doctors, yet upon completion of their training, they are expected to perform tasks

internationally designated for doctors. In the course of task shifting, COs are therefore faced with high job demands and low job resources as they grapple to perform as substitutes for medical doctors given their lesser clinical training and skills. The high job demands and low job resources cause or aggravate OS and burnout among COs through emotional exhaustion, depersonalisation and reduced personal accomplishment. OS and burnout ultimately result in psychological, physical, social, and economic consequences.

The introduction of the CO position as a form of task shifting, was a temporary measure on the understanding that sooner or later, the country would produce an adequate number of medical doctors to gradually assume their roles, which were previously performed by COs (Muula, 2009). The challenge is that when engaging the COs in clinical practice, they are not adequately informed that the roles and responsibilities conventionally performed by doctors are temporarily being assigned to them (COs). As such, when doctors begin to assume their conventional roles and responsibilities temporarily assigned to COs under task shifting, the COs react with resentment, frustration, and anxiety that their responsibilities, authority, and power are being unfairly taken away from them (COs). Any attempt by the Ministry of Health to restore to doctors the responsibilities previously held by COs, is interpreted as an aggressive action against COs. Such resentment, frustrations, and anxieties are sources of OS and burnout among COs, as I demonstrated in Chapter 6. From the onset, the ToRs for engaging COs in task shifting should spell out that:

1. COs are temporary substitutes for medical doctors to address the shortage of medical doctors.
2. At any point, any tasks provisionally performed by the COs as substitutes, can be transferred back to medical doctors.

If the points highlighted above were clarified in the ToRs for engaging COs in task shifting, resentments, frustrations, and anxieties among COs over reinstating of responsibilities provisionally performed by COs to medical doctors would have been avoided. Hence, OS and the burnout associated with such resentments, frustrations, and anxieties would also have been averted to some extent.

10.2.2. Other policy interventions

In Chapter 5, I established that neoliberal conditionalities partly compel the government to implement policy interventions aimed at constraining the national

budget and, in particular the recruitment of health workers to fill vacancies in the public sector. This partly contributes to excessive workloads and long hours of work among COs, which are sources of OS and burnout among COs. Other policy interventions were also introduced to address the human resource challenges in the health sector, such as the locum programme and the EHRP, which I discussed in Chapter 6. In Chapter 6, I also discussed that there have been functional reviews and decentralisation in the health sector as policy interventions to improve efficiency in the delivery of healthcare. Furthermore, when the COVID-19 pandemic emerged, there were policy responses aimed at curbing the pandemic, as I demonstrated in Chapter 7. However, I demonstrated in chapters 6–7 that locum, EHRP, functional reviews, decentralization, and COVID-19 responses are associated with increased risks of OS and burnout among COs. I, therefore, conclude that policy interventions such as task shifting, implementation of neoliberal conditionalities, the locum programme, EHRP, decentralization, and COVID-19 responses that were introduced to address various challenges in the health sector, eventually posed impacts on OS and burnout among COs. The OS and burnout associated with these policy interventions, negatively affect the quality of healthcare rendered by COs. These policy interventions are therefore examples of psychosocial hazards from outside the workplace.

I further argue that if public hospitals had OSH management systems, psychosocial risk assessments would have been conducted before the implementation of neoliberal conditionalities, locum program, EHRP, decentralization, and COVID-19 responses. The reasoning behind conducting psychosocial risk assessments is to identify the potential effects of these policy interventions on the mental health of health workers. Thereafter, appropriate measures for mitigation would therefore be devised and implemented.

10.3. Impact shifting

The impacts of OS and burnout are not only felt by the individual COs. The psychological, physical, and social consequences of OS and burnout among COs are eventually externalised to the patients through the poor quality of services by COs. The poor quality of healthcare ultimately contributes to the decline of the degree of patient satisfaction, which is one of the key indicators for health outcomes designated by the Ministry of Health. Against this backdrop, I coined the term *impact shifting* to refer to the externalisation of the consequences of OS and burnout among COs to the

general public through poor quality healthcare and low patient satisfaction. Since OS and burnout among COs consequently affect health in the general public through impact shifting, I argue that psychosocial hazards at public hospitals require serious attention and prioritisation in national OSH regulation and health sectoral policies As such, OSH should be integrated with the broader public health and health promotion services at national level.

In the final analysis, as I discussed in Chapter 1, there are three implicit assumptions posed by the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare. The first assumption is that psychosocial hazards do not exist in workplaces in Malawi. The second assumption is that, if at all psychosocial hazards exist at workplaces, they do not pose a critical problem that would warrant policy intervention at both the workplace and national levels. The third assumption is that hospitals, as spaces through which healthcare services are delivered, are immune to OSH hazards, hence the exemption of healthcare from OSH regulation. In this thesis (Chapters 5–9), I provided empirical evidence that challenges the three implicit assumptions by demonstrating that:

1. Public hospitals in Malawi are not immune to OSH hazards.
2. Psychosocial hazards do exist at public hospitals in Malawi.
3. Psychosocial hazards constitute a fundamental cause of health problems related to OS and burnout among COs at public hospitals in Malawi.
4. Health problems emanating from OS and burnout among COs negatively affect the quality of healthcare services rendered by the COs.
5. Poor quality healthcare services provided by COs as a result of the negative effects of OS and burnout, have a negative impact on patient satisfaction and ultimately health outcomes.

Using the experiences of COs, I have demonstrated that despite that the coverage of OSH regulation neglects psychosocial hazards and exempts services like healthcare, there is a myriad of psychosocial hazards at public hospitals. In particular, the incidents of OS and burnout are prevalent among COs at public hospital through three aspects. Thes three aspects are: emotional exhaustion, depersonalisation and reduced personal accomplishment.

10.4. Study limitations

I identified five overall limitations for my doctoral research. Firstly, there are various cadres of health workers at public hospitals in Malawi, such as COs, medical assistants, dentists, nurses, midwives, doctors, pharmacists, laboratory technicians, health surveillance assistants, radiographers, and support staff (Malawi Government, 2018b). In challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare, I focused on the experiences of COs with OS and burnout. I, therefore, did not pay attention to the other cadres of health workers at public hospitals who may have had peculiar experiences with OS and burnout. The data from other health workers would be valuable to strengthen the arguments I raised in challenging the narrow scope and coverage of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare.

Secondly, my doctoral research is a qualitative study, which by design could not illustrate the extent of OS and burnout among COs. As a result, the findings are based on COs' perceptions and experiences with OS and burnout. However, there are tools to quantify OS and burnout, such as the Maslach Burnout Inventory (MBI) and the Tedium Measure or Burnout Measure (Schaufeli & Taris, 2014). I could have used these quantitative tools to measure the extent of OS and burnout among COs. Thirdly, my doctoral research was a cross-sectional study that focused on one slice of the experiences of OS and burnout among COs, such as the sources and consequences of OS and burnout. I did not examine OS and burnout among COs over some time. Hence, the understanding of OS and burnout among the COs is limited to one slice of the sources and consequences of OS and burnout.

Fourthly, there are interesting political economy issues that emerged in the study on which I did not dwell much simply because I found them not directly speaking to my research questions and key study objectives. The political economy issues include: dynamics of the one-party state, neoliberalism, role of IFIs, governance and accountability, donor support, national budget processes, impact of democratic dispensation. The articulation of such issues related to the political economy within the confines of psychosocial hazards discourse, would entail that I amend the research questions and study objectives during data analysis. I chose to keep focused on the

research questions and study objectives that I primarily used to frame the research design.

Fifthly in this thesis, I employed three theoretical perspectives, i.e., attribution theory originally from psychology, the JD-R model from human resource management, and the fundamental cause theory from sociology of health. However, there could be other theoretical perspectives that can be drawn from other disciplines to explain OS and burnout among COs and public hospitals. These disciplines can include: sociology of work, development, economics. The findings and conclusions of this thesis would have been enriched if I had also explored additional theories from other disciplines to compliment attribution theory, JD-R model, and fundamental cause theory.

Nevertheless, my doctoral research has uncovered structural features that underlie OS and burnout in a hospital context in Malawi. It has also investigated the systemic effects of OS and burnout on individual health workers and the general public. These structural features and systemic effects of OS and burnout can be used as evidence to validate the review of OSH regulation that neglects psychosocial hazards and exempts service sectors like healthcare. Furthermore, the study's subjects were not ordinary people, but rather health professionals some of whom directly dealt with mental health issues. While their perceptions of OS and burnout were based on personal experiences as observers or current or previous OS and burnout victims, they shared their reality from informed positions as professionals in clinical practice. Their submissions concerning the reality of OS and burnout, therefore enhanced the credibility of the findings of my study although I did not quantify OS and burnout. Finally, despite the limitation on theory, I have proposed a theoretical framework for analysing OSH in Malawi with a particular focus on psychosocial hazards at public hospitals.

10.5. Recommendations

From the discussions of chapters 5–9, I draw key recommendations at three levels: research, policy, and practical levels for the consideration by government, workers, and other stakeholders.

10.5.1. Research level

1. Future research should attempt to address the fundamental limitations of my study as highlighted above:
    A. Other scholars should conduct case studies on OS and burnout targeting other cadres of health workers at public hospitals beyond COs.
    B. Other scholars should consider using quantitative research design and quantitative data collection tools to measure the extent of OS and burnout among COs (and possibly other cadres of health workers) at public hospitals.
    C. Other scholars should study OS and burnout among COs (and possibly other cadres of health workers) over time and longitudinally examine how OS and burnout may unfold over the years.
    D. Other scholars should examine the impact of the broader political economy issues with OSH in general and psychosocial hazards in particular.
2. Future research should explore and propose other theoretical perspectives (drawn from other disciplines such as sociology of work or development) that can also be used to describe or explain OS and burnout in a hospital setting.
3. The Ministry of Health in consultations with employers and workers in the health sector, civil society organisations and other relevant stakeholders should commission studies on how to advance the quality of healthcare through the improvement of OSH in general and in particular psychosocial well-being of the health workers.

10.5.2. Policy level

1. The Ministry of Health and Ministry of Labour, in consultation with employers and workers in the health sector and other relevant stakeholders, should lead in setting up OSH management systems at public hospitals that should, among other things, provide for the following:
    A. conducting OSH risk assessment regularly (including on psychosocial hazards);
    B. activities on OSH targeting health workers in line with the national OSH programme, policies, and legislation;

C. comprehensive policy on OSH for the health sector (covering all 5 categories of OSH hazards) at national and health facility levels;
D. appointment of responsible officers with expertise and authority on OSH at the Ministry of Health (headquarters), central hospitals, and DHMTs;
E. establishment of OSH committees at all health facilities;
F. setting standards, guidelines, and codes of practice for OSH at all health facilities.

2. The Ministry of Health and Ministry of Labour, in consultation with employers and workers in the health sector and other relevant stakeholders, should make psychosocial hazards a priority of OSH regulation and other health sector policies.
    A. Expedite the finalisation of consultation processes at the national level on the proposals to broaden the scope and coverage of OSH regulation to include psychosocial hazards and service sectors such as healthcare;
    B. Prioritize mental health for the hospital staff by formulating and implementing workplace mental health policies that provide for psychosocial risk assessment, psychosocial support for health workers, and guidelines on work-life balance, among others;
    C. Revise the national mental health policy to strengthen interventions for promoting mental well-being at workplaces as highlighted in 2B (above).
3. In consultation with employers and workers in the health sector, the Ministry of Health should formulate and implement policies to ensure an appropriate and fair duration of working hours and rest breaks for health workers.
4. National Disaster Risk Management Strategies formulated and implemented by the government should incorporate specific interventions during pandemics and disease outbreaks, with a particular focus on averting psychosocial hazards among health workers.

10.5.3. Practical level

1. PAUM, in collaboration with HRHC and other relevant stakeholders, should lobby that social dialogue platforms for the health sector declare OSH as a fundamental right at work for all workers, including health workers, and then ensure that health workers enjoy that right.

