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Examining the impact of occupational health and safety on worker productivity: A Case of Marondera Provincial Hospital.

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(Signature of the Chairperson) Date

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(Signature of the examiner(s) Date

DEDICATION

I would like to dedicate this research to my parents, my brothers :Tino, Tashie and Tatenda.

ABSTRACT

The study sought to examine the impact of Occupational health and safety on worker productivity case of Marondera Provincial Hospital. Hospitals in Zimbabwe have been facing a series of strikes, movement out the country to greener pastures by nurses, doctors and nurses dating back from as early as 2007 up to date due poor working conditions like poor Occupational health and safety conditions . The objectives of the study is to examine the challenges of Occupational Health and Safety on the productivity of Health care workers at Marondera Provincial Hospital, to determine the measures to solve the challenges of Occupational health and safety on the productivity of health care workers at Marondera Provincial Hospital, to examine the health and safety standards and policies which uphold the Occupational Health and Safety at Marondera Provincial Hospital and to establish the relationship between Occupational Health and safety and the productivity of health workers at Marondera Provincial Hospital. Case study research design was used to collect data. The sample size for questionnaires was 35, composed of 13 nurses, 10 nurse aides, 10 general hands and 2 doctors. The sample size for in-depth interviews is 5.The results of the data were presented in form of tables, graphs and pie charts. The study revealed that occupational health and safety has a positive relationship on worker productivity.

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LIST OF ACRONYMS

MPH - Marondera Provincial Hospital

OHS - Occupational Health and Safety

BUSE - Bindura University of Science Education

PMD - Provincial Medical Directorate

OSHA - Occupational and Safety Health Act

MOHCC - Ministry of Health and Child Care

OHSMS -Occupational Health and Safety Management Systems

ZHSB - Zimbabwe Health Service Board

OHP -Occupational Health Psychology

OHSAS – Occupational Health and Safety Assessment Series

TABLE OF CONTENTS

CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter will look at the background of the study, statement of the problem, research questions and research objectives. It will also cover assumptions, significance of the study, delimitations, limitations and definition of key terms of the study.

1.2 Background of the study

A generally held belief is that a better working environment that adheres to all health and safety rules yields greater performance. Because of the nature of the job and the employees that work there, a workplace is created with care (Morgeson et al., 2006). However, there are a variety of occupational diseases and injuries that impact health-care workers, for example, at Zimbabwe's hospitals, resulting in lower productivity (Gerein et al., 2006). Occupational health and safety, by definition, investigates patterns in worker disease and injury and recommends and executes measures to prevent them (Correll et al, 2021). An enforcing safety culture is the result of a vital balance between productivity and safety, and it has been discovered that building a safety culture promotes employee productivity and reduce factory costs (Martin, 2016). Historically, the focus of occupational health and safety efforts researches have been on manual labour occupations such as factory workers. But the field now covers all occupations which then become imperative that the researcher studies towards exploring the impacts of Occupation health and safety on worker productivity in the health sector of Zimbabwe, Marondera Provincial Hospital is of no exception.

Occupational Health and Safety is managed at worldwide, regional and national levels. Safety and health in the workplace does not simply apply to perilous positions or jobs, such as working at heights or with chemicals, but to all working environments, including offices. Moreover, Occupational Health and Safety laws and guidelines likewise incorporate the necessity of employers to adjust work and the workplace to the abilities of the workers considering their physical and mental wellness.

Occupational Health and Safety studies are defined as investigations of the health and safety of workers. The Occupational Health and Safety Legislation was first shown in 1884 by Ontario in response to the British factory act, and it was the principal OHS act at the time. The text of

the everlasting safety requirements was altered in 1960 after a tragic event resulted in the deaths of five labourers. In 1964, the name of the act was changed from factory act to industrial act. Prior to 1970, the working environment health and safety guidelines were a completely different terrain. It was under the Department of Labour's jurisdiction at the time, but it lacked a focal point, implying that employees would bear the brunt of the consequences. After that, OHS began in the United States. ***Britain adopted the OHSAS18001 which was an international standard for occupational health and safety management systems, compliance with enabled the organisations to demonstrate health and safety. The objective of the law was to further develop safety and assurance more secure working conditions for all labourers regardless of their work or industry to further increase productivity (Mark, 2001).

The Act also introduced the Occupational Safety and Health Administration (OSHA) to set health and safety standards, at the same time the establishment of the National Institute for Occupational Safety and Health (NIOSH) to act as a research body on OSHA's behalf under the supervision of the Centres for Disease Control. These standards are the ones that all current standards are built on. They drafted the baseline of health and safety regulations for businesses to follow, guiding employer's duties and reporting protocols. In 1972, OSHA established the OSHA Training Institute. The Institute is still present and functioning up to today, responsible for the training and education of state and federal compliance officers, private sector safety managers, state consultants, and non-OSHA personnel.

Occupational Safety and Health Law, was published on 30 June 2012, building upon the Turkish Labor Act of 2003 and represents a significant expansion of the protections and rights afforded to Turkish workers as well as more extensive employer responsibilities with regard to occupational health and safety. Leblebici (2012) in turkey, postulated that these days the connection among employees and employers might be seen topsy-turvy. Therefore, the human resources practitioners need to consider new strategies as far as human resourcing is concerned so as to equip the organization with best fit candidates suitable for the job. Higher salaries and compensation benefits may seem the most likely way to attract employees. However, quality of the physical workplace environment with good health and safety measures have a strong influence in recruiting talented people hence an improvement in productivity. Just as the OHS Law in Turkey governs workplace environments and industries (both public and private) as well as virtually all classes of employees including part-time workers, interns, and apprentices, it introduced employee mandates with proactive concepts such as employer risk assessments,

accident prevention plans, industry hazard classes, on-site occupational safety experts, employee safety classes, and periodic medical examinations for employees. This is done to facilitate occupational health and safety so as to improve worker productivity.

According to Mohr (1996), to achieve high levels of employee productivity, organisations must ensure that the physical environment is conducive to organisational needs facilitating interaction and privacy, formality and informality, functionality and cross- disciplinarily. The physical environment is a tool that can be leveraged both to improve business results and employee well-being. In order to generate employee commitment and productivity there is need to ensure adequate facilities are provided to the employees, (Huang et al, 2004). The provision of inadequate health facilities and adverse working conditions has been shown to affect employee commitment and intention to stay with the organisation as well as levels of job satisfaction and the perception of fairness of pay.

The influence of enduring employee's safety on organisational productivity and loss control in the developing countries industries cannot be over emphasized, especially in the areas with minimum safety management standards, safe working procedures and environmental management standards (Lourandos, 2008). The organisation and implementation of OHS in South Africa, Zimbabwe, Zambia and Botswana has remained at suboptimal levels. In adequacy of human resource capital, training and education in the field of OHS has had a major impact on the worker productivity, (Moyo, 2015).

However, in other countries like Ghana they have already started prioritising OHS in hospitals, the case of South Tongu District Hospital the impact of OHS on employee productivity was solved by introducing the OHS policy, use of safety equipment and the workers were to adhere to the rules and regulations and precautions that were meant to reduce the risk or exposure to hazards and this proved that there was a positive relationship between OHS measures of the hospital and productivity, (Gbadago, 2017).

It is assumed an organisation 's employee's safety measures have direct relationship with employees' productivity in view of the fact that assigned tasks can only be safely accomplished when the work environment is safe and conducive for execution of the assigned duties. That is construction, manufacturing, health or servicing, thus any phenomenon that affects human production capacity will invariably affect organisational productivity hence improving workers

wellbeing which then offers the company an opportunity of enhancing its performance, (Galliker,2000).

In Zimbabwe the OHS act was regulated generally by the factories and work act (20 of 1948), (the labour act 16 of 1985), the NSSA (Notice no.68 of 1990 and the labour regulations (HIV and AIDS). The factories act provides for the regulation of conditions of work in factories, supervision of the use of machinery, precautions against accident to persons employed on structural work. The labour act defines the fundamental rights of employees and regulates conditions of employment as far as issues of health and safety are concerned.

The Zimbabwe Health service board annual report (2006) identified the key push factors for the migration of health service workers to other sectors and countries. The issue of occupational health and safety is one of the push factors identified to health workers in Zimbabwe. Poor occupational health and safety and working conditions drive employees away at the same time reduces productivity. Health care workers are moving away due to poor conditions like PPE shortages especially in times of the Covid 19 pandemic which becomes a threat to their health at the same time lack of compensation in the event of workplace injuries and illness for instance some of the health workers who suffered with covid 19 had delays in receiving their compensatory funds. These issues reduces the productivity of employees. The health sector of Zimbabwe is experiencing brain drain again due to insufficient recognition of their work financially. The issue of insufficient recognition of work financially is leading to strikes in Zimbabwe which is therefore weakening the health sector of Zimbabwe. Therefore, this becomes imperative for the researcher to study towards the impact of occupational health on worker productivity, case of Marondera Provincial hospital a hospital in Zimbabwe.