2. The Ministry of Health, in collaboration with the Ministry of Finance, should mobilise financial resources to recruit more health workers in general and COs in particular in order to fill existing vacancies in the health sector. Filling the existing vacancies for COs may partly alleviate the problem of excessive workloads and long hours of work among COs that emanate from the shortage of staff.
3. PAUM, in collaboration with HRHC and other relevant stakeholders, should advocate for the implementation of ratified ILO conventions on OSH (without excluding the health sector).
4. The Ministry of Health, in consultation with trade unions and associations representing health workers, should expedite the revision of conditions of service in the health (public) sector to improve motivation and engagement on the job among health workers, i.e., fast-track long-overdue promotions, raise wages, introduce medical schemes for all health workers, provide adequate equipment, and so on.
5. 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 IPCP, eradicating stereotypes against other cadres and inculcating a spirit of mutual respect and teamwork.

10.6. Summary

Overall, my doctoral thesis hinges on two pillars. The first pillar focuses on the experiences of burnout and OS among COs as they partake in *task shifting*, under which they perform clinical duties conventionally designated for medical doctors. I argued that some policy interventions implemented in the health sector to address various challenges, are associated with increased risks of OS and burnout among COs in the course of *task shifting*. The second pillar of my doctoral thesis lies on the consequences of OS and burnout among COs. On this pillar, I coined a concept *impact shifting* which I used to demonstrate that the consequences of OS and burnout, are not only confined to COs as individuals. I argued that the consequences of OS and burnout among COs, are eventually externalised to patients and the general public through poor quality of healthcare services. In a nutshell, my doctoral thesis is

positioned on two conceptual fronts. These are: *task shifting* within which OS and burnout among COs occur and *impact shifting* as far as negative effects of OS and burnout among COs are concerned which are ultimately externalised to the patients and general public. Finally, in this chapter, I provided key recommendations at the research, policy, and practical levels for the consideration of by government, workers, and other key stakeholders.

Appendix 1: Guide for a semi-structured interview

Session	Key questions
Clinical Officers	1. Which occupational safety and health (OSH) hazards are associated with clinical officers' work at the hospital? 2. Is the mental health of staff in general and clinical officers, in particular, a priority at the hospital? 3. Have there been any incidences of clinical officers suffering from occupational stress and burnout? 4. What are the sources of occupational stress and burnout among clinical officers? 5. Is there any association between occupational stress/burnout and the COVID-19 pandemic among clinical officers? 6. Are there workplace policies or risk management interventions to address psychosocial hazards in general and occupational stress/burnout in particular at hospitals? 7. What specific health problems among clinical officers can be associated with occupational stress and burnout? 8. How do occupational stress and burnout affect the quality of services delivered by clinical officers? 9. Are there workplace interventions in response to the consequences of occupational stress and burnout among clinical officers? 10. Is there participation and consultation of clinical officers on workplace interventions on occupational stress and burnout? 11. Any recommendations to address occupational stress and burnout among clinical officers at hospitals?
key informants: Immediate COs' supervisors; Hospital administrators; Ministry of Health-Policy/Planning specialist; Professional body/trade union that represents COs; Occupational health physician.	1. Is the mental health of staff a priority at public hospitals? 2. Are there policies and risk management interventions to address psychosocial hazards in general and occupational stress/burnout in particular at hospitals? 3. What government policies or external factors contribute to psychosocial hazards in general and occupational stress/burnout in particular at hospitals? 4. Are there specific policies/interventions in response to the consequences of occupational stress and burnout among healthcare workers? 5. Any recommendations to address occupational stress and burnout at hospitals

Appendix 2: Guide for focus group discussion

Session	Key questions
Clinical Officers	1. Which occupational safety and health (OSH) are associated with clinical officers' work at the hospital? 2. Is the mental health of staff in general and clinical officers, in particular, a priority at the hospital? 3. Have there been any incidences of clinical officers suffering from occupational stress and burnout? 4. What are the sources of occupational stress and burnout among clinical officers? 5. Is there any association between occupational stress/burnout and the COVID-19 pandemic among clinical officers? 6. Are there workplace policies or risk assessments to address psychosocial hazards in general and occupational stress/burnout in particular at hospitals? 7. What specific health problems among clinical officers can be associated with occupational stress and burnout? 8. How do occupational stress and burnout affect the quality of services delivered by clinical officers? 9. Are there workplace interventions in response to the consequences of occupational stress and burnout among clinical officers? 10. Is there participation and consultation of clinical officers on workplace interventions on occupational stress and burnout? 11. Any recommendations to address occupational stress and burnout among clinical officers at hospitals?

Appendix 3: Participant Information Sheet

Consequences of Neglecting Psychosocial Hazards and Health-Care in the Regulation of Occupational Safety and Health: The Case of Occupational Stress and Burnout Among Clinical Officers at Public Hospitals in Malawi.

Names and Contacts of Principal Investigator and co-investigators

No	Name	Position	Organization	Address	Telephone
1.	Mr Paliani Chinguwo Email: 506088@students.wits.ac.za	Principal Investigator	University of Witwatersrand	P.O. Box 2461. Blantyre	+265888 619 629
2.	Ms Matsiame Mafa Email: mmatsiame@gmail.com	Research Assistant	University of Witwatersrand (postgraduate student)	1 Jan Smuts Avenue,Braamfontein 2000. Johannesburg. South Africa	+27810064 572
3.	Ms Anne Kazembe Email: annakazembe@gmail.com	Research Assistant	Transport & General Workers Union	P.O. Box 31416. Chichiri. Blantyre 3.	+265888327033
4.	Mr Yobe Saka Email: ycsaka@gmail.com	Research Assistant	University of Livingstonia (former undergraduate student)	P.O. Box 2461. Blantyre	+265882945169
5.	Mr Emmanuel Katema Email: ekatema28@gmail.com	Research Assistant	Communication Workers Union of Malawi.	P/Bag 186, Blantyre.	+265999234743

Introduction

I am a PhD student in the School of Social Sciences at the University of the Witwatersrand, Johannesburg. As part of my studies, I have to undertake academic research. I am investigating the *Consequences of Neglecting Psychosocial Hazards and Health-Care in the Regulation of Occupational Safety & Health: The Case of Occupational Stress and Burnout Among Clinical Officers at Public Hospitals in Malawi*. The study will be conducted at five public hospitals in Malawi as follows: Queen Elizabeth Central Hospital (Blantyre), Balaka District Hospital, Nkhatabay District Hospital, Chikwawa District Hospital and Mulanje District Hospital.

Purpose

The purpose of this study is to find out the contributing factors and the impact of occupational stress and burnout among clinical officers at public hospitals in Malawi.
As part of this research, I would like to invite you to take part in an interview/focus group discussion. This activity will involve question and answer conversation related to your work experience as a clinical officer in light of the purpose of the research explained above. The

interview and focus group discussion will last for 45 minutes and 90 minutes respectively. Due to COVID-19 restrictions, the interview will be conducted through a direct phone call which will not require you to spend your airtime or voice bundles. The focus group discussion will also be virtually conducted through a WhatsApp call or Microsoft Teams. As such data bundles will be provided to you to enable you to participate in the virtual focus group discussion.

Procedure

The data for this study will be collected through interviews, focus group discussions and documentary analysis. There are no disadvantages or penalties if you do not choose to participate or if you withdraw from the interview. You may withdraw at any time or not answer any question if you do not want to.

For purposes of transcribing, the interview/focus group discussion will be recorded. This study will finally be written up as a research report which will be available online through the university library website. The data collected from this research will be stored on my personal computer which is protected by a password for two (2) years if a scientific publication arises from the study and six (6) years if there is no publication. Thereafter, the data will be destroyed.

Benefits

You will not receive any direct benefits from participation. However, the results and findings of the study may influence improvements in occupational safety and health conditions for healthcare workers which will benefit clinical officers including yourself. There will be no personal costs to you if you participate in this study other than your time to participate in the interview/focus group discussion.

Risks

There are no risks of physical harm to the participants of this study. However, the potential for psychological risk is minimal. If you experience any psychological distress or discomfort at any point during the session, you can leave the session. Should you need counselling services following the focus group discussion, these are available at St. John of God Hospitaller Services. The contact details for the counselling service are Att: Dr Charles Masulani Mwale, P.O. Box 744, Mzuzu. Tel: (265) 1 311 495 Fax: (265) 1 311 213. E-mail: sjog@sjog.mw. You will not be required to pay for the services.

Privacy and Confidentiality

The interview will be completely confidential and anonymous as I will not be asking for your name. The information you give to me will be held securely such that it will only be accessed by the principal researcher, research assistants and research supervisor for this study. However, privacy and confidentiality in the case of a focus group discussion is not guaranteed as others will also be participating in the same focus group discussion. Nevertheless, in my final research report, I will be using a pseudonym (false name) to represent your participation in the interview/focus group discussion.

Study Approval

This study has been approved by the Committee on Research Ethics in the Social Sciences & Humanities at the National Commission for Science & Technology (NCST) in Malawi and the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg. A principal function of these two Committees is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research.

If you have any questions during or afterwards about this research, feel free to contact the principal investigator: Mr Paliani Chinguwo, Email: 506088@wits.students.ac.za. Cell:

+265 888 619 629. In case, you have any concerns over the way the study is being conducted, please contact any of the following:

1. Dr Peter Mvula. The Chairperson of the Committee on Social Sciences & Humanities, National Commission for Science & Technology, tel: +265 1771 550, e-mail: ncrsh@ncst.mw
2. Prof. Clement Penny. The Chairperson, the Human Research Ethics Committee (Medical), the University of the Witwatersrand, tel: +27 11 717 2301, e-mail: Clement.Penny@wits.ac.za.
3. Dr Rajohane Matshedisho, the supervisor of this study, University of the Witwatersrand, tel: +27 72227 6060, e-mail: Rajohane.Matshedisho@wits.ac.za.

Finally, if you agree to participate in this interview/focus group discussion, you are kindly requested to sign the form below to affirm your consent.

Thank You.

Appendix 4: Informed Consent Form

The Consequences of Neglecting Psychosocial Hazards and Health-Care in the Regulation of Occupational Safety and Health: The Case of Occupational Stress and Burnout Among Clinical Officers at Public Hospitals in Malawi.

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read the Participant Information Sheet in the language I well understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment. Conversely, participation will not cost me anything but my time;
6. I hereby consent to the recording of the interview/focus group discussion on the condition that the recording will be transcribed and any information that could identify me in the report will be removed;
7. I understand that even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons. If that happened, any data collected about me for the study would immediately be destroyed, unless I give consent for it to be retained;
8. I have been given a range of contact details. If I require further information or become concerned about any aspect of this study, I am free to speak to any of these contacts.

Name of Participant: _____
Date: _____
Place: _____
Signature or mark _____

Name of Principal Investigator: _____
Signature: _____
Date: _____

References

Abdulraheem, I., Amodu, M., Saka, M., Bolarinwa, O., & Uthman, M. (2012). Knowledge, awareness and compliance with standard precautions among health workers in northeastern Nigeria. *J Community Med Health Edu*, *2*(3), 1-5.

Akagbo, S. E., Nortey, P., & Ackumey, M. M. (2017). Knowledge of standard precautions and barriers to compliance among healthcare workers in the Lower Manya Krobo District, Ghana. *BMC research notes*, *10*(1), 432.

Alderson, P. (1998). The importance of theories in health care. *BMJ*, *317*(7164), 1007-1010.

Alli, B. O. (2008). Fundamental principles of occupational health and safety Second edition. *Geneva, International Labour Organization*, *15*, 2008.

Anderson, C., & Brion, S. (2014). Perspectives on power in organizations. *Annu. Rev. Organ. Psychol. Organ. Behav.*, *1*(1), 67-97.

Arandjelovic, M., Nikolic, M., & Stamenkovic, S. (2010). Relationship between burnout, quality of life, and work ability index—Directions in prevention. *TheScientificWorldJOURNAL*, *10*, 766-777.

Armenti, K., Sweeney, M. H., Lingwall, C., & Yang, L. (2023). Work: A Social Determinant of Health Worth Capturing. *International Journal of Environmental Research and Public Health*, *20*(2), 1199.

Arnetz, J. E., Arnetz, B. B., & Söderman, E. (1998). Violence toward health care workers: Prevalence and incidence at a large, regional hospital in Sweden. *AAOHN journal*, *46*(3), 107-114.

Asante, J. O., Li, M. J., Liao, J., Huang, Y. X., & Hao, Y. T. (2019). The relationship between psychosocial risk factors, burnout and quality of life among primary healthcare workers in rural Guangdong province: a cross-sectional study. *BMC health services research*, *19*(1), 1-10.

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of management review*, *14*(1), 20-39.

Association of Malawian Midwives & National Organisation of Nurses and Midwives of Malawi. (11 January 2022).

Babbie, E. (2010). *The Practice of social research* (12th ed.). Wadsworth.

Bahl, P., Doolan, C., de Silva, C., Chughtai, A. A., Bourouiba, L., & MacIntyre, C. R. (2020). Airborne or droplet precautions for health workers treating COVID-19? *The Journal of infectious diseases*, *XX*, 1-8.

Bailey, N., Mandeville, K. L., Rhodes, T., Mipando, M., & Muula, A. S. (2012). Postgraduate career intentions of medical students and recent graduates in Malawi: a qualitative interview study. *BMC medical education*, *12*(1), 1-10.

Bakhtom, S., Nassiri, P., & Borgheipour, H. (2019). The Relationship between Shift Work and Burnout among ICU Nursing Staff in Hospitals of Shahid Beheshti University of Medical Sciences. *Novelty in Biomedicine*, *7*(4), 181-186.

Balaka District Council. (2018a). Balaka district development plan (2017-2022).

Balaka District Council. (2018b). Balaka district socio-economic profile (2017-2022).

Balaka District Hospital. (2022). Staff returns.

Baldwin, P., Dodd, M., & Wrate, R. (1997). Young doctors' health—II. Health and health behaviour. *Social Science & Medicine*, *45*(1), 41-44.

Bamberger, S. G., Vinding, A. L., Larsen, A., Nielsen, P., Fonager, K., Nielsen, R. N., Ryom, P., & Omland, Ø. (2012). Impact of organisational change on mental health: a systematic review. *Occupational and Environmental Medicine*, *69*(8), 592-598.

Batbaatar, E., Dorjdagva, J., Luvsannyam, A., Savino, M. M., & Amenta, P. (2017). Determinants of patient satisfaction: a systematic review. *Perspectives in public health*, *137*(2), 89-101.

Baylina, P., Barros, C., Fonte, C., Alves, S., & Rocha, Á. (2018). Healthcare workers: Occupational health promotion and patient safety. *Journal of medical systems*, *42*(9), 159. Retrieved 2018/07//, from https://doi.org/10.1007/s10916-018-1013-7

Beauregard, T. A., & Henry, L. C. (2009). Making the link between work-life balance practices and organizational performance. *Human resource management review*, *19*(1), 9-22.

Beck, J. C., & Schouten, R. (2000). Workplace violence and psychiatric practice. *Bulletin of the Menninger Clinic*, *64*(1), 36-48.

Bellagamba, G., Gionta, G., Senergue, J., Bèque, C., & Lehucher-Michel, M.-P. (2015). Organizational factors impacting job strain and mental quality of life in emergency and critical care units. *International journal of occupational medicine and environmental health*, *28*(2), 357.

Bendix, J. (2019). The real reason doctors burnout: How the system works against you and what to do about it. *Medical Economics*, *25 January*.

Beyamo, A., Dodicho, T., & Facha, W. (2019). Compliance with standard precaution practices and associated factors among health care workers in Dawuro Zone, South West Ethiopia, cross-sectional study. *BMC health services research*, *19*(1), 381.

Bhatia, N., Kishore, J., Anand, T., & Jiloha, R. C. (2010). Occupational stress amongst nurses from two tertiary care hospitals in Delhi. *Australasian Medical Journal (Online)*, *3*(11), 731-738.

Blanton, R. G., Blanton, S. L., & Peksen, D. (2017). International financial institutions and labour rights: rhetoric versus reality. *International Union Rights*, *24*(1), 6-28.

Blantyre District Council. (2018). Blantyre district socio-economic profile (2017-2022).

Bohoslavsky, J. P. (2017). Austerity and labour market deregulation: High risks and weak justifications. *International Union Rights*, *24*(1), 16-28.

Borghi, J., Munthali, S., Million, L. B., & Martinez-Alvarez, M. (2018). Health financing at district level in Malawi: an analysis of the distribution of funds at two points in time. *Health policy and planning*, *33*(1), 59-69.

Bourbonnais, R., Brisson, C., Vézina, M., Masse, B., & Blanchette, C. (2005). Psychosocial work environment and certified sick leave among nurses during organizational changes and downsizing. *Relations Industrielles/Industrial Relations*, *60*(3), 483-509.

Bradley, S., Kamwendo, F., Chipeta, E., Chimwaza, W., de Pinho, H., & McAuliffe, E. (2015). Too few staff, too many patients: a qualitative study of the impact on obstetric care providers and on quality of care in Malawi. *BMC pregnancy and childbirth*, *15*(1), 65.

Bradley, S., & McAuliffe, E. (2009). Mid-level providers in emergency obstetric and newborn health care: factors affecting their performance and retention within the Malawian health system. *Human resources for health*, *7*(1), 14.

Braveman, P., & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public health reports*, *129*(1_suppl2), 19-31.

Bridges, K., & Woolcock, M. (2017). How (not) to fix problems that matter: assessing and responding to Malawi's history of institutional reform. *World Bank Policy Research Working Paper*(8289).

Broadhead, R. L., & Muula, A. S. (2002). Creating a medical school for Malawi: problems and achievements. *BMJ*, *325*(7360), 384-387.

Brown, M., Tucker, P., Rapport, F., Hutchings, H., Dahlgren, A., Davies, G., & Ebden, P. (2010). The impact of shift patterns on junior doctors' perceptions of fatigue, training, work/life balance and the role of social support. *Quality and Safety in Health Care*, *19*(6), e36-e36.

Bryman, A. (2012). *Social Research Methods*. Oxford University Press.

Bulthuis, S. E., Kok, M. C., Amon, S., Agyemang, S. A., Nsabagasani, X., Sanudi, L., Raven, J., Finn, M., Gerold, J., & Tulloch, O. (2021). How district health decision-making is shaped within decentralised contexts: a qualitative research in Malawi, Uganda and Ghana. *Global public health*, *16*(1), 120-135.

Caponecchia, C. (2010). It won't happen to me: An investigation of optimism bias in occupational health and safety. *Journal of Applied Social Psychology*, *40*(3), 601-617.

Callaghan, M., Ford, N., & Schneider, H. (2010). A systematic review of task-shifting for HIV treatment and care in Africa. *Human resources for health*, *8*, 1-9.

Chalmers, A. (1998). Workload and stress in New Zealand universities in 1998. *Wellington: New Zealand Council for Educational Research*.

Chatterjee, N. (2005). Theory for all and rehabilitation for the few (with money): Who does our theory serve? *Disability and Rehabilitation*, *27*(24), 1503-1508.

Chersich, M. F., Gray, G., Fairlie, L., Eichbaum, Q., Mayhew, S., Allwood, B., English, R., Scorgie, F., Luchters, S., & Simpson, G. (2020). COVID-19 in Africa: care and protection for frontline healthcare workers. *Globalization and Health*, *16*, 1-6.

Chikwawa District Council. (2020). Chikwawa district socio-economic profile (2017-2022).

Chikwawa District Hospital. (2022). Staff returns.

Chilopora, G., Pereira, C., Kamwendo, F., Chimbiri, A., Malunga, E., & Bergström, S. (2007). Postoperative outcome of caesarean sections and other major emergency obstetric surgery by clinical officers and medical officers in Malawi. *Human resources for health*, *5*(1), 17.

Chinguwo, P. (2013). Trade union services and benefits in Malawi. In T. Kalusopa, K.N. Otoo, & H. Mote (Eds.), *Trade union services and benefits in Africa* (pp. 204-248). Africa Labour Research Network.

Chodzaza, E., Mbiza, C., Gadama, L., & Kafulafu, U. (2020). Midwives' and Medical professionals' perspectives of collaborative practice at Queen Elizabeth Central Hospital Maternity Unit, Malawi: The discovery phase of an appreciative inquiry project. *Malawi Medical Journal*, *32*(1), 13-18.

Christopher, D. J., Isaac, B. T., Rupali, P., & Thangakunam, B. (2020). Health-care preparedness and health-care worker protection in COVID-19 pandemic. *Lung India*, *37*(3), 238-245.

Clegg, S., & Dunkerley, D. (1980). *Organization, class and control*. Routledge and Kegan Paul London.

Cockburn, I. M., Bailit, H. L., Berndt, E. R., & Finkelstein, S. N. (1999). Loss of work productivity due to illness and medical treatment. *Journal of Occupational and Environmental Medicine*, 948-953.

Cockerham, W. C. (2013). The rise of theory in medical sociology. In W. C. Cockerham (Ed.), *Medical Sociology on the Move: New Directions in Theory* (pp. 1-10). Springer.

Cole, L. L., Grubb, P. L., Sauter, S. L., Swanson, N. G., & Lawless, P. (1997). Psychosocial correlates of harassment, threats and fear of violence in the workplace. *Scandinavian journal of work, environment & health*, 450-457.

Conly, J. M. (2006). Personal protective equipment for preventing respiratory infections: what have we really learned? *Canadian Medical Association Journal*, *175*(3), 263-263.

Correll, R. (2021). What Is Occupational Health and Safety? https://www.verywellhealth.com/what-is-occupational-health-and-safety-4159865

Creanga, A. A., Gullo, S., Kuhlmann, A. K. S., Msiska, T. W., & Galavotti, C. (2017). Is quality of care a key predictor of perinatal health care utilization and patient satisfaction in Malawi? *BMC pregnancy and childbirth*, *17*(1), 1-13.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage publications.

Cullati, S., Bochatay, N., Maître, F., Laroche, T., Muller-Juge, V., Blondon, K. S., Perron, N. J., Bajwa, N. M., Vu, N. V., & Kim, S. (2019). When team conflicts threaten quality of care: a study of health care professionals' experiences and perceptions. *Mayo Clinic Proceedings: Innovations, Quality & Outcomes*, *3*(1), 43-51.

Cullen, W., Gulati, G., & Kelly, B. (2020). Mental health in the Covid-19 pandemic. *QJM: An International Journal of Medicine*, *113*(5), 311-312.

d'Ettorre, G., & Greco, M. (2015). Healthcare work and organizational interventions to prevent work-related stress in Brindisi, Italy. *Safety and health at work*, *6*(1), 35-38.

Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of management*, *25*(3), 357-384.

Daoud, A., Nosrati, E., Reinsberg, B., Kentikelenis, A. E., Stubbs, T. H., & King, L. P. (2017). Impact of International Monetary Fund programs on child health. *Proceedings of the National Academy of Sciences*, *114*(25), 6492-6497.

Day, A., Crown, S. N., & Ivany, M. (2017). Organisational change and employee burnout: The moderating effects of support and job control. *Safety science*, *100*, 4-12.

Deen, J., Mengel, M. A., & Clemens, J. D. (2020). Epidemiology of cholera. *Vaccine*, *38*, A31-A40.