1.3 Problem statement

Occupational health and safety is a broad subject in the health sector of Zimbabwe. Health workers in Zimbabwe are moving away to other countries in search of good working environments and sufficient financial compensation. During the Covid 19 pandemic many health workers were infected by virus some died during the course and some had serious illness and had delays in compensation and obtaining medical assistance. These issues reduces the productivity of health workers as they will be demotivated to perform their duties at times resulting in strikes. As a result if the issue of occupational health and safety in the health sector is not emphasised it will lead to low productivity, poor performance of the sector, migration of

employees leading to staff shortages as well as accidents and illness of healthcare workers. Previous researchers have been looking at impacts of OHS on worker productivity in factories, manufacturing firms, food industries and office workplaces in general leaving the most important aspect that is the health sector. It is in this vein that the main thrust of this study is to explore the impact of Occupational health and safety hazards on worker productivity in hospitals, a case of Marondera Provincial Hospital.

1.4 Purpose of study

The main purpose of the study is to examine the impact of occupational health and safety on worker productivity the case of Marondera Provincial Hospital.

1.5 Research objectives

1.5.1 Main objective

- The main objective seeks to examine the impact of Occupational Health and Safety on worker productivity.

1.5.2 Specific Objectives

- To examine the challenges of Occupational Health and Safety on the productivity of Health care workers at Marondera Provincial Hospital.
- To determine the measures to solve the challenges of Occupational health and safety on the productivity of health care workers at Marondera Provincial Hospital.
- To examine the health and safety standards and policies which uphold the Occupational Health and Safety at Marondera Provincial Hospital.
- To establish the relationship between Occupational Health and safety and the productivity of health workers at Marondera Provincial Hospital.

1.6 Research Questions

1.6.1 Main questions

- What is the impact of Occupational Health and Safety measures on worker productivity?

1.6.2 Sub Questions

- What are the challenges of Occupational Health and Safety on the productivity of Health care workers at Marondera Provincial Hospital?
- What are the measures to solve the challenges of Occupational health and safety on the productivity of health care workers at Marondera Provincial Hospital?
- What are the health and safety standards and policies which uphold the Occupational Health and Safety?
- What is relationship between Occupational Health and safety and the productivity of the health workers at Marondera Provincial Hospital?

1.7 Justification to the study

The research will be important to the various parties for instance the academics, the employees, the employers, NSSA and the Ministry of Labour and social welfare to mention a few. To the academics the research will provide a platform for future researches on the impact of Occupational Health and Safety hazards in hospitals by adding literature which could support their present studies. At the same time this research will be a tool for building knowledge of the academics as much as occupational health and safety is concerned, facilitating their learning be it in terms of their assignments or projects.

The research will also allow the academics to be critics of lies as much as occupational health and safety is concerned by supporting truths always. The research as well will promote the love, confidence in reading and writing as well as sharing information about occupational health and safety. The research may also be used by the academics to create documents which outline ways to improve occupational health and safety

This research will help employees to comply with organisational health and safety standards which in the long run would reduce accidents, injuries and spread of infections at the workplace thereby increasing performance and productivity. The research will come up with information useful for the drafting of the occupational health and safety policy in which all the employees should adhere to. At the same time the research will create the need for the employees to participate in occupational health and safety programs in the organisation be it in terms of awareness campaigns and the occupational health and safety committee.

This research will enlighten the employers on the occupational hazards at their workplaces and their possible effects on employee performance. Consequently, this will compel the employer to improve the working environment of the employees by providing with protective clothing, obtaining knowledge in drafting occupational health and safety policy as well as the setting up of OHS committee.

The research will also expose the vulnerability of hospital workers and as a result will compel NSSA to review the benefits that are supposed to be compensated to such employees exposed to the dangers of poor occupational health and safety.

The study will explore the Occupational Health and Safety measures in hospitals and hence will compel the Ministry of Labour to revisit the Labour Act through the crafting of the new laws as far as occupational health and safety is concerned. The ministry also may come up penalties for those who fail to adhere to the law.

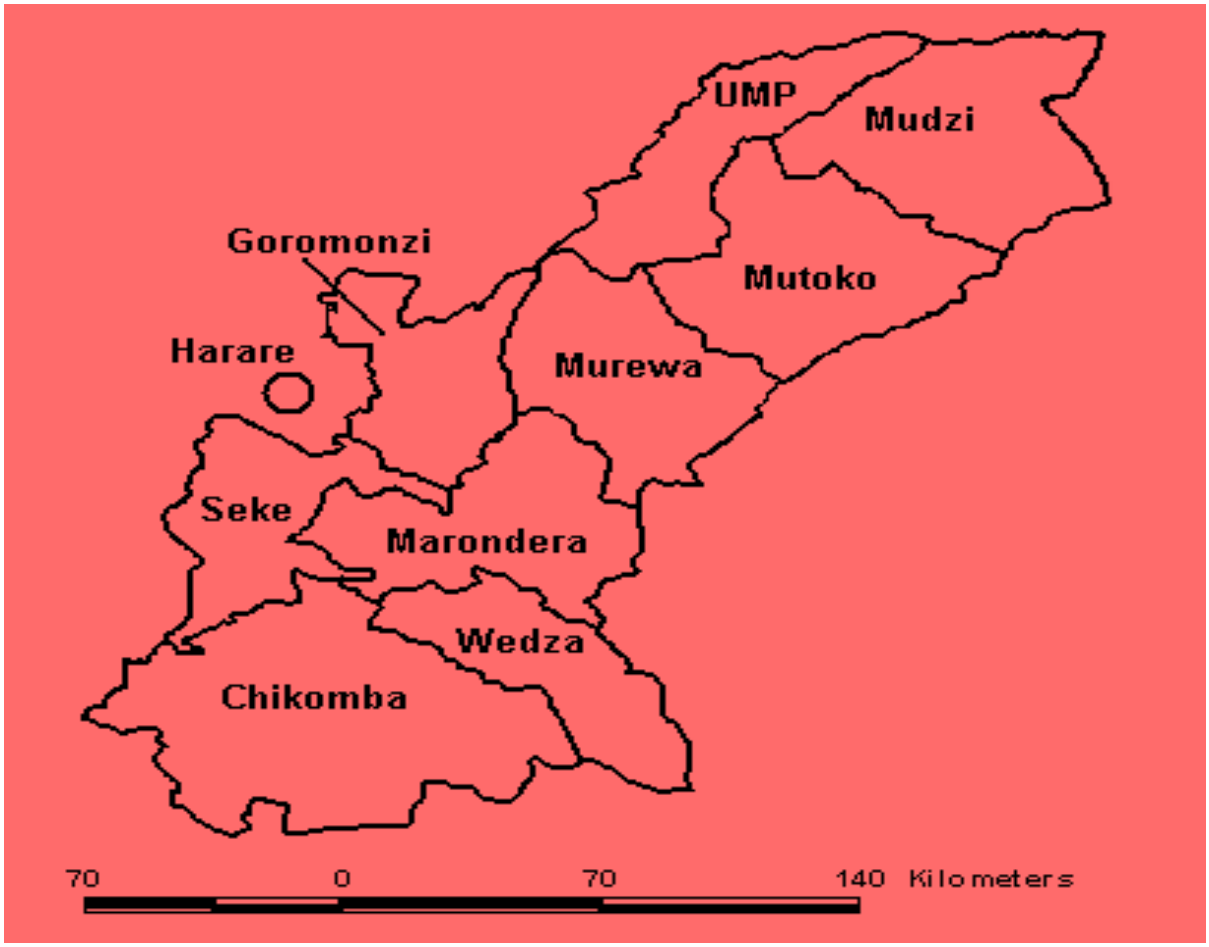
1.8 Assumptions of the study

- Participants will be honest when responding to questions.
- Recommendations and results from the study may be implemented in the organisation.
- All members at the hospital will cooperate in conducting the study.

1.9 Delimitations of the study

Marondera Provincial Hospital is a major public health institution in Mashonaland East Province responsible for delivering health services to the community around the town of Marondera and the whole province. It is also the referral point which manages the patients referred from district hospitals and clinics located in Mashonaland East Province such as Mahusekwa Hospital, Mutoko hospital and Makumbe hospital to mention a few . It operates under the Ministry of Health and Child Care which is responsible for the health service delivery system of the country.Marondera Provincial Hospital is situated in the town of Marondera which is 75km from the capital city of Harare along Harare-Mutare highway and 1km off the highway at the corner of Fourth Street and De Jager Avenue. The hospital was established in 1934.