DeHury, P., & Kumar, K. (2019). Reciprocal Relations between Work and Health: A Theoretical Understanding from the History of Occupational Health and Behaviour. *Journal of Clinical & Diagnostic Research*, *13*(8).

DeJoy, D. M. (1994). Managing safety in the workplace: An attribution theory analysis and model. *Journal of safety research*, *25*(1), 3-17.

Delecta, P. (2011). Work life balance. *International Journal of Current Research*, *3*(4), 186-189.

Delgado, D., Wyss Quintana, F., Perez, G., Sosa Liprandi, A., Ponte-Negretti, C., Mendoza, I., & Baranchuk, A. (2020). Personal Safety during the COVID-19 Pandemic: Realities and Perspectives of Healthcare Workers in Latin America. *International Journal of Environmental Research and Public Health*, *17*(8), 2798.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, *86*(3), 499-512.

Denscombe, M. (2017). *The good research guide: For small-scale social research projects*. McGraw-Hill Education (UK).

Denzin, N. K., & Lincoln, Y. S. (2008). *Strategies of qualitative inquiry* (Vol. 2). Sage.

Deutch, M. (1973). *The resolution of conflict*. Yale Univesity Press.

Dewi, R. S., & Riana, I. G. (2019). The effect of workload on role stress and burnout. *Journal of Multidisciplinary Academic*, *3*(3), 1-5.

Donnelly, C., Ashcroft, R., Bobbette, N., Mills, C., Mofina, A., Tran, T., Vader, K., Williams, A., Gill, S., & Miller, J. (2021). Interprofessional primary care during COVID-19: a survey of the provider perspective. *BMC Family Practice*, *22*(1), 1-12.

Dousin, O., Collins, N., & Kaur Kler, B. (2019). Work-life balance, employee job performance and satisfaction among doctors and nurses in Malaysia. *International Journal of Human Resource Studies*, *9*(4), 306-319.

Dovlo, D. (2004). Using mid-level cadres as substitutes for internationally mobile health professionals in Africa. A desk review. *Human resources for health*, *2*(1), 7.

Dragano, N., Verde, P. E., & Siegrist, J. (2005). Organisational downsizing and work stress: testing synergistic health effects in employed men and women. *Journal of Epidemiology & Community Health*, *59*(8), 694-699.

Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative science quarterly*, 239-263.

Dzimbiri, L. (2005). The state and labour control in Malawi: continuities and discontinuities between one-party and multiparty systems. *Africa Development*, *XXX*(4), 53–85.

Dzimbiri, L. (2007). Trade unions. In N. Patel & L. Svajand (Eds.), *Government and politics in Malawi*. Kachere.

Dzimbiri, L. (2013). Industrial relations in Malawi.

Eaton, L. (2019). Health workforce burn-out. *Bulletin of the World Health Organization*, *97*, 585–586.

Eddington, I. (2006). An historical explanation of the development of occupational health and safety and the important position it now occupies in society. Proceedings of the 1st Queensland Safety Forum (AEC 2006),

Emanuel, L., Berwick, D., Conway, J., Combes, J., Hatlie, M., Leape, L., Reason, J., Schyve, P., Vincent, C., & Walton, M. (2009). What exactly is patient safety? *Journal of Medical Regulation*, *95*(1), 13-24. https://meridian.allenpress.com/jmr/article/95/1/13/438453/What-Exactly-Is-Patient-Safety

Episcopal Conference of Malawi and Malawi Council of Churches. (13 January 2023). *Appeal to government, donors and other partners for the cholera support*

European Agency for Safety and Health at Work. (2009). *European Risk Observatory Report. OSH in figures: Stress at work–facts and figures*. https://osha.europa.eu/en/publications/reports/TE-81-08-478-EN-C_OSH_in_figures_stress_at_work

European Commission. (2011). *Report on the implementation of the European social partners' Framework Agreement on Work-related Stress*.

Fan, T., Khan, J., Khassawneh, O., & Mohammad, T. (2023). Examining Toxic Leadership Nexus With Employee Cyberloafing Behavior via Mediating Role of Emotional Exhaustion. *Journal of Organizational and End User Computing (JOEUC)*, *35*(1), 1-23.

Fernandes, S. F., Trigueiro, J. G., Barreto, M. A. F., Carvalho, R. E. F. L. d., Silva, M. R. F. d., Moreira, T. M. M., Costa, M. V. d., & Freitas, R. J. M. d. (2021). Interprofessional work in health in the context of the COVID-19 pandemic: a scoping review. *Revista da Escola de Enfermagem da USP*, *55*.

Follet, M. P. (1973). Power. In E. Fox & L. Urwick (Eds.), *Dynamic adminstration: The collected papers of Mary Parker Follet* (pp. 66-87). Pitman.

Gajewski, J., Borgstein, E., Bijlmakers, L., Mwapasa, G., Aljohani, Z., Pittalis, C., McCauley, T., & Brugha, R. (2019). Evaluation of a surgical training programme for clinical officers in Malawi. *British Journal of Surgery*, *106*(2), e156-e165.

Gao, W., Sanna, M., Tsai, M. K., & Wen, C. P. (2020). Geo-temporal distribution of 1,688 Chinese healthcare workers infected with COVID-19 in severe conditions—A secondary data analysis. *PLoS One*, *15*(5), e0233255.

Gestal, J. (1987). Occupational hazards in hospitals: risk of infection. *Occupational and Environmental Medicine*, *44*(7), 435-442.

Gittell, J. H., Godfrey, M., & Thistlethwaite, J. (2013). Interprofessional collaborative practice and relational coordination: Improving healthcare through relationships. *Journal of Interprofessional Care*, *27*(3), 210-213. https://doi.org/10.3109/13561820.2012.730564

Goetz, K., Berger, S., Gavartina, A., Zaroti, S., & Szecsenyi, J. (2015). How psychosocial factors affect well-being of practice assistants at work in general medical care. *A questionnaire survey*.

Gonçalves, S. M. P., da Silva, S. A., Lima, M. L., & Meliá, J. L. (2008). The impact of work accidents experience on causal attributions and worker behaviour. *Safety science*, *46*(6), 992-1001.

Gondwe, W. T., & Brysiewicz, P. (2008). Emergency nursing experience in Malawi. *International emergency nursing*, *16*(1), 59-64.

Gosseries, O., Demertzi, A., Ledoux, D., Bruno, M.-A., Vanhaudenhuyse, A., Thibaut, A., Laureys, S., & Schnakers, C. (2012). Burnout in healthcare workers managing chronic patients with disorders of consciousness. *Brain Injury*, *26*(12), 1493-1499.

Green, B. N., & Johnson, C. D. (2015). Interprofessional collaboration in research, education, and clinical practice: working together for a better future. *Journal of Chiropractic Education*, *29*(1), 1-10.

Greenberg, N., Docherty, M., Gnanapragasam, S., & Wessely, S. (2020). Managing mental health challenges faced by healthcare workers during covid-19 pandemic. BMJ 368, m1211.

Grimes, C. E., Mkandawire, N. C., Billingsley, M. L., Ngulube, C., & Cobey, J. C. (2014). The cost-effectiveness of orthopaedic clinical officers in Malawi. *Tropical doctor*, *44*(3), 128-134.

Groenewald, J. (1986). *Social research: design and analysis*. Citadel.

Guadix, J., Carrillo-Castrillo, J., Onieva, L., & Lucena, D. (2015). Strategies for psychosocial risk management in manufacturing. *Journal of Business Research*, *68*(7), 1475-1480.

Gyekye, S. A. (2010). Occupational safety management: The role of causal attribution. *International Journal of Psychology*, *45*(6), 405-416.

Hall, G. B., Dollard, M. F., & Coward, J. (2010). Psychosocial safety climate: Development of the PSC-12. *International Journal of Stress Management*, *17*(4), 353.

Hall, G. B., Dollard, M. F., Winefield, A. H., Dormann, C., & Bakker, A. B. (2013). Psychosocial safety climate buffers effects of job demands on depression and positive organizational behaviors. *Anxiety, Stress & Coping*, *26*(4), 355-377.

Hall, L., Johnson, J., Watt, I. S., Tsipa, A., & O'Connor, D. B. (2016). Healthcare Staff Wellbeing, Burnout, and Patient Safety: A Systematic Review. *PloS one*.

Harries, A. D., van Gorkom, J., L'Herminez, R., & Squire, S. B. (2014). Professor Felix Salaniponi, 1955–2014. *Public Health Action*, *4*(3), 207.

Harvey, M. (2020). How Do We Explain the Social, Political, and Economic Determinants of Health? A Call for the Inclusion of Social Theories of Health Inequality Within US-Based Public Health Pedagogy. *Pedagogy in Health Promotion*, *6* (4), 246–252.

Head of State of Malawi. (13 February 2022). *National address on weekly COVID-19 updates*.

Head of State of Malawi. (20 March 2020). *Declaration of state of disaster by head of state of the Republic of Malawi, Prof. Peter Mutharika* https://malawi.un.org/en/46778-declaration-state-disaster-malawi-president-petermutharika.

Heidegger, T., Saal, D., & Nuebling, M. (2006). Patient satisfaction with anaesthesia care: what is patient satisfaction, how should it be measured, and what is the evidence for assuring high patient satisfaction? *Best Practice & Research Clinical Anaesthesiology*, *20*(2), 331-346.

Heider, F. (1944). Social perception and phenomenal causality. *Psychological review*, *51*(6), 358.

Heino, B. (2013). The state, class and occupational health and safety: locating the capitalist state's role in the regulation of OHS in NSW. *Labour & Industry: a journal of the social and economic relations of work*, *23*(2), 150-167.

Henderson, C., Evans-Lacko, S., & Thornicroft, G. (2013). Mental illness stigma, help seeking, and public health programs. *American journal of public health*, *103*(5), 777-780.

Hersi, M., Stevens, A., Quach, P., Hamel, C., Thavorn, K., Garritty, C., Skidmore, B., Vallenas, C., Norris, S. L., & Egger, M. (2015). Effectiveness of personal protective equipment for healthcare workers caring for patients with filovirus disease: a rapid review. *PloS one*, *10*(10), e0140290.

Hertting, A., Nilsson, K., Theorell, T., & Larsson, U. S. (2004). Downsizing and reorganization: demands, challenges and ambiguity for registered nurses. *Journal of advanced nursing*, *45*(2), 145-154.

High Court of Malawi. (2020). *The state on application of Kathumba and others V president of Malawi and others (constitutional reference number 1 of 2020)*. Retrieved from https://malawilii.org/mw/judgment/high-court-general-division/2020/29.

Holmgren, J. (1981). Actions of cholera toxin and the prevention and treatment of cholera. *Nature*, *292*(5822), 413-417.

Hu, X., Zhan, Y., Garden, R., Wang, M., & Shi, J. (2018). Employees' reactions to customer mistreatment: The moderating role of human resource management practices. *Work & Stress*, *32*(1), 49-67.

Huang, J., Han, M., Luo, T., Ren, A., & Zhou, X. (2020). Mental health survey of 230 medical staff in a tertiary infectious disease hospital for COVID-19. *Zhonghua lao dong wei sheng zhi ye bing za zhi= Zhonghua laodong weisheng zhiyebing zazhi= Chinese journal of industrial hygiene and occupational diseases*, *38*, E001-E001.

Human Resources for Health Coalition. (15 January 2021, 15 January 2021). *In the second wave of COVID-19 pandemic: A call for an improved health system*

Humphries, N., McDermott, A. M., Creese, J., Matthews, A., Conway, E., & Byrne, J.-P. (2020). Hospital doctors in Ireland and the struggle for work–life balance. *European journal of public health*, *30*(Supplement_4), iv32-iv35.

Iannone, P., Castellini, G., Coclite, D., Napoletano, A., Fauci, A. J., Iacorossi, L., D'Angelo, D., Renzi, C., La Torre, G., & Mastroianni, C. M. (2020). The need of health policy perspective to protect Healthcare Workers during COVID-19 pandemic. A GRADE rapid review on the N95 respirators effectiveness. *PLoS One*, *15*(6), e0234025.