Figure 1: Location Map of Marondera



Source:

1.10 Definition of terms

Occupation- "an activity in which one engages in usual or principal work or business especially as a means of earning a living" (Cole, 2002).

Health- "the state of complete physical, mental and social well-being and not merely forgetting the absence of diseases and infirmities" (Goldstein, 2001).

Safety- "is a state in which hazards and conditions leading to physical, psychological or material harm are controlled in order to preserve health and well-being of individuals and the community"(WHO, 1998).Safety may be defined as the freedom from the occurrence or risk of injury or loss.

Occupational Health- "is the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations preventing departures from health, controlling risks and adaptation of work to people and people to their jobs" (ILO/WHO,

1950).Occupational health may be defined as procedures or systems adopted by an organisation to ensure good health of employees at work.

Occupational Health and Safety- "concerned with safety, health and wellness of people engaged in employment with a view to foster a safe and healthy environment" (Burns, 2000).

Worker productivity-"is an assessment of the efficiency of a worker or group of workers" (Tech target contributors, 2014).Worker productivity may be defined as real economic output per labour hour.

1.11 Organisation of study

The study is structured in a systematic and simplified so as to confirm that all the objectives of the study are addressed.

Chapter one introduces the subject on the impact of occupational health and safety on worker productivity case of Marondera Provincial Hospital. The chapter conceptualize the necessary aspects to set tone of the research, it also clearly outlines the background, research problem, importance of research, aim, objectives of the research area and the study period forming the fundamental backbone of this study.

Chapter two reviews the necessary literature related to occupational health and safety at work place both at global, national and local level. This chapter reviews different schools of thoughts on the subject matter, it based on major aspects that are the conceptual framework, empirical evidence, legislative framework and theoretical underpinnings, these reviews more on research gap.

Chapter three gives an outline of how objectives will be met. The chapter lays a framework of how, when and what information is to be collected. The chapter also justifies all the research methods used in data collection process. This chapter also gives a highlight of the shortfalls encountered in the research and the ethical consideration in collection of data as well as the research design, sampling data, target population and data analysis.

Chapter 4 gives a framework for analysing all the data collected and related findings as to capture trends and underlying realization. The chapter also presents the refined information forming the backbone of this study and it discussed the implications of this study to human

capital development. The chapter presents data, summarises data, analysis of data, comparing results of the study and results of previous researches and theories.

The final chapter seeks to satisfy the fifth objective by giving recommendations, proposals and suggestions based purely on the conclusions and findings of the study. The chapter also gives guidelines for implementations of proposals to ensure sustainability, as the subject of this study.

1.12 Chapter Summary

This chapter focuses on background of the study, statement of problem, research questions, research objectives, significance of the study, delimitations and limitations of the study and definition of terms. The next chapter will look at the review related to the study

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

For the purposes of coming up with a meaningful and authentic conclusion on the data to be drawn from the study, it is vital that much attention is put on occupational health and safety in reference to worker productivity and review some literatures pertinent to the study for comparison, confirmation and differences to be reviewed. Due to this, this chapter is meant to contain the review of various literature is considered to be relevant to the study of impact of occupation health and safety in worker productivity in hospitals. The components of this chapter are a theoretical framework, conceptual framework, an overview of occupational health and safety, challenges faced by employees in the workplace in terms of OHS, attitudes and perceptions of employees towards occupational health and safety ,legal framework for OHS ,Case studies, Lessons learnt from the study and lastly the Chapter Summary.

2.2 Theoretical Framework

2.2.1 Maslow's hierarchy of needs

The study is led by Abraham Maslow's "A Theory of Motivation," a theory of the hierarchy of needs. Maslow (1943:1954) developed a five-tier model of human requirements, which is commonly portrayed as hierarchical tiers within a pyramid. Physiological (food and clothes), safety (job security), love and belonging needs (friendship), esteem, and self-actualization are the needs from the bottom of the hierarchy up. The graphic below depicts this.

Figure 2: Maslow's hierachy of needs

Source: (J. F. Stoner, R. E. Freeman & D. R. Gilbert (1995)

According to Maslow, there is a hierarchy of requirements within every human being. When each need is met to a significant degree, the following one takes precedence. He categorizes his requirements into higher and lower order requirements. Higher order wants, such as belonging, self-esteem, and self-actualization, are met inwardly, whereas lower order needs, such as physiological and safety requirements, are met externally. According to Maslow's theory, employers should first address an employee's basic demands, such as job security, compensation, and health benefits, before moving on to larger goals, such as his or her position within the organization (Maslow, 1970).

The fundamental needs, according to Maslow, are those that are essential to the individual's well-being and general upkeep. Those demands, which are related to biological self-maintenance, are unavoidable for an individual. Food, sexual satisfaction, water, and sunlight are among them. Employees require a stable wage in order to adequately feed their families.

Safety and security are the second-lower-order requirements. Protection from physical and bodily injury is the focus of safety needs. Comfort, freedom from fear and threat from the environment, shelter, order and a structured world, and freedom from violence are among the requirements.

Safety requirements must be addressed first, according to Maslow, before moving on to belongingness needs. Abraham Maslow's hierarchy of needs theory lists safety as one of the most important human wants. Occupational health and safety (feeling safe at work) is seen as a very important component in job satisfaction (Kreitner, 2007). Certain organizations incorporate into its policy thrust, ensuring workers' safe work execution in an environment capable of improving their physical, mental, and emotional conditions, in an attempt to meet this requirement. This type of organizational policy is frequently classified as health and safety.

According to the notion, a worker's basic physiological and safety needs must be addressed before he or she may seek higher-order goals like self-actualization and relationships. Individuals who are denied basic physiological and safety needs show indicators of poor mental health over time, according to the idea. For successful workplace motivation and greater worker productivity, Maslow's theory states that labor must be consistent and reliable, contributing to the workers' well-being in areas such as providing food and drink, housing, and personal, physical, and property security. When all of these conditions are accomplished, the worker moves on to the metaphysical objective of actualisation, which, according to the idea, leads to long-term happiness (Akpan, 2011).

As a result, safety policies may include activities aimed at decreasing or eliminating hazardous conditions that could cause bodily harm. According to Aswathappa (2004), organizational safety policies define the company's safety goals and provide tasks and authorities for achieving them. He goes on to say that such a policy statement must emphatically declare four fundamental points: employee and public safety, safety taking precedence over expediency, every effort made to involve all managers, supervisors, and employees in the development and implementation of safety procedures, and compliance with applicable safety legislation.

When considering Maslow's hierarchy of human needs, it's difficult to argue with the argument that these circumstances are necessary for a safe, secure, and meaningful life. Work is a necessary activity in order to meet these needs. The fruits of one's labor provide commodities and services that are both necessary and desired. Compensation for one's labor enables one to pay for essentials and luxuries in life. Work, for those lucky enough to be in positions that provide emotional fulfillment, can be a satisfying activity in and of itself, assisting in the fulfillment of higher level demands (Annah, 2004).

Employment legislation can assist in addressing basic requirements by facilitating and organizing work relationships. It’s most useful duty in this regard is to establish statutory

compensation and working conditions ceilings. Workplace safety and security are aided by labor standards that encompass the living wage, minimum wage, overtime, and child labor. Gratification makes employees sick or causes them to act evilly, whereas satisfying requirements is healthy (Aswathappa, 2004).