Ilić, I. M., Arandjelović, M. Ž., Jovanović, J. M., & Nešić, M. M. (2017). Relationships of work-related psychosocial risks, stress, individual factors and burnout-Questionnaire survey among emergency physicians and nurses. *Med Pr*, *68*(2), 167-178.

Industrial Health Research Group and South African Municipal Workers Union. (2005). *Who cares for health care workers: The state of occupational safety and health in municipal health clinics in South Africa* (Occasional Papers Series Issue.

International Federation of Red Cross and Red Crescent Societies. (17 September 2022). *Emergency plan of action (EPoA) Malawi: Cholera outbreak*. https://adore.ifrc.org/Download.aspx?FileId=575153

International Labour Office. (2015). *Report of the Director General to the International Labour Conference 104th Session*. I. L. Office.

International Labour Office. (2020). In the face of a pandemic: ensuring safety and health at work. Geneva: ILO.

International Labour Organisation. (1212). *SOLVE: Integrating health promotion into workplace OSH policies - Participant's work book*. https://www.ilo.org/global/topics/safety-and-health-at-work/resources-library/training/WCMS_178396/lang--en/index.htm

International Labour Organisation. (2001). Guidelines on occupational safety and health management systems. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107727.pdf

International Labour Organisation. (2011). Occupational safety & health management system: A tool for continual improvement. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/publication/wcms_153930.pdf

International Labour Organisation. (2014). *Global employment trends for 2014*.

Centenary declaration on the future of work, (2019a). https://www.ilo.org/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_711674.pdf

International Labour Organisation. (2019b). Safety and Health at the heart of the Future of Work: Building on 100 years of experience.

International Labour Organisation. (2020a). In the face of a pandemic: ensuring safety and health at work (9789220321379 (print)). https://www.ilo.org/global/topics/safety-and-health-at-work/events-training/events-meetings/world-day-safety-health-at-work/WCMS_742463/lang--en/index.htm

International Labour Organisation. (2020b). Ratifications for Malawi.

International Monetary Fund. (1 May 2020, 1 May 2020). *IMF Executive Board Approves a US$91 Million Disbursement under the Rapid Credit Facility for Malawi* https://www.imf.org/en/News/Articles/2020/05/01/pr20200-malawi-imf-executive-board-approves-us-million-disbursement-under-rapid-credit-facility

International Monetary Fund. (9 April 2020). IMF Rapid Credit Facility (RCF). https://www.imf.org/en/About/Factsheets/Sheets/2016/08/02/21/08/Rapid-Credit-Facility

International Monetary Fund. (October 2005). Establishment of an Exogenous Shocks Facility Under the Poverty Reduction and Growth Facility Trust. https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Establishment-of-an-Exogenous-Shocks-Facility-Under-the-Poverty-Reduction-and-Growth-PP493

International Monetary Fund. (3 December 2008). IMF Executive Board Approves US$77.1 Million Exogenous Shocks Facility Arrangement for Malawi https://www.imf.org/en/News/Articles/2015/09/14/01/49/pr08309

International Monetary Fund. (3 March 2020). IMF Extended Credit Facility (ECF)

https://www.imf.org/en/About/Factsheets/Sheets/2016/08/02/21/04/Extended-Credit-Facility

International Monetary Fund. (31 July 2009). The Poverty Reduction and Growth Facility (PRGF). https://www.imf.org/external/np/exr/facts/prgf.htm

International Monetary Fund. (December 2019). Malawi : Second and Third Reviews Under the Three-Year Extended Credit Facility Arrangement and Requests for Waivers of Nonobservance of Performance Criteria and Augmentation of Access-Press Release; Staff Report; and Statement by the Executive Director for Malawi. https://www.imf.org/en/Publications/CR/Issues/2019/12/06/Malawi-Second-and-Third-Reviews-Under-the-Three-Year-Extended-Credit-Facility-Arrangement-48858

International Monetary Fund. (September 1999). The IMF's Enhanced Structural Adjustment Facility (ESAF): Is It Working? https://www.imf.org/external/pubs/ft/esaf/exr/index.htm

Jain, A., Hassard, J., Leka, S., Di Tecco, C., & Iavicoli, S. (2021). The Role of Occupational Health Services in Psychosocial Risk Management and the Promotion of Mental Health and Well-Being at Work. *International Journal of Environmental Research and Public Health*, *18*(7), 3632.

Jenkins, R. (1996). *Social identity*. Routledge.

Jiskoot, P. (2008). On-the-job training of clinical officers in Malawi. *Malawi Medical Journal*, *20*(3), 74-77.

Jones, L., & Arana, G. (1996). Is downsizing affecting incident reports? *The Joint Commission journal on quality improvement*, *22*(8), 592-594.

Kalata, N., Kamange, L., & Muula, A. (2013). Adherence to hand hygiene protocol by clinicians and medical students at Queen Elizabeth Central Hospital, Blantyre-Malawi. *Malawi Medical Journal*, *25*(2), 50-52.

Kalimo, R., Taris, T. W., & Schaufeli, W. B. (2003). The effects of past and anticipated future downsizing on survivor well-being: an equity perspective. *Journal of occupational health psychology*, *8*(2), 91-109.

Kamaloo, A., Ahmadipour, A., Labbaf, A., Hesari, E., Valadkhani, S., Zebardast, J., & Arbabi, M. (2017). Why do emergency medicine residents experience burn out? A qualitative study. *Iranian journal of psychiatry*, *12*(3), 214.

Kasolola, T. (15 August 2019). Fire razes down Mangochi district hospital stores block. Retrieved 21 April 2022, from https://allafrica.com/stories/201908150428.html

Kearns, D., McCarthy, P., & Sheehan, M. (1998). Managerial styles during organisational restructuring: issues for health and safety practitioners. *Journal of Occupational Health and Safety, Australia and New Zealand*, *14*(1), 31-37.

Kelley, H. H. (1967). Attribution theory in social psychology. Nebraska symposium on motivation,

Kelley, H. H. (1971). Attribution theory in social interaction. Morristown. In: NJ: General Learning Press.

Kelley, H. H. (1973). The processes of causal attribution. *American psychologist*, *28*(2), 107.

Kentikelenis, A. (2017). Structural adjustment and health: A conceptual framework and evidence on pathways. *Social Science & Medicine*, *187*, 296-305.

Kentikelenis, A., King, L., McKee, M., & Stuckler, D. (2015). The international monetary fund and the Ebola outbreak. *The Lancet Global Health*, *3*(2), e69-e70.

Khamula, O. (14 November 2019). Fire guts Mangochi hospital again. Retrieved 21 April 2022, from https://www.nyasatimes.com/fire-guts-mangochi-hospital-again/

Kim, M., Mazenga, A. C., Yu, X., Simon, K., Nyasulu, P., Kazembe, P. N., Kalua, T., Abrams, E., & Ahmed, S. (2019). Factors associated with burnout amongst healthcare workers providing HIV care in Malawi. *PloS one*, *14*(9).

Kim, S., Buttrick, E., Bohannon, I., Fehr, R., Frans, E., & Shannon, S. E. (2016). Conflict narratives from the health care frontline: A conceptual model. *Conflict Resolution Quarterly*, *33*(3), 255-277.

Kingma, M. (2001). Guest Editorial. *International Nursing Review*, *48*, 129-130.

Kivimäki, M., Vahtera, J., Pentti, J., & Ferrie, J. E. (2000). Factors underlying the effect of organisational downsizing on health of employees: longitudinal cohort study. *Bmj*, *320*(7240), 971-975.

Kjellstro¨m, T., Ha°kansta, C., & Hogstedt, C. (2007). Globalisation and public health – introduction and overview. *Scandinavian Journal of Public Health 35* (70), 1-68.

Koukoulaki, T., Pinotsi, D., Georgiadou, P., Daikou, A., Zorba, K., Targoutzidis, A., Poulios, K., Naris, S., Panousi, P., & Skoulatakis, Y. (2017). Restructuring seriously damages well-being of workers: The case of the restructuring programme in local administration in Greece. *Safety science*, *100*, 30-36.

Kumar, A., & Nayar, K. R. (2020). COVID 19 and its mental health consequences. *Journal of Mental Health*, *180*(6), 817-818.

Kumar, M. S., Goud, B. R., & Joseph, B. (2014). A study of occupational health and safety measures in the Laundry Department of a private tertiary care teaching hospital, Bengaluru. *Indian journal of occupational and environmental medicine*, *18*(1), 13-20.

Laterza, V. (2016). Resilient labour: Workplace regimes, globalisation and enclave development in Swaziland. *The Journal of Development Studies*, *52*(4), 576-590.

Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Publications.

Lee, D. (2002). Gendered workplace bullying in the restructured UK civil service. *Personnel review*, *31*, 205-227.

Lehmann, U., Van Damme, W., Barten, F., & Sanders, D. (2009). Task shifting: the answer to the human resources crisis in Africa? *Human resources for health*, *7*(1), 1-4.

Leka, S., & Lavicoli, S. (2017). The psychosocial work environment in times of change: society and the workplace. *Safety science*, *100*, 1-3.

Li, J., Matouschek, N., & Powell, M. (2017). Power dynamics in organizations. *American Economic Journal: Microeconomics*, *9*(1), 217-241.

Li, Y., Liu, G., Egolet, R. O., Yang, R., Huang, Y., & Zheng, Z. (2021). Knowledge, attitudes, and practices related to COVID-19 among Malawi adults: a community-based survey. *International Journal of Environmental Research and Public Health*, *18*(8), 4090.

Li, Z., Dai, J., Wu, N., Jia, Y., Gao, J., & Fu, H. (2019). Effect of long working hours on depression and mental well-being among employees in Shanghai: the role of having leisure hobbies. *International Journal of Environmental Research and Public Health*, *16*(24), 4980.

Lin, S., H, Liao, W. C., Chen, M. Y., & Fan, J. Y. (2014). The impact of shift work on nurses' job stress, sleep quality and self-perceived health status. *Journal of nursing management*, *22*(5), 604-612.

Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of health and social behavior*, *56*(Extra Issue), 84-94.

Link, B. G., Phelan, J. C., & Hatzenbuehler, M. L. (2018). Stigma as a fundamental cause of health inequality. In J. F. D. Brenda Major, and Bruce G. Link (Ed.), *The Oxford Handbook of Stigma, Discrimination, and Health* (pp. 1-26). Oxford University Press.

Loewenson, R. (2001). Globalization and occupational health: a perspective from southern Africa. *Bulletin of the World Health Organization*, *79*, 863-868.

London, L., & Kisting, S. (2017). Worker Health and Safety: International Issues. Stella R. Q (ed). International Encyclopedia of Public Health (Second Edition). Academic Press.

London, L., Tangwa, G., Matchaba-Hove, R., Mkhize, N., Nwabueze, R., Nyika, A., & Westerholm, P. (2014). Ethics in occupational health: deliberations of an international workgroup addressing challenges in an African context. *BMC medical ethics*, *15*(1), 48.

Lucas, J. W., & Baxter, A. R. (2012). Power, influence, and diversity in organizations. *The ANNALS of the American Academy of Political and Social Science*, *639*(1), 49-70.

Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of organizational Behavior*, *13*(2), 103-123.

Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, *9*(3).

Mahajan, A., & Sharma, P. (2020). COVID-19 and radiologist: Image wisely. *Indian Journal of Medical and Paediatric Oncology*, *41*(2), 121.

Malawi24. (31 July 2020). Fire destroys part of Balaka hospital. Retrieved 21 April 2022, from https://malawi24.com/2020/07/31/fire-destroys-part-of-balaka-hospital/

Malawi College of Health Sciences. (2022). *Malawi College of Health Sciences' history*. https://mchs.mw/college-history/

Malawi Government. (1948). Public Health Act.