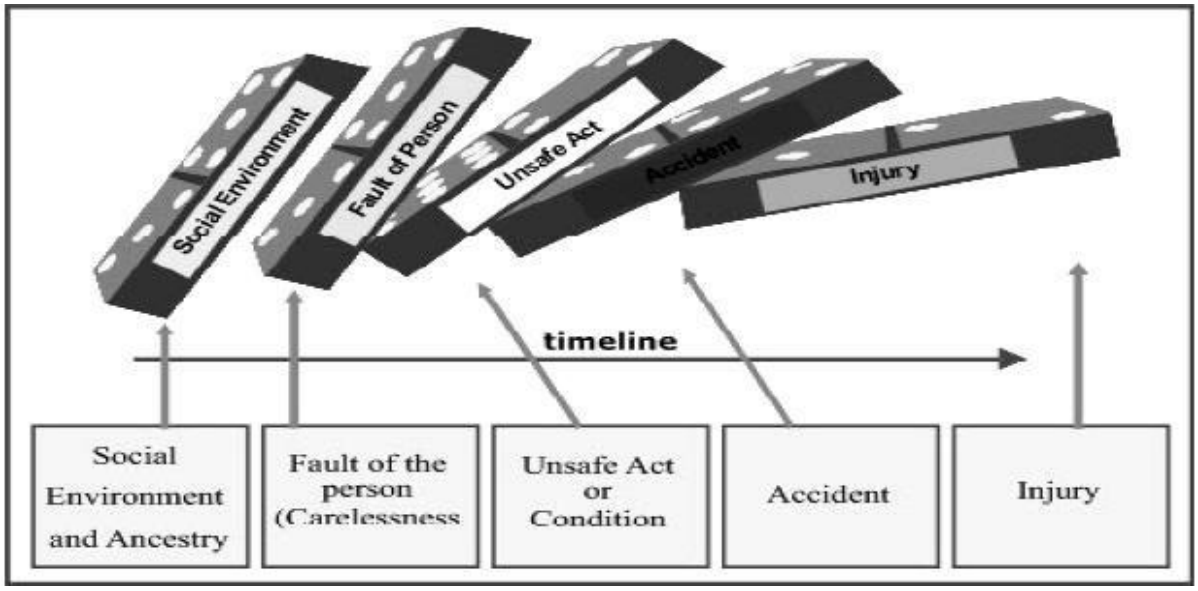
Job security, seniority, pensions, hospitalization, and life insurance are examples of workplace safety demands. The need for security, protection, and stability in the physical and interpersonal events of daily life are defined as safety needs. Only by granting a person's freedom from fear can they continue to excel. If an employee is constantly monitored by a critical employer who threatens to fire them for poor performance, the employee will be unable to concentrate on the job at hand. The employee's job will suffer as a result of the intangible demands, making both the employee and the company unhappy (ILO, 2005).

Workplace health and safety regulations also extend to job security, financial security, and overall well-being. To maximize employee loyalty, morale, and productivity, businesses must make an effort to meet the requirements of their employees. Employers should emphasize the importance of the employee's responsibilities and frequently compliment their performance. To support total fulfillment of the hierarchy, they should sponsor events that stimulate teamwork and encourage leisure time (ILO, 2005).

2.2.2 The Domino Theory

The Domino hypothesis is used to guide this research as well. According to the hypothesis, safety performance is strongly dependent on management control, with management control being the first domino to fall. The role of managerial control in accident prevention was identified as a significant driver in producing safe workplaces in a research by Frank Bird (1974). Accidents were more prevalent where there was a lack of control, poor performance, and low productivity, but the opposite was true for organizations with strong management and high health and safety requirements. In other words, management played a significant effect in both OHSAS18001 certified and non-certified enterprises' safety performance. Frank (1969) proposed that little accidents led to catastrophic accidents if those minor accidents occurred were not prevented. As a result, this was owing to a lack of workplace occupational health and safety requirements that may prevent workplace accidents.

Figure 3: Domino sequence of accident acquisition theory



Source: Hosseinian & Torghabeh (2012: 54)

In the Domino hypothesis, the five factors (dominos) are ordered. The means of learning knowledge of workplace practices and skills are ancestry and social environment (Hosseinian & Torghabeh, 2012: 54). Person fault will result from a lack of skills and expertise in completing duties, as well as improper social and environmental settings (ibid). Person flaws (carelessness), according to Hosseinian & Torghabeh (2012), are bad aspects of a person's personality, albeit these undesirable traits can be learned. For them, negligence leads to dangerous activities or situations. Errors and technical failures that produce an accident that results in injuries are examples of unsafe activities and/or mechanical or physical situations.

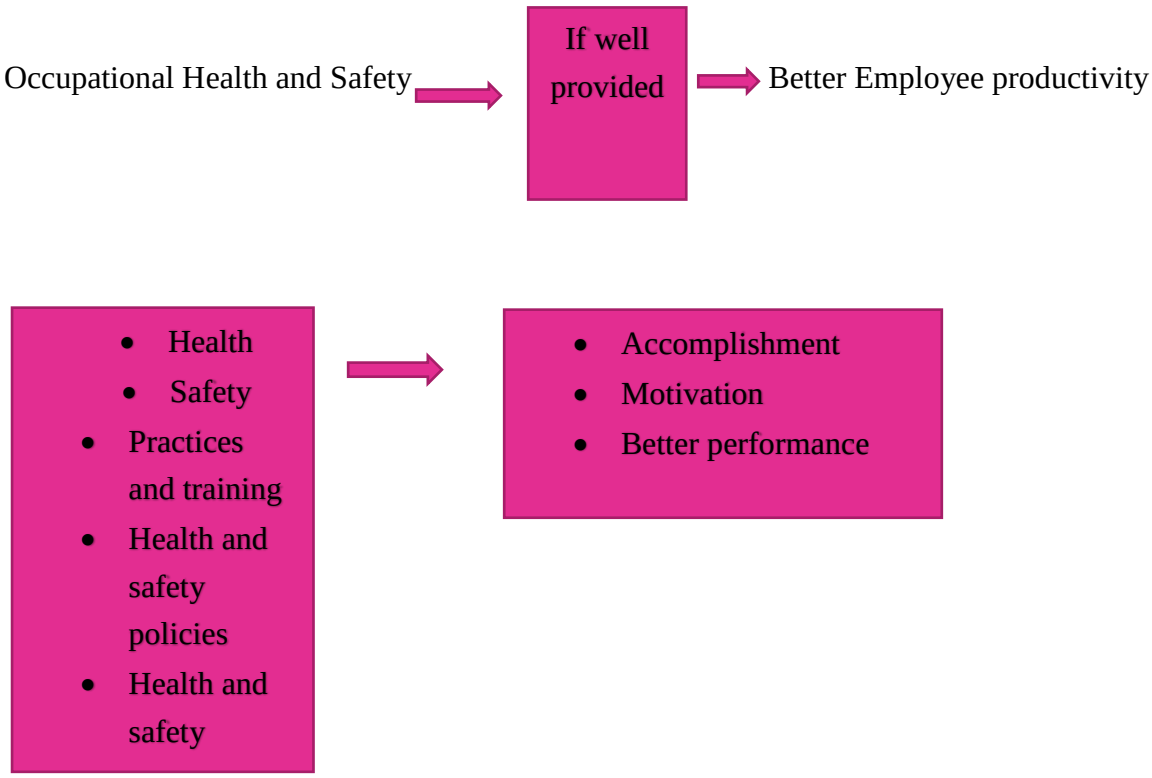
If the first domino (Ancestry and social environment) falls, the five remaining dominos will fall one by one (Hosseinian &Torghabeh, 2012). Only if the chain of events is disrupted can an accident be avoided; for example, a risky conduct or circumstance can be abolished to prevent accidents and injuries (ibid). Heinrich's contributions to accident causation theory can be summarized in two points: "people" (humans) who are the primary causes of accidents, and "management" who is responsible for preventing accidents (having the power and authority). The hypothesis was accused for simplifying human behavior control in accidents, but it went on to become the foundation for a slew of further studies on accident causation models, with a focus on management's role in accident prevention (Hosseinian &Torghabeh, 2012).

The addition of management and worker behavior to the basic model included a focus on worker empowerment, progressive labor practices, health and safety promotion as a personal and organizational value, the development of positive worker attitudes, with a focus on

behavior modification, and the use of ergonomic and human factor analyses (Cliff 2012). A focus on occupational health in the workplace was also introduced to the framework, emphasizing the need of protecting and promoting employee health in the workplace (ibid). The prevention and control of occupational diseases and accidents, the establishment and promotion of a healthy and safe workplace, and the enhancement of physical, mental, and social welfare were all important factors, according to Cliff (2012). According to Cliff (2012), these early investigations and advancements laid the groundwork for the formation of a more systematic approach to workplace OHS.

2.3 Conceptual Framework

Figure 4



Source: The Researcher (2022)

The above conceptual framework summarizes the relationship between workplace health and safety and employee productivity. It linked the components of occupational health and safety, as well as current types of practices, to employee achievement, performance, and motivation as elements that contribute to improved performance. Employees would be motivated, protected from injuries and accidents if health and safety, safe and health practices were

maintained in the company, according to the conceptual framework, and the end result would be the achievement of goals and higher organizational performance**.**

2.4 An Overview of Occupational Health and Safety

OHSMSs have developed greatly during the previous 20 years," according to Robson et al. (2005). More OHSMSs are in place and available currently than ever before." Occupational safety and health is a long-standing concern. The origins of OHS are described in a variety of ways. Many of today's health and safety concerns, according to Friend and Kohn (2007: 4), were first identified almost 2,000 years ago. The Code of Hammurabi, which dates back to around 2100 BC and was primarily concerned with personal damage and loss, set a schedule of punishments and reparations for wrongdoers in an attempt to repay victims of the listed transgressions (Friend and Kohn 2007: 4). Hippocrates, the Father of Medicine, and Pliny the Elder, a Roman physician and scholar who lived between 400 BC and 300 AD, expressed worry for the health of people exposed to the metals that were extensively utilized at the time (Friend and Kohn 2007: 4).

The Du Pont company, which was created in 1802 with a heavy emphasis on accident prevention and mitigation, is perhaps the earliest widely recorded use of accident causation knowledge (Safety Institute of Australia 2012). In a paper titled "Two Centuries of Process Safety at DuPont," Klein (2009) stated that the company's founder, E.I. Du Pont (1772–1834), once said, "we must seek to understand the hazards we live with," and that the design and operation of Du Pont explosives factories were gradually improved over the next 120 years as a result of a consistent effort to understand how catastrophic explosions were caused and prevented (Safety Institute of Australia 2012). During that time, many of the principles of modern accident prevention theory were developed.

According to the Safety Institute of Australia (2012), by 1891, management accountability for safe operations had become so important that the original Du Pont plant design included a requirement that the director's house, in which Du Pont, his wife, and their seven children lived, be built within the plant precinct—a powerful incentive to learn about accident causation.

The eradication of dangers was recognized as a priority in 1915, according to DeBlois (1915), the first head of DuPont's Safety Division, and a goal of zero injuries was also established at the time. The Du Pont Safety Division was founded in their Engineering Department in 1915 and carried out factory inspections, conducted special investigations, and analyzed incidents, among other safety management measures that would still be deemed suitable in today's corporations' safety plans (Safety Institute of Australia 2012).

According to Tetrick and Peiro (2012), industrial and organizational psychologists have been concerned about worker health and well-being since the studies conducted at the Western Electric Company in Hawthorne (Mayo, 1933; Roethlisberger & Dickson, 1939) or Taylor's (1911) work, even though these early works were primarily concerned with productivity, performance, and efficiency and were not explicitly concerned with workers' health and well-being. According to Salminen (2015), until the end of the nineteenth century, a belief existed that most hazards were produced by natural events, and that accidents were caused by people's sins or "God's will." Production migrated to factories with the rise of industrialization in the twentieth century, which were built environments with man-made risks (ibid).

Over the decades, occupational health and safety would gain more prominence. According to Tetrick and Peiró (2012), the global establishment of Occupational Health Psychology (OHP) as a separate subject in the mid-1990s, as well as other reasons, has resulted in a more balanced approach between the requirements of employers and employees. OHP uses psychological theory and research to improve the quality of workers' work lives while also protecting and promoting their safety, health, and well-being (ibid). It uses a primary prevention approach, according to Quick& Tetrick (2003), quoted by Tetrick & Peiro (2012), emphasizing on the reduction of threats to employees' safety and health.

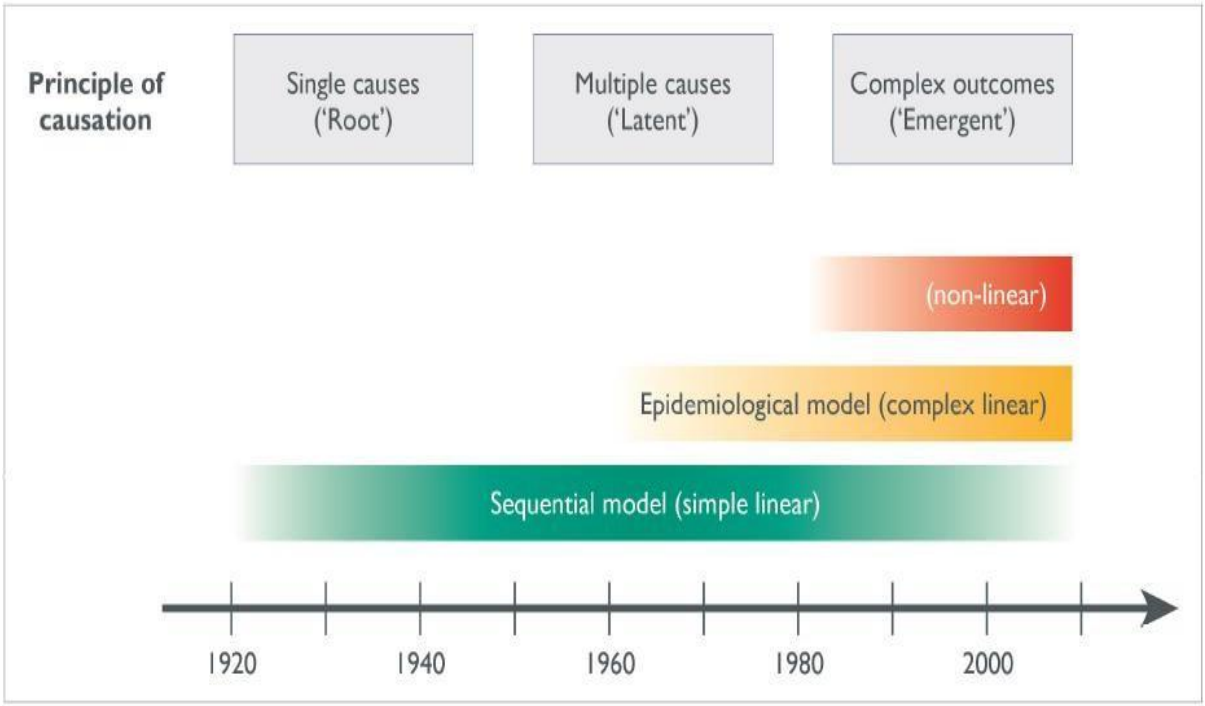
In short, the history of accident models to date can be traced from the 1920s through three distinct phases, namely: the simple linear models, complex linear models, and complex nonlinear models (Hollnagel, 2010). Each type of model is underpinned by specific assumptions: the simple linear models assume that accidents are the culmination of a series of events or circumstances which interact sequentially with each other in a linear fashion and thus accidents are preventable by eliminating one of the causes in the linear sequence (ibid). Complex linear models are based on the presumption that accidents are a result of a combination of unsafe acts and latent hazard conditions within the system which follow a linear path (Hollnagel, 2010). The factors furthest away from the accident are attributed to actions of

the organisation or environment and factors at the sharp end where humans ultimately interact closest to the accident; the resultant assumption being that accidents could be prevented by focusing on strengthening barriers and defences (Hollnagel 2010 cited by SIA 2012).

The new generation of thinking about accident modelling has moved towards recognising that accident models need to be non-linear; that accidents can be thought of as resulting from combinations of mutually interacting variables which occur in real world environments and it is only through understanding the combination and interaction of these multiple factors that accidents can truly be understood and prevented (Hollnagel 2010 cited by SIA 2012). Figure 4 below portrays the temporal development of the three types of model and their underpinning principle.

Accidents can be thought of as resulting from combinations of mutually interacting variables that occur in real-world environments, and it is only through understanding the combination and interaction of these multiple factors that accidents can truly be understood and prevented, according to a new generation of accident modeling thinking (Hollnagel 2010 cited by SIA 2012). The three types of models, as well as their underlying principles, are depicted in Figure 4 below.

Figure 5: Summary of a history of accident modelling



Source: The Safety Institute of Australia (2012: 4)

Muchemedzi and Charamba (2006) went on to say that accidents are caused by a collection of factors acting simultaneously, rather than a single cause. An accident does not occur until someone is exposed to a potentially dangerous circumstance. Accidents occur as a result of harmful activities or practices, as well as the human aspect, which includes poor attitudes, physical conditions, and a lack of knowledge or skills necessary to work properly. They can also be the result of equipment or materials that are in poor condition.

Accidents cause pain and suffering to a worker and his or her family, according to Koopman (2001) in his studies conducted in the United States of America. The repercussions are terrible for both the person and the corporation when it results in permanent incapacity. The victim loses his ability to earn money and live a normal active life, while society and the firm lose his or her talent contribution to production. According to a 1969 Frank Bird Ration research on the causes of accidents, 88 percent of accidents are caused by risky human behavior, 10% by unsafe mechanical or physical factors, and the other 2% are unavoidable.

The Health and Safety Department of the Zimbabwe Congress of Trade Unions (ZCTU) further defines OHS threats into six categories: physical, chemical, mechanical, biological, ergonomic, and psychological. All of these dangers have a significant impact on employee health and safety, resulting in lower production. Monotony, for example, is a psychological hazard that creates mental tension and lowers productivity.

2.5 Empirical Evidence

2.5.1 Challenges of Occupational Health and safety on the productivity of workers

Everyday nearly one million people get hurt at work, impacting workers economically, physically and socially. These conditions require companies to improve occupational health and safety, building a dependable safety culture. Leading the way for International labor organization to create safety culture.

Challenges are obstructions that impede the participation on individuals in an activity. They may also be defined as problems that individuals encounter while conducting an activity. The Indian university libraries during the covid 19 pandemic defined challenges as problems or difficulties which came from all domains at the same time requires great efforts, perseverance and determination to deal with sets of situations to overcome. As a result the challenges faced

by employees in the workplace in terms occupational health and safety are defined as problems which employees encounter in terms of occupational health and safety in a workplace environment.