Malawi Government. (1968a). Control of Goods Act.

Malawi Government. (1968b). Tourism Act.
Malawi Government. (1970). Railways Act.
Medical Practioners and Dentists Act, (1987).
Malawi Government. (1997). Occupational Safety, Health and Welfare Act.
Malawi Government. (1998a). Local Government Act.
Malawi Government. (1998b). National Decentralisation Policy.
Malawi Government. (2000). Employment Act.
Malawi Government. (2011a). Decent Work Country Programme (2011-2016).
Malawi Government. (2011b). Health Sector Strategic Plan I (2011 - 2016) for Malawi. Retrieved from https://www.resakss.org/sites/default/files/Malawi%20MH%202011%20Malawi%20Health%20Sector%20Strategic%20Plan%202011%20-%202016.pdf
Malawi Government. (2012). National Programme on Occupational Safety and Health.
Malawi Government. (2013). Guidebook on the local government system in Malawi.
Malawi Government. (2017a). Health Sector Strategic Plan II (2017-2022) for Malawi. Malawi Government.
Malawi Government. (2017b). Malawi public service regulations.
Malawi Government. (2017c). Quality Management Policy for the Health Sector in Malawi. Malawi Government.
Malawi Government. (2018a). Functional review report on central hospitals autonomy.
Malawi Government. (2018b). Human resources for health strategic plan (2018–2022) for Malawi.
Malawi Government. (2018c). National health indicators handbook for monitoring health sector performance. http://nkhokwe.kuhes.ac.mw/bitstream/handle/20.500.12845/191/Malawi_National_Health_Indicators.pdf?sequence=1&isAllowed=y
Malawi Government. (2020a). Decent work country programme (2020-2023).
Malawi Government. (2020b). National care of carers workplace policy.
Malawi Government. (2020c). National mental health policy.
Malawi Government. (2020d). Performance contract between the Government of the Republic of Malawi and Ministry of Health.
Malawi Government. (2022a). Annual economic report of 2022.
Malawi Government. (2022b). National COVID-19 preparedness and response strategy and plan (July2021-June 2022). Retrieved from https://planipolis.iiep.unesco.org/sites/default/files/ressources/malawi_national_covid_19_preparedness_and_response_strategy_and_plan_-july_2021_to_june_2022.pdf
Malik, M. I., Zaheer, A., Khan, M. A., & Ahmed, M. (2010). Developing and testing a model of burnout at work and turnover intensions among doctors in Pakistan. *International journal of business and management*, *5*(10), 234-247.
Malle, B. F. (2006). The actor-observer asymmetry in attribution: A (surprising) meta-analysis. *Psychological bulletin*, *132*(6), 895.
Mallon, D. F., Shearwood, W., Mallal, S. A., French, M. A., & Dawkins, R. L. (1992). Exposure to blood borne infections in health care workers. *Medical journal of Australia*, *157*(9), 592-595.
Maluwa, V. M., Andre, J., Ndebele, P., & Chilemba, E. (2012). Moral distress in nursing practice in Malawi. *Nursing ethics*, *19*(2), 196-207.
Manfredi, S., & Holliday, M. (2004). Work-life balance. *An audit of staff experience at Oxford*.
Mangani, R. (2020). The Macroeconomic and political foundations of endemic poverty in Malawi. In M. a. G. Rompel, R. (Ed.), *Malawi: Economy, Society and Political Affairs*. Zed Books.
Mangham, L. (2007). Addressing the Human Resource Crisis in Malawi's Health Sector: Employment preferences of public sector registered nurses.
Manyele, S., Ngonyani, H., & Eliakimu, E. (2008). The status of occupational safety among health service providers in hospitals in Tanzania. *Tanzania journal of health research*, *10*(3), 159-165.

Marphatia, A. A. (2010). The adverse effects of International Monetary Fund programs on the health and education workforce. *International Journal of Health Services*, *40*(1), 165-178.

Maseko, F., Nkunika, H., & Bowie, C. (2008). The impact of a relief scheme as an incentive in tackling human resources for health shortage in Malawi: a comparative case study of Chiradzulu and Mchinji district health offices. *College of Medicine, Blantyre, Malawi*.

Mashoto, K. O., Mubyazi, G. M., & Mushi, A. K. (2015). Knowledge of occupational exposure to HIV: a cross sectional study of healthcare workers in Tumbi and Dodoma hospitals, Tanzania. *BMC health services research*, *15*(1), 1-6.

Masina, L. (12 February 2021). Malawi health workers face harassment over COVID-19 deaths. Retrieved 19 April 2022, from https://www.voanews.com/a/covid-19-pandemic_malawi-health-workers-face-harassment-over-covid-19-deaths/6201961.html

Masina, L. (25 January 2021). Malawi recruits healthcare workers to combat surge in COVID-19. Retrieved 19 April 2022, from https://www.voanews.com/a/africa_malawi-recruits-healthcare-workers-combat-surge-covid-19/6201182.html

Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). *Maslach burnout inventory*. Scarecrow Education.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of organizational Behavior*, *2*(2), 99-113.

Mathisen, G. E., Brønnick, K., Arntzen, K. J., & Bergh, L. I. V. (2017). Identifying and managing psychosocial risks during organizational restructuring: It's what you do and how you do it. *Safety science*, *100*, 20-29.

McAuliffe, E., Bowie, C., Manafa, O., Maseko, F., MacLachlan, M., Hevey, D., Normand, C., & Chirwa, M. (2009). Measuring and managing the work environment of the mid-level provider–the neglected human resource. *Human resources for health*, *7*(1), 13.

McAuliffe, E., Manafa, O., Maseko, F., Bowie, C., & White, E. (2009). Understanding job satisfaction amongst mid-level cadres in Malawi: the contribution of organisational justice. *Reproductive Health Matters*, *17*(33), 80-90.

McHugh, M. D., Kutney-Lee, A., Cimiotti, J. P., Sloane, D. M., & Aiken, L. H. (2011). Nurses' widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care. *Health Affairs*, *30*(2), 202-210.

Meagher, K. (2016). The scramble for Africans: Demography, globalisation and Africa's informal labour markets. *The Journal of Development Studies*, *52*(4), 483-497.

Mechanic, D. (1962). Sources of power of lower participants in complex organizations. *Administrative science quarterly*, 349-364.

Medical Council of Malawi. (2019). Certificate of registration for clinical officer. In: Medical Council of Malawi.

Mehrdad, R., Dennerlein, J. T., & Morshedizadeh, M. (2012). Musculoskeletal disorders and ergonomic hazards among Iranian physicians. *Archives of Iranian medicine*, *15*(6), 0-0.

Metzler, Y. A., von Groeling-Müller, G., & Bellingrath, S. (2019). Better safe than sorry: methods for risk assessment of psychosocial hazards. *Safety science*, *114*, 122-139.

Mijakoski, D., Karadzinska-Bislimovska, J., Basarovska, V., Stoleski, S., & Minov, J. (2015). Burnout and work demands predict reduced job satisfaction in health professionals working in a surgery clinic. *Open access Macedonian journal of medical sciences*, *3*(1), 166-173.

Miller, D. T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? *Psychological bulletin*, *82*(2), 213.

Minister of Health. (5 December 2022). *Update on Cholera outbreak situation in Malawi*

Corona virus prevention, containment and management rules (Amended), (7 August 2020).

Minister of Health. (7 October 2022). Speech by the Minister of Health, Hon. Khumbize Kandodo Chiponda on the revised COVID-19 public health measures. Corona virus prevention, containment and management rules (9 April 2020). https://gazettes.africa/gazettes/mw-government-gazette-supplement dated-2020-04-09-no-4A

Minister of Health. (9 June 2022). *Reminder on travel requirements for Malawi* https://www.dropbox.com/s/mt6e810veovy8a2/20220609%20Press%20Statement%20on%20Entry%20Requirements%20from%20June%2022.pdf?dl=0

Minister of Health. (14 April 2020). *Speech by Minister of Health on additional measures on COVID-19* https://malawi.un.org/en/46796-speech-minister-healths-additional-measures-covid-19

Minister of Health. (27 August 2021). *Lifting of travel restrictions* https://www.dropbox.com/sh/io9aajkk9ulp44f/AAC8aiBmMysTlr4IgcIa0Vqza?dl=0&preview=20210827+SPEECH+IN+FULL+-+MINISTER+OF+HEALTH+LIFTING+OF+TRAVEL+RESTRICTION.pdf

Minister of Health. (28 November 2021). *Situation of Corona virus pandemic in the country and review of rules and guidelines in the context of evolving regional and global situations* https://www.dropbox.com/sh/io9aajkk9ulp44f/AACJznuGsXJ_1y4K67CqmBiIa/20211128%20Presidential%20Taskforce%20Statement%20on%20Coronavirus.pdf?dl=0

Ministry of Labour. (2020). Occupational accidents reported in Malawi (2015-2020).

Minnie, K., Lekalakala-Mokgele, E., & Massinga, Z. (2016). Factors influencing compliance with universal precautions in operating theatres in northern KwaZulu-Natal. *Occupational Health Southern Africa*, *22*(2), 16-20.

Mitchell, P. H. (2008). Defining patient safety and quality care. *Patient safety and quality: An evidence-based handbook for nurses*.

Mkandawire, N., Ngulube, C., & Lavy, C. (2008). Orthopaedic clinical officer programme in Malawi: a model for providing orthopaedic care. *Clinical orthopaedics and related research*, *466*(10), 2385-2391.

Molokwane, T., & Chinguwo, P. (2019). Adverse Effects of Labour Market Transformation on Public Health in Africa. *African Journal of Employee Relations (Formerly South African Journal of Labour Relations)*, *43*, 19 pages-19 pages.

Morris Jr, J. G., & Black, R. E. (1985). Cholera and other vibrioses in the United States. *NEW ENGLAND JOURNAL OF MEDICINE*, *312*(6), 343-350.

Moyo, D., Zungu, M., Kgalamono, S., & Mwila, C. D. (2015). Review of occupational health and safety organization in expanding economies: the case of Southern Africa. *Annals of global health*, *81*(4), 495-502.

Mulanje District Council. (2017). Mulanje district socio-economic profile (2017-2022).

Mulanje District Hospital. (2022). Staff returns.

Mullen, B., Atkins, J. L., Champion, D. S., Edwards, C., Hardy, D., Story, J. E., & Vanderklok, M. (1985). The false consensus effect: A meta-analysis of 115 hypothesis tests. *Journal of Experimental Social Psychology*, *21*(3), 262-283.

Munthali, T. (2004). *The impact of Structural Adjustment Policies (SAPs) on manufacturing growth in Malawi* [Dissertation, Leeds University].

Muula, A. S. (2009). Case for clinical officers and medical assistants in Malawi. *Croatian medical journal*, *50*(1), 77.

Muula, A. S. (2016). Personal View: How IMF's loan freeze will affect health care in Malawi. *Malawi Medical Journal*, *28*(1), 26-27.

Muula, A. S., Mulwafu, W., Chiweza, D., & Mataya, R. (2016). Reflections on the first twenty-five years of the University of Malawi College of Medicine. *Malawi Medical Journal*, *28*(3), 75-78.