Identification of challenges in an organization makes it easier for the organization to come up with solutions hence saving time, money and resources. Correctly identifying problems and resolving them quickly is the key to success in an organization. As a result identifying problems in organizations addresses workplace problems that is the next immediate step is to addresses them earlier and directly. Allowing problems to linger once they have been revealed can create a host of problems, ranging from the problem growing in size to spawning other problems revealing a lack of solid leadership.

The identification of challenges in the organization assists in problem recognition in the workplace. At this level we will be looking at problem solving, how we get beyond challenges and how we discover new things and how we navigate to whatever outcome we are seeking. Defining the problem allows the organization to come up with a resolution.

Recently ILO released a special report on health and safety at workplace issues. The report name “Safety and Health at the Heart of the future work, provides a detailed analysis of OHS going forward. It also includes a close look at the ways in which ILO has helped shape safety over years also discussing the future challenges in workplace health and safety. According to this report the major sources of challenges to workplace health and safety are technology, demographics, sustainable development and OHS as well as changes in work organization (ILO, 2005).

2.5.1.1 Insufficient Funds

The issues experienced by hospitals in Zimbabwe, South Africa, and Mozambique in terms of OHS, according to Chimedza et al (2020), are due to a lack of knowledge on how to apply Health Wise, insufficient money, stretched human resources, older facilities, and a lack of event reporting infrastructure. Health Wise required dedicated local team members who assisted facilitate the process by adjusting Health Wise to workers' occupational health and safety knowledge and skill levels, as well as the cultures and needs of their hospitals, to avoid failure.

2.5.1.2 Poor Ergonomics

n his studies of occupational health and safety in office environments, Chandrasekar (2011), an Indian researcher, further opines that office work is diverse, with jobs ranging from those

that require a high level of skill and knowledge, such as journalists and financial administrators, to those where the worker has little control over their work or the organization of their working day, such as call center and data processing work. Poor ergonomics in these types of work can lead to a variety of diseases and accidents, such as backaches and repetitive strain injuries as a result of using computers in an area with poor ergonomics. As a result, employee productivity suffers as a result of them spending more time on sick leaves and breaks so as to gain strength to do work and recover from injuries.

2.5.1.3 Psychosocial hazards

A study conducted in Australia between 2003 and 2007 looked at psychological hazards as a challenge of poor workplace health and safety, as well as the occurrence of low productivity. Inspectors and managers were interviewed for the study, and findings revealed that the difficulty of psychological hazards and low worker productivity was related to a lack of training, resourcing restrictions, regulatory flaws, and worker fears of victimization. Psychosocial hazards are characteristics in the workplace design that enhance the likelihood of work-related stress, such as a lack of supervisory support or excessive job demands (Quinlan et al, 2011).

According to Quinlan (2007), the issues of poor OHS in the workplace are attributable to downsizing and associated kinds of organizational restructuring, which have negative consequences on worker safety, health, and wellbeing. Downsizing is the process of permanently reducing a company's labor base by eliminating ineffective employees or divisions. Restructuring entails completing an assessment to identify areas that need to be improved as well as potential dangers, and then using the results to develop solutions. Evidence shows that downsizing is linked to poorer mental health outcomes, such as bullying and other forms of workplace violence, as well as low productivity. Downsizing and restructuring induce mental distress in employees, resulting in degradation of mental and physical health and, as a result, reduced productivity leading to the deterioration of the employee’s mental health and physical health hence low productivity.

This was notably true, according to Lippel (2007), in a Canadian qualitative assessment of the workers' compensation process. The impact of the workers' compensation process was also recognized as a result of poor OHS and low productivity. The procedure is considered to have a substantial impact on the mental health of the personnel. The uneven compensation process resulted in stigmatization of wounded workers as well as a substantial imbalance between

claimants due to a lack of access to health care and economic support. Employees who are injured may be fired and denied medical care, which can have a detrimental influence on their mental health. At the same time affecting mentally those who are physically fit, as they may see what could happen to them in the event of injury at work leading to low performance and productivity in the organisation.

2.5.1.4 Lack of Implementation Costs

Another issue with inadequate occupational health and safety is the organization's size. Small subcontractors, who comprise the great majority of enterprises in the Australian construction industry, had substantial obstacles in adapting to the Occupational Health and Safety system, according to a study conducted in Australia by Andonakis et al (2007). Lack of implementation expenses, language and educational limitations, and a fear of change all contributed to this.

2.5.1.5 Lack of OHS training

Poor OHS, according to a research by the World Health Organization (2002), reduces employees' working capacity, which might cost a country 10- 20% of its GDP. Workers in fast-growing countries like Ghana have tended to battle for job security while overlooking the importance of a safe working environment. Poor infrastructure and finance, a lack of a comprehensive OHS policy, a shortage of skilled occupational health and safety practitioners, and a general lack of relevant knowledge are all obstacles to OHS in Ghana.

Workers' access to occupational health and safety has remained inadequate globally, particularly in South Africa, Zambia, Zimbabwe, and Botswana, where implementation of OHS has remained suboptimal. As a result the implementation OHS in these countries has been a failure due to the challenges like inadequacy of Human resources capital, training and education in the field of Occupational health and safety which has had a negative impact on the improvement of workers' access to OHS services in the expanding economies (Moyo, 2015).

2.5.1.6 Shortage of protective equipment

In a research in Spain by Fernandez (2021), he found the COVID 19 pandemic posed a tremendous challenge to healthcare systems and their workers globally. The findings of the study revealed that doctors and medical service professionals were more exposed to the virus, which makes it more difficult for those workers to protect themselves if there is a lack of protective equipment and better OHS requirements for their well-being.

According to a study conducted in the wood processing industry in Mutare, Zimbabwe, other OHS challenges were discovered to be due to the owners and managers' lack of provision of adequate maintenance and funds to purchase protective equipment, and less attention was given to safety processing machines, equipment, and tools, as well as their link to health requirements in such firms. These challenges become a threat to the lives of workers in the wood industry (Jerie, 2012).

2.5.1.7 Poor Waste management

Another study in Gweru, Zimbabwe, investigates and analyzes the occupational dangers and issues related to solid waste management procedures in Gweru's formal industries. In the hurry to implement technologies like composting, solid waste management has faced a dilemma of garnering little attention. Because solid waste management is dominated by manual work, other issues induced by solid waste management include diarrhea, viral hepatitis, and increased incidences of obstructive and restrictive disorders, as well as muscular skeletal disorders (Jerie, 2016).

2.5.2 Measures to solve the challenges of occupational health and safety on the productivity of workers.

Health and safety at work is a very important aspect in every organisation. Safety and health at work is not only a sound economic policy-it is a basic human right (Kofi Annan, Former UN Secretary General). As a result it is important to take the measures necessary to solve the problem of poor OHS.

Measures these are activities and precautions taken to improve something. Measures may also be defined as means and ways designed with the primary aim of protecting the wellbeing of individuals and groups in an activity. Measures of safety may also defined as precautions taken to improve safety that is reduce risk related to human health. Measures of safety may also be defined as reasonable steps taken by any responsible person or organisation to prevent an accident or serious injury or measures taken to eliminate any hazardous conditions.

Identification of measures of occupational health and safety in an organisation helps the organisation by reducing absences and sick leaves due to the reduced number of injured workers. If an organisation identifies measures it protects he staff from any form damage and injury at work. Measures of occupational health and safety boosts productivity and profits of

the organisation. They also maintain a good reputation at the same time saving insurance and legal costs.

2.5.2.1 Occupational Health and safety policy

Higashi (2006) addressed the construction of a service system for all workers, ongoing review of OHS, content based on social conditions, and introduction of fresh evidence and evaluation as solutions to the future difficulties of occupational health services. According to Tappura (2014), organizational supports have an impact on successful resolutions of difficult OHS management issues.

In a study conducted in Denmark by Svendesen et al (2020), it was proposed that in order to address the problem of muscle illnesses in the workplace, a request for the establishment of practice and evidence-based guidelines for the prevention and treatment of work-related muscular disorders be made.

2.5.2.2 Medical Assistance

According to Steel et al. (2017), in order to address the challenges of OHS at work, there is a need for timely prevention through long-term treatment of chronic illnesses, vaccination of target groups against infectious diseases, and reducing health inequities by reaching out to hard-to-reach populations.

2.5.2.2 Occupational Health and safety training and education

In a study in Australia about Agricultural workers, it was reviewed that there is need for revisions to regulation (both general duty provisions and specific codes), the development of comprehensive guidance and assessment tools to be used by inspectors, greater use of procedural enforcement and enhanced inspectorate resourcing and training so as to reduce the negative impacts caused by OHS. It was outlined that there is need for standardised and specific OHS training, random inspections and full inclusion of agricultural workers in the wood processing industry.

In a study undertaken in Mutare in 2011 targeting the wood sector of Zimbabwe, it was outlined that in order to improve the health and safety of the organisation there is need to be guided by a comprehensive national policy dealing with health and safety issues in the wood processing sector. There is need to have precise knowledge of OHS and the various exposure levels to be measured and monitored.

According to a study carried out by Katsuro et al (2010), it was recommended that food industry factories should upgrade their occupational health and safety through training programmes and use up to date equipment. Training is essential in OHS because it provide with important tips on preventing accidents, minimising risks and develop ways of reducing the risks before an accident occurs.

Moyo (2017), in his study opined that in order to solve the problem of Occupational Health and safety in Southern Africa there is need to capacitate primary health services with basic occupational health knowledge which will be invaluable in bridging the current skills deficit. Also introducing short courses and foundational tracks in occupational medicine for general medical practitioners would be invaluable.

A similar finding emerged from the development of the Safety Engineering Model (SEM) in the United States of America where it was found that 85% of accidents were attributable to unsafe acts while unsafe conditions accounted for 15%. The researchers further suggested that unsafe acts are best prevented through education and enforcement, whereas unsafe conditions are best prevented through improved engineering practices and enforcement of these practices (Cliff 2012).

2.5.2.3Effective Communication

More so, in a study by Kanojerera (2014), in order solve the negative impacts of OHS on worker productivity at City of Harare council it was recommended that the organisation should develop proper systematic Occupational health and safety policies and practices, implement OHS management system and ensure periodic review in order to improve OHS performance in work place. He further reviewed that commitment through effective communication and budgeting, resource allocation, follow up and effective training and evaluation are also recommended.

2.5.3 The relationship between occupational health and safety and worker productivity

"It has been noted that health is an absence of disease, accident or stress" (Ivancevich, 2001; Iathis, 1997) .They say also that health is a state of well-being, both physically, mentally and socially. A health person at work is productive employee, free from diseases, injury and stress. Productivity therefore relates to the health of an employee and safety of the environment in

which the employee works. The environment must be free from hazards risks and accidents in order to achieve performance goals.

Therefore a healthy person is one who is free from illness and injury and emotional problems that impair normal activity. According to Iathis (1997), Health Management Practice strives to maintain the overall well-being of individuals. This way the employees are able to give their best performance if they in their best form of body and mind.

In a study in Zimbabwe of a food factory by Katsuro et al (2010), it was noted that bad occupational health and safety practices in food factories decreases the workers' productivity due to the fact that a worker who is suffering from an occupational illness is slower and weaker, thereby missing the targets. The study noted that the decreases in productivity due to occupational health and safety hazards in different stations and work related illness which reduce level of productivity in individuals.

The Zimbabwe Nurses Association (ZINA), noted that health institutions had been facing the poor OHS constraints which were in the presence of poor working conditions, lack of protective equipment which exposed the employees to communicable diseases, inadequate bed linen and lack of proper equipment (ZINA, 2017).This was noted that it led to low productivity of workers as some were absent at work due to illness, stress and at the same time the rate of presenteeism increased.

2.5.4 Health and safety standards and policies of occupational health and safety

2.5.4.1 Regulatory and institutional framework for Occupational Health and safety

Health and safety standards these are requirements that every business must follow to ensure the comfort and safety of everyone at work. They may also be defined as requirements designed to reduce the risk of work related ill health (injury) and to provide safe and healthy work environment.

Health and safety standards help the organisation in meeting their legal obligations and protect staff and patients. They also improve occupational health and safety in health care. Health and safety standards also provide a valuable service that will help organisations achieve effective management and control of risk in a practical and proportionate way.

The regulatory frameworks, include Constitution of Zimbabwe, Labour Act chapter 28. 01, National Social Security Authority Chapter 17. 04, Labour Relations Regulations of 1993 just to mention but a few. Institutional framework refers to law or other formal provisions that

assign primary responsibility as well as the authority to control and enforcing law. There are various institutions and authorities, which guide health and safety; these include the ministry of health and child care (MOHCC), Health service board of Zimbabwe, International Labour Organizations Zimbabwe Office, Environmental Management Agency, National Employment Council, Ministry of Public Service, Labour and Social Welfare and Zimbabwe Occupational Health and Safety Council. There are core health and safety principles, which are addressed by regulatory and institutional framework, these principles, include avoidance of hazards, safe technology, optimization of working conditions and integration of production and health and safety activities. In addition, other principles are government responsibility, authority and competence in the development and control of working conditions, cooperation, and collaboration on an equal basis by employers and workers.

National Social Security Authority (NSSA) is one of the institutions under the Ministry of Labour and Social Welfare in Zimbabwe established to enforce regulations of Factories and Works Act, the labour Act with the aim of providing safe and health work place. NSSA administers two schemes, which are the Pensions and other Benefits Scheme and Accident Prevention and Workers' Compensation scheme. The Accident, Prevention, and Workers' Compensation Schemes create awareness and promote health and safety in the workplace by providing rehabilitation services (NSSA, 2015). The Accident and Prevention and Workers' Compensation Schemes enforces health and safety legislation. It provides financial benefits to families of workers who would have been injured or killed at workplaces or who would have acquired occupational diseases (NSSA, 2015). The Accident and Prevention and Workers' Compensation Schemes require all workplace accidents to be reported within 14 days of occurring, regardless of whether the worker has completed treatment or not (NSSA, 2015). In cases of serious accidents and fatalities, employers are required to report to the nearest NSSA office and the police immediately. The NSSA, The Accident and Prevention, and Workers Compensation Schemes meet all costs related to workplace injuries, such as transport, drugs, hospital fees, and artificial appliances. NSSA will also meet the costs of dentures, spectacles, hearing aids, artifice al limbs, crutches, and other apparatus used by physically disabled people due to occupational accidents (NSSA, 2015). In addition, it also focuses on the welfare of the employee and his or her immediate family members in the event of incapacitation or fatal accident or occupational disease (Moyo et al, 2015). NSSA is also responsible for appraisal of industrial plans and make recommendations that is in line with Public Health Act, it is the

statutory obligation and responsibility of management to provide everything necessary for working safety in the workplace to reduce risks and accidents.

In addition, National Employment Council of Zimbabwe (NEC) is another institutional framework, which governs the health and safety management of Health workers in Zimbabwe. NEC is responsible for maintain and enhance a comfortable and supportive workplace to ensure health and safety of all who work in the health sector. It is responsible for improving occupational health and safety management system by continuously and efficiently implementing occupational health and safety activities through upholding of labour laws to reduce accidents in the health sector. NEC is also responsible for promoting the identification of sources of danger, as well as risks assessment and risk management with the aim of reducing accidents to zero in health institutions. This institution also strives to make occupational health and safety obligation known to ensure understanding and fulfilment of this obligation and it promotes various programs and activities for all employees from the perspective of reducing accidents in health institutions. Therefore, National Employment Council is one of the institutions, which plays a critical role in addressing the core health and safety principles largely because it is the regulated institution responsible for assessing different trades in the health sector.

Health and safety rules are guided by a number of statutes, one of the main regulatory frameworks to be analysed is the labour Act and the Constitution of Zimbabwe. Constitution of Zimbabwe as a regulatory framework Section 65 (1) out that every person has the right to fair and safe labour practice and a fair reasonable wage in order for them to improve health and safety. In addition, Section 65 (4) pointed out that every employee is entitled to just equitable and satisfactory conditions of work for example provision of protective clothing in the health institutions as well as provision of adequate cleaning detergents for surfaces in the hospitals. In accordance with Labour Act 28:01, the employer cannot compel any employee to work under and conditions or situations, which are below those prescribed by law, for instance every worker is entitled to wear protective clothing whenever there are healthy procedures taking place for instance operations and when being exposed to patients. In addition, it is a duty of any employer to ensure safety and health of workers by adopting measure and procedures required in workplace. Workers must also comply with Occupational Health and Safety related requirements and take reasonable steps to protect their own safety and health in the workplace for example wearing of protective clothing in the work place to reduce and prevent injuries and accidents in health institutions.

Therefore, Constitution of Zimbabwe and Labour Act chapter 28.01 plays a critical role as regulatory frameworks that govern the Health institutions Health and safety management in Zimbabwe and largely addresses core health and safety principles such as avoidance of hazards and optimization of working conditions at work place. The ministry of health and child care monitor disease trends, quality of care and health status of the population. It also coordinate the development of health policies, programs and strategies and set-up of national standards and guidelines. The ministry also develop and implement comprehensive population health programs including child care.