Mzungu, W. (6 March 2021). Nurses body condemns attacks on frontline healthcare workers - 'Hopes for justice'. Retrieved 19 April 2022, from https://www.nyasatimes.com/malawi-nurses-body-condemns-attacks-on-frontline-healthcare-workers-hopes-for-justice/

National Institute for Occupational Safety and Health. (1999). *Stress at Work* (NIOSH Publication No. 99-101, Issue. http://www.cdc.gov/niosh/docs/99-101/

National Statistical Office. (2019). *2018 Malawi population and housing census*. Retrieved from https://malawi.unfpa.org/sites/default/files/resource-

pdf/2018%20Malawi%20Population%20and%20Housing%20Census%20Main%20Report%20%281%29.pdf
Nations online. (N/A). Administrative map of Malawi.
Ndu, A. C., & Arinze-Onyia, S. U. (2017). Standard precaution knowledge and adherence: Do Doctors differ from Medical Laboratory Scientists? *Malawi Medical Journal*, *29*(4), 294-300.
Ng'ong'ola, D. (1996). Analysis of Policy Reform and Structural Adjustment Programmes in Malawi, with emphasis on agriculture and trade.
Nkhatabay District Council. (2020). Nkhatabay district socio-economic profile (2017-2022).
Nkhatabay District Hospital. (2022). Staff returns.
Nwobodo, E. O., Orjiako, R. N., Nwadinigwe, C. U., Anyaehie, U. B., Ugwu, P. I., Nwobodo, N. F., Iyidobi, E. C., Ikwuka, D. C., Nwonye, C. A., & Ekechi, V. C. (2022). Interprofessional Conflict Among Healthcare Teams in Nigeria: Implications on Quality of Patient Care. *Frontline Medical Sciences and Pharmaceutical Journal*, *2*(10), 10-19.
Nyasa Times. (15 February 2016). Fire guts Mulanje hospital hostel. Retrieved 21 April 2022, from
Nyasa Times. (31 December 2022). Nankhumwa tours Limbe, Makhetha Cholera treatment facilities, calls for emergency measures. https://www.nyasatimes.com/nankhumwa-tours-limbe-makhetha-cholera-treatment-facilities-calls-for-more-emergency-measures/
Oakman, J., Macdonald, W., Bartram, T., Keegel, T., & Kinsman, N. (2018). Workplace risk management practices to prevent musculoskeletal and mental health disorders: what are the gaps? *Safety science*, *101*, 220-230. https://www.sciencedirect.com/science/article/abs/pii/S0925753516307032
Occupational Safety and Health Administration. (2014). Hospital hazards. www.osha.gov/SLTC/etools/hospital/index.html.
Ogbonnaya, L., Ogbonnaya, C., & Adeoye-Sunday, I. (2007). The perception of health prefessions on cause of interprofessional conflict in a tertiary health institution in Abakaliki, southeast Nigeria. *Nigerian Journal of Medicine*, *16*(2), 161-168.

O'Keefe, L. C., Brown, K. C., Christian, B. J. (2014). Policy perspectives on occupational stress. . *Workplace health & safety*, *62*(10), 432-438.
Okyere, E., Mwanri, L., & Ward, P. (2017). Is task-shifting a solution to the health workers' shortage in Northern Ghana? *PloS one*, *12*(3), e0174631.
Omisore, A. G., Adesoji, R. O., & Abioye-Kuteyi, E. A. (2017). Interprofessional rivalry in Nigeria's health sector: a comparison of doctors and other health workers' views at a secondary care center. *International quarterly of community health education*, *38*(1), 9-16.
O'Neil, M., Jarrah, Z., Nkosi, L., Collins, D., Perry, C., Jackson, J., Kuchande, H., & Mlambala, A. (2010). Evaluation of Malawi's emergency human resources programme.
Orji, E., Fasubaa, O., Onwudiegwu, U., Dare, F., & Ogunniyi, S. (2002). Occupational health hazards among health care workers in an obstetrics and gynaecology unit of a Nigerian teaching hospital. *Journal of obstetrics and gynaecology*, *22*(1), 75-78.
Ozturk, H., Demirsoy, N., Sayligil, O., & Florczak, K. L. (2020). Patients' perceptions of nursing care in a university hospital. *Nursing science quarterly*, *33*(1), 12-18.
Palmer, D. (2006). Tackling Malawi's human resources crisis. *Reproductive Health Matters*, *14*(27), 27-39.
Pandolfelli, L. E., Shandra, J., & Tyagi, J. (2014). The international monetary fund, structural adjustment, and women's health: a cross-national analysis of maternal mortality in Sub-Saharan Africa. *The Sociological Quarterly*, *55*(1), 119-142.
Pansiri, J. (2005). Pragmatism: A methodological approach to researching strategic alliances in tourism. *Tourism and Hospitality Planning & Development*, *2*(3), 191-206.
Park, J., Yi, Y., & Kim, Y. (2010). Weekly work hours and stress complaints of workers in Korea. *American Journal of Industrial Medicine*, *53*(11), 1135-1141.

Pascoe, G. C. (1983). Patient satisfaction in primary health care: a literature review and analysis. *Evaluation and programme planning*, *6*(3-4), 185-210.

Paul, S., & Peterson, C. Q. (2002). Interprofessional Collaboration: Issues for Practice and Research. *Occupational Therapy In Health Care*, *15*(3-4), 1-12. https://doi.org/10.1080/J003v15n03_01

Pensulo, C. (13 May 2020). Coronavirus leaves Malawi's health workers facing threats and social stigma. Retrieved 19 April 2022, from https://www.theguardian.com/world/2020/may/13/coronavirus-leaves-malawis-health-workers-facing-threats-and-social-stigma.

Phelan, J. C., & Link, B. G. (2013). Fundamental cause theory. In W. C. Cockerham (Ed.), *Medical Sociology on the Move: New Directions in Theory* (pp. 105-125). Springer.

Phelan, J. C., Link, B. G., Diez-Roux, A., Kawachi, I., & Levin, B. (2004). "Fundamental causes" of social inequalities in mortality: a test of the theory. *Journal of health and social behavior*, *45*(3), 265-285.

Phelan, J. C., Link, B. G., & Tehranifar, P. (2010). Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications. *Journal of health and social behavior*, *51*(1_suppl), S28-S40.

Phillips, M. L., Medford, N., Senior, C., Bullmore, E. T., Suckling, J., Brammer, M. J., Andrew, C., Sierra, M., Williams, S. C., & David, A. S. (2001). Depersonalization disorder: thinking without feeling. *Psychiatry Research: Neuroimaging*, *108*(3), 145-160.

Physician Assistants Union of Malawi. (1st September 2020). Open letter to the Minister of Health.

Physician Assistants Union of Malawi. (7 October 2020). PAUM president's statement to the LASCOM and Management.

Pikó, B. (1999). Work-related stress among nurses: a challenge for health care institutions. *The journal of the Royal Society for the Promotion of Health*, *119*(3), 156-162.

Prakash, B. (2010). Patient satisfaction. *Journal of cutaneous and aesthetic surgery*, *3*(3), 151.

Pransky, G., Berndt, E., Finkelstein, S., Verma, S., & Agrawal, A. (2005). Performance decrements resulting from illness in the workplace: the effect of headaches. *Journal of Occupational and Environmental Medicine*, 34-40.

Prasad, M., Wahlqvist, P., Shikiar, R., & Tina Shih, Y.-C. (2004). A review of self-report instruments measuring health-related work productivity. *Pharmacoeconomics*, *22*(4), 225-244.

Queen Elizabeth Central Hospital. (3 January 2022). Guidelines on management of staff with COVID-19.

Queen Elizabeth Central Hospital. (2022). Staff returns.

Quinlan, M., & Bohle, P. (2009). Overstretched and unreciprocated commitment: reviewing research on the occupational health and safety effects of downsizing and job insecurity. *International Journal of Health Services*, *39*(1), 1-44.

Quinlan, M., Mayhew, C., & Bohle, P. (2001). The global expansion of precarious employment, work disorganization, and consequences for occupational health: a review of recent research. *International Journal of Health Services*, *31*(2), 335-414.

Raja, D. S., & Sultana, B. (2012). Potential health hazards for students exposed to formaldehyde in the gross anatomy laboratory. *Journal of Environmental Health*, *74*(6), 36-41.

Rajgopal, T. (2010). Mental well-being at the workplace. *Indian journal of occupational and environmental medicine*, *14*(3), 63.

Rajkumar, R. P. (2020). COVID-19 and mental health: A review of the existing literature. *Asian journal of psychiatry*, *52*, 102066.

Ramos-Gomez, F., ELLISON, J., GREENSPAN, D., BIRD, W., LOWE, S., & GERBERDING, J. L. (1997). Accidental exposures to blood and body fluids among health care workers in dental teaching clinics: a prospective study. *The Journal of the American Dental Association*, *128*(9), 1253-1261.

Riany, C. O., Musa, G. H., Odera, O., & Okaka, O. (2012). Effects of restructuring on organization performance of mobile phone service providers. *International Review of social sciences and Humanities*, *4*(1), 198-204.

Rick, J., & Briner, R. (2000). Psychosocial risk assessment: problems and prospects. *Occupational Medicine*, *50*(5), 310-314.

Rivera, A. S., Akanbi, M., O'Dwyer, L. C., & McHugh, M. (2020). Shift work and long work hours and their association with chronic health conditions: A systematic review of systematic reviews with meta-analyses. *PloS one*, *15*(4), e0231037.

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Advances in experimental social psychology*, *10*, 173-220.

Ross, P. (1994). Ergonomic hazards in the workplace: assessment and prevention. *AAOHN journal*, *42*(4), 171-176. https://journals.sagepub.com/doi/pdf/10.1177/216507999404200405.

Sabet Sarvestani, A., Coulentianos, M., & Sienko, K. H. (2021). Defining and characterizing task-shifting medical devices. *Globalization and Health*, *17*(1), 1-7.

Sadoh, W. E., Fawole, A. O., Sadoh, A. E., Oladimeji, A. O., & Sotiloye, O. S. (2006). Practice of universal precautions among healthcare workers. *Journal of the National Medical Association*, *98*(5), 722-726.

Salilih, S. Z., & Abajobir, A. A. (2014). Work-related stress and associated factors among nurses working in public hospitals of Addis Ababa, Ethiopia: a cross-sectional study. *Workplace health & safety*, *62*(8), 326-332.

Sanyahumbi, A. S., Sable, C. A., Karlsten, M., Hosseinipour, M. C., Kazembe, P. N., Minard, C. G., & Penny, D. J. (2017). Task shifting to clinical officer-led echocardiography screening for detecting rheumatic heart disease in Malawi, Africa. *Cardiology in the Young*, *27*(6), 1133-1139.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students*. Pearsons Education Limited.

Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G.F. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health* (pp. 43-68). Springer.

Schonfeld, I. S., & Mazzola, J. J. (2013). Strengths and limitations of qualitative approaches to research in occupational health psychology. In M. W. Sinclair, & L. Tetrick (Ed.), *Research methods in occupational health psychology: State of the art in measurement, design, and data analysis* (pp. 268-289). Routledge.

Schrecker, T. (2016). Neoliberalism and health: the linkages and the dangers. *Sociology Compass*, *10*(10), 952-971.

Schuller, K. (2019). Interventions as the centrepiece of psychosocial risk assessment–why so difficult? *International Journal of Workplace Health Management*.

Schulte, J. M., Nolt, B. J., Williams, R. L., Spinks, C. L., & Hellsten, J. J. (1998). Violence and threats of violence experienced by public health field-workers. *JAMA*, *280*(5), 439-442.

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English language teaching*, *5*(9), 9-16.

Semo, B.-w., & Frissa, S. M. (2020). The mental health impact of the COVID-19 pandemic: Implications for sub-Saharan Africa. *Psychology Research and Behavior Management*, *13*, 713.

Shanafelt, T. D., & Noseworthy, J. H. (2017). Executive leadership and physician well-being: nine organizational strategies to promote engagement and reduce burnout. Mayo Clinic Proceedings.

Shepperd, J., Malone, W., & Sweeny, K. (2008). Exploring causes of the self-serving bias. *Social and Personality Psychology Compass*, *2*(2), 895-908.

Silverman, D. (2010). *Qualitative research*. SAGE.

Singh, R. K., Bajpai, R., & Kaswan, P. (2021). COVID-19 pandemic and psychological wellbeing among health care workers and general population: A systematic-review and meta-analysis of the current evidence from India. *Clinical Epidemiology and Global Health*.

Singh, S., Roy, M. D., Sinha, C. P. T. M. K., Parveen, C. P. T. M. S., Sharma, C. P. T. G., & Joshi, C. P. T. G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry research*, 113429.

Sinyiza, F. W., Kaseka, P. U., Chisale, M. R. O., Chimbatata, C. S., Mbakaya, B. C., Kamudumuli, P. S., Wu, T.-S. J., & Kayira, A. B. (2022). Patient satisfaction with health care at a tertiary hospital in Northern Malawi: results from a triangulated cross-sectional study. *BMC health services research*, *22*(1), 1-9.

Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and teacher education*, *25*(3), 518-524.

Skjørshammer, M. (2001). Co-operation and conflict in a hospital: interprofessional differences in perception and management of conflicts. *Journal of Interprofessional Care*, *15*(1), 7-18.

Smoke, P. (2003). Decentralisation in Africa: goals, dimensions, myths and challenges. *Public Administration and Development: The International Journal of Management Research and Practice*, *23*(1), 7-16.

Stake, R. E. (1995). *The Art of Case Study Research.* Sage.

Subramaniam, T., & Loo, R. C. N. (2015). Knowledge and practice of medical students of the usage of personal protective equipment: A comparison of two cohorts of students at the International Medical University. *International E-Journal of Science, Medicine & Education*, *9*(2), 25-31.

Suifan, T. S., Abdallah, A. B., & Diab, H. (2016). The influence of work life balance on turnover intention in private hospitals: The mediating role of work life conflict. *European Journal of Business and Management*, *8*(20), 126-139.

Tait, F. N., Mburu, C., & Gikunju, J. (2018). Occupational safety and health status of medical laboratories in Kajiado County, Kenya. *Pan African Medical Journal*, *29*(1), 1-17.

Tambulasi, R. I. (2012). Labour Crisis and Innovation in Developing Countries: An Analysis of Locum Programme for Health Personnel in Malawi. *International Journal of Public Administration*, *35*(8), 524-531.

Tan, C. C. (1991). Occupational health problems among nurses. *Scandinavian journal of work, environment & health*, 221-230.

Tereskerz, P., Pearson, R., & Jagger, J. (1997). Occupational exposure to blood among medical students-Reply. *NEW ENGLAND JOURNAL OF MEDICINE*, *336*(13), 966-967.

Tetřevová, L. (2007). Concept of corporate restructuring and reengineering. *Scientific papers of the University of Pardubice. Series D, Faculty of Economics and Administration. 11 (2007)*.

Thekkur, P., Tweya, H., Phiri, S., Mpunga, J., Kalua, T., Kumar, A. M., Satyanarayana, S., Shewade, H. D., Khogali, M., & Zachariah, R. (2021). Assessing the impact of COVID-19 on TB and HIV programme services in selected health facilities in Lilongwe, Malawi: operational research in real time. *Tropical Medicine and Infectious Disease*, *6*(2), 81.

Thetard, R., & Macheso, A. (2004). Clinical officers in Malawi. *South African Family Practice*, *46*(2), 32-32.

Thomas, J. P., Srinivasan, A., Wickramarachchi, C. S., Dhesi, P. K., Hung, Y. M., & Kamath, A. V. (2020). Evaluating the national PPE guidance for NHS healthcare workers during the COVID-19 pandemic. *Clinical Medicine*, *20*(3).

Thornicroft, G., Rose, D., & Kassam, A. (2007). Discrimination in health care against people with mental illness. *International review of psychiatry*, *19*(2), 113-122.

Töyry, S. (2005). *Burnout and self-reported health among Finnish physicians* [Doctoral thesis, University of Kuopio].

Tsamakis, K., Rizos, E., Manolis, A. J., Chaidou, S., Kympouropoulos, S., Spartalis, E., Spandidos, D. A., Tsiptsios, D., & Triantafyllis, A. S. (2020). [Comment] COVID-19 pandemic and its impact on

mental health of healthcare professionals. *Experimental and Therapeutic Medicine*, *19*(6), 3451-3453.

Tshoose, C. (2014). Placing the right to occupational health and safety within a human rights framework: trends and challenges for South Africa. *The Comparative and International Law Journal of Southern Africa*, 276-296.

UNICEF. (12 January 2023). *Malawi humanitarian flash update No. 2 (Cholera): 9 January 2023* https://reliefweb.int/report/malawi/unicef-malawi-humanitarian-flash-update-no-2-cholera-9-january-2023.

United Nations. (27 March 2020). *COVID-19 update (Malawi)* https://malawi.un.org/sites/default/files/2020-05/Malawi COVID-19 Situation Update - 27.03.20.pdf

United Nations Development Programme. (2020). The next frontier: Human development and the Anthropocene.

Väänänen, A., Anttila, E., Turtiainen, J., & Varje, P. (2012). Formulation of work stress in 1960–2000: Analysis of scientific works from the perspective of historical sociology. *Social Science & Medicine*, *75*(5), 784-794.

Vecchio, N., Scuffham, P. A., & Hilton, M. F. (2009). Mental health and hours worked among nurses. *Australian Journal of Labour Economics*, *12*(3), 299-320.

Victoria Auditor General. (2013). *Occupational health and safety risk in public hospitals*. www.audit.vic.gov.au/publications/20131128-ohs-in-hospitals.pdf.

Waldron, H. (1996). Sickness in the medical profession. *The Annals of occupational hygiene*, *40*(4), 391-396.

Weary, G., Stanley, M. A., & Harvey, J. H. (1989). Introduction to basic attribution theories. In *Attribution* (pp. 3-25). Springer.

Weiner, B. (2008). Reflections on the history of attribution theory and research: People, personalities, publications, problems. *Social Psychology*, *39*(3), 151-156.

Whetten, D. A., & Godfrey, P. C. (1998). *Identity in organizations: building theory through conversations*. SAGE publications.

Wichert, I. (2002). Job insecurity and work intensification: The effects on health and well-being. In B. Burchell, D. Ladipo, & F. Wilkinson (Eds.), *Job insecurity and work intensification* (pp. 93-111). Routledge.

World Bank. (2020). World development indicators.

World Bank. (2021). Malawi economic monitor, December 2021 : Addressing Macro and Gender Imbalances. https://openknowledge.worldbank.org/handle/10986/36747.

World Health Organisation. (9 March 2019). Patient safety https://www.who.int/news-room/facts-in-pictures/detail/patient-safety#:~:text=While%20in%20hospital%2C%201%20in%20every%2010%20patients%20is%20harmed&text=In%20a%20study%20on%20frequency,and%2030%25%20led%20to%20death.

World Health Organisation. (27 April 2022). Cholera - Malawi https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON372.

World Health Organisation. (30 March 2022). Cholera https://www.who.int/news-room/fact-sheets/detail/cholera.

World Health Organization. (2007). *Everybody business : strengthening health systems to improve health outcomes : WHO's framework for action.* World Health Organization.

World Health Organisation. (1995). Global strategy on occupational health for all: the way to health at work, recommendation of the Second Meeting of the WHO Collaborating Centres in Occupational Health, 11-14 October 1994, Beijing, China. World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/36845/WHO_OCH_95.1.pdf?sequence=1

World Health Organisation. (2002). The world report on violence and health. World Health Organisation. ttps://apps.who.int/iris/bitstream/handle/10665/42495/9241545615_eng.pdf

World Health Organisation. (2006). The world health report 2006: working together for health. https://apps.who.int/iris/bitstream/handle/10665/43432/9241563176_eng.pdf?sequence=1&isAllowed=y.

World Health Organisation. (2007a). Everybody business: strengthening health systems to improve health outcomes : WHO's framework for action.

World Health Organisation. (2007b). Raising awareness of stress at work in developing countries protecting workers' health series No. 6.

World Health Organisation. (2010a). Framework for action on interprofessional education and collaborative practice.

World Health Organisation. (2010b). Occupational health of health workers. https://www.who.int/occupational_health/gohnet_17_finalrevised.pdf?ua=1.

World Health Organisation. (2011). Patient safety curriculum guide: multi-professional edition. http://apps.who.int/iris/bitstream/handle/10665/44641/9789241501958_eng.pdf?sequence=1.

World Health Organisation. (2017). Country cooperation strategy at glance: Malawi. http://apps.who.int/iris/bitstream/handle/10665/136935/ccsbrief_mwi_en.pdf;jsessionid=1E345BAB7A8C38E586092A960E4505AE?sequence=1.

World Health Organisation. (2021). State of health workforce in the WHO Africa region: Survey report https://apps.who.int/iris/bitstream/handle/10665/348855/9789290234555-eng.pdf?sequence=1.

World on data. (2022). Daily confirmed new COVID cases & deaths per million people for Malawi during 1st & 2nd waves.

World on data. (2022). Daily confirmed new COVID cases & deaths per million people for Malawi (Nov 2021-April 2022).

Wulandari, A. S., Nurinda, E., Putri, I. R. R., Samutri, E., Oktavia, R. S., Ahmad, N. F. S., & Diroh, V. A. (2022). Exploring Challenges and Opportunities in Interprofessional Collaboration of Health Workers during COVID-19 Pandemic at the Public Health Center in Bantul Regency. *Open access Macedonian journal of medical sciences*, *10*(T8), 30-34.

Young, R. D. (2002). *State Reorganization in South Carolina: Theories, History, Practices and Further Implications*. University of South Carolina Institute for Public Service and Policy Research.

Zablah, A. R., Chonko, L. B., Bettencourt, L. A., Allen, G., & Haas, A. (2012). A job demands-resources (JD-R) perspective on new product selling: A framework for future research. *Journal of Personal Selling & Sales Management*, *32*(1), 73-87.

Zapf, D., Knorz, C., & Kulla, M. (1996). On the relationship between mobbing factors, and job content, social work environment, and health outcomes. *European Journal of work and organizational psychology*, *5*(2), 215-237.

Zhang, W.-r., Wang, K., Yin, L., Zhao, W.-f., Xue, Q., Peng, M., Min, B.-q., Tian, Q., Leng, H.-x., & Du, J.-l. (2020). Mental health and psychosocial problems of medical health workers during the COVID-19 epidemic in China. *Psychotherapy and psychosomatics*, *89*(4), 242-250.

CONVERSATIONS

Conversation, external referee- public health researcher. 11 August 2022.

SEMI-STRUCTURED INTERVIEWS

Interview, 01/CO/03. 4 December 2021

Interview, 01/CO/04. 2 December 2021.

Interview, 01/CO/05. 3 December 2021.

Interview, 01/CO/05R. 7 January 2022.

Interview, 02/CO/04. 29 November 2021.

Interview, 02/CO/03. 1 December 2021.

Interview, 02/CO/05. 5 December 2021.

Interview, 03/CO/5R. 8 January 2022.

Interview, 03/CO/01. 13 December 2021.

Interview, 03/CO/05. 14 December 2021.

Interview, 04/CO/01. 8 December 2021.

Interview, 04/CO/04. 8 December 2021.

Interview, 04/CO/05. 10 December 2021.

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

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

Interview, 05/CO/5R. 8 January 2022.

Interview, supervisor 01. 12 January 2022.

Interview, supervisor 05. 21 January 2022.

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

Interview, retired clinical officer 01. 16 August 2022.

FOCUS GROUP DISCUSSIONS

Focus group discussion, 01B. 27 December 2021.

Focus group discussion, 01C. 27 December 2021.

Focus group discussion, 01D. 27 December 2021.

Focus group discussion, 02A. 12 December 2021.

Focus group discussion, 02B. 12 December 2021.

Focus group discussion, 03A. 7 January 2022.

Focus group discussion, 03C. 7 January 2022.

Focus group discussion, 04B. 15 December 2021.

Focus group discussion, 04C. 15 December 2021.

Focus group discussion, 04D. 15 December 2021.

Focus group discussion, 05B. 8 January 2022.