More so the health service board supervises and monitor the health policy planning and public health service. It monitors also occupational health and safety at workplaces. Furthermore Environmental Management Act (Chapter 20:27) is another regulatory frameworks governing health and safety management in the Health sector of Zimbabwe. Environmental Management Act on sustainable development and prohibits the discharge and disposal of waste without waste license. This is important because it gives allowance to health workers to practice good health conditions in the health institutions rather than using unauthorized dumping of waste in undesignated places because there are some hospital waste which not be dumped anywhere. Therefore, NSSA now issuing prohibition notice whenever they found violation of Occupational Health and safety issues at work place hence addressing core health and safety issues illness and injuries. The importance of PPEs can also be highlighted by the public health act chapter 15:17 part 4 sub part B which reviews the suppression of infectious diseases.

2.6 Gap Analysis

These studies mainly focused on industries like agriculture, construction and manufacturing without clear investigation into the health sector so the researcher intends to find out the applicability of these findings within the health sector mainly hospitals. More so, the researcher wanted to find out if researches done in developed countries would be applicable in his` developing country due to different economical setups.

2.7 Case studies

A health and safe working environment is an essential component for any business to run successfully. In Kenya, a study was carried out by Okumu (2016), examining the effects of occupational health and safety on employees' productivity in Mumias Sugar Company. The objectives of the study were to identify occupational health and safety activities in the organisation, determine effects of occupational health and safety activities in the organisation, determine effects of occupational health and safety on worker productivity, ascertain the

challenges faced in the implementation of occupational health and safety practices and explore appropriate techniques of implementing occupational health and safety practices.

However the study showed that occupational health and safety practices had a positive relationship with productivity of employees by preventing fires, provision of lighting and ventilation, provision of protective equipment, good house -keeping, first aid kits, sanitary facilities and medical facilities. The study concluded that when an organisation fully implement occupational health and safety practices employees' productivity improves. The study showed that the absence of occupational health and safety practices could result in absenteeism, high employee turnover, increased medical bills and insurance claims as well as injuries and frequent accidents.

More so, a study in Ghana by Gbadago (2017) was conducted at the south Tongu district hospital and the aim of the study was to find out the level of awareness of the occupational health and safety policy of the Ghana Health service, to determine whether the occupational health and safety policy has been implemented and to identify the challenges faced in the implementation of the OHS measures by management. The study found out the awareness of the occupational health and safety policy was 79, 5% and this evidenced that the safety measures seemed to have been implemented adequately. The study found out that the management was being constrained financially in the implementation and maintenance of occupational health and safety measures.

2.8 Lessons learnt

From the above discussion one can learn that occupational health and safety is essential in every organisation as it facilitates the health of the most important assets of the organisation that is the employees. The above discussion showed us that there are many occupational health and safety practices that can be conducted by the organisation for example provision of safety equipment, sanitary facilities and medical facilities to mention a few.

They can also deduce that productivity improves safety and quality at the same time with the availability of safety processes, safety can be improved and quality can be improved as well. The more productive employees are, the less likely they are to ignore safety processes. Prioritising OHS at work has several benefits including reduced risk or accidents or injuries by identifying and mitigating hazards. From the above discussion one can learn to prepare for emergencies, release some stress on employees and include workers on health policies.

Prioritising OHS at work reduces the risks of accidents as well as injuries and mitigating hazards. It also improves efficiency and productivity due to fewer employees missing work from illness or injury.

2.9 Chapter Summary

This chapter looked at the review of related literature on the impact of occupational health and safety hazards on worker productivity. It also looked at the introduction and an overview of occupational health and safety in general, challenges faced by employees in workplaces in terms of occupational health and safety and measures to challenges faced by occupational health and safety. It further looked at the attitudes and perceptions by employees towards occupational health and safety as well as the health and safety standards and policies of occupational health and safety. The next chapter looks at the research methodology.

CHAPTER THREE: RESEARCH METHODOLOGY

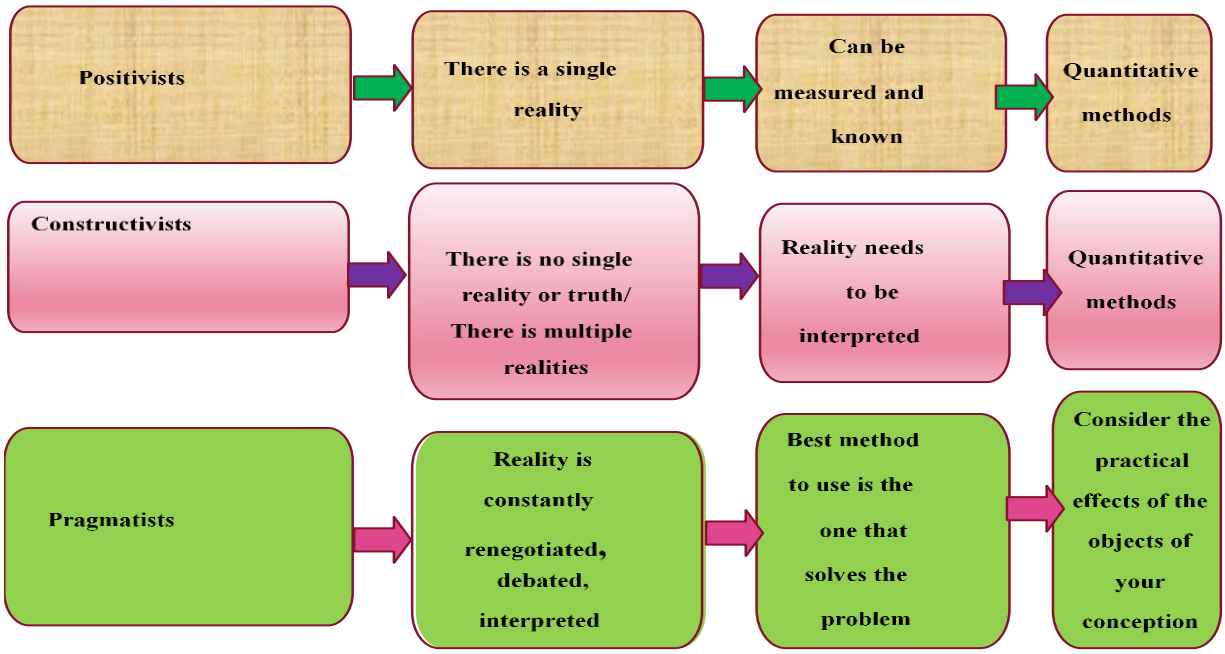
3.1 Introduction

The previous chapter covers the conceptual framework and theoretical framework as well empirical evidence. This chapter presents an overview of the research methodology employed in the study. Research methodology is a process of collecting information and data for the purpose of making decisions or making conclusion. Methodology is a set or system of methods, principles and rules for regulating a give discipline. It is of great importance for any researcher as it guides the researcher on how the data is gathered. The credibility of the research findings depends on the appropriateness and reliability of methods used in data collection and justification for their use. Research methodology often includes research design, data gathering techniques data analysis, pilot study and ethical consideration. This chapter is looking at the research design, sample population of the study, the relevant sampling procedures, research instruments, pilot study, data collection procedures, data presentation and analysis procedure.

3.2 Research Paradigm

Research paradigm are the entire constellation of beliefs, values, techniques and so on shared by members of a given community (Kuhn, 1970). Research paradigm as a comprehensive belief system, worldview or framework that guides research and practice in a field (Willis, 2007). It is perceived as a way of seeing the world that frames a research topic and influence the way that researchers think about the topic (Hughes, 2010). A research paradigm is made up of theoretical assumptions and laws, and techniques for their application that members of a particular scientific community can adopt and it is classified into three which include Positivists, constructivists and pragmatists.

Figure 5



Source : Cohen et al (2011)

3.2.1 Pragmatic Paradigm

Pragmatism is advanced philosophy that provides the epistemology and the logic for combining the quantitative and qualitative approaches and methods (Johnson et al, 2007). In addition, pragmatism is the philosophy that permits mixing of paradigm and methods of data collection and analysis (Creswell 2014). Creswell (2009), pragmatism is a research paradigm concerned with what works for specific problems through the use of a mixed method research methodology. Pragmatism can be explained simply as a research approach used to question and evaluate thoughts and beliefs based on real functions. This study adopts the pragmatic paradigm because it uses enquiries from the assumptions of both the quantitative and qualitative methods in research. This paradigm allows researcher the freedom to choose from procedures and techniques of collecting data so as to accomplish research objectives (Creswell 2009). The pragmatic philosophy was also adopted in this research because the research required the use of qualitative and quantitative data. Moreover, pragmatism is of great importance in this research because it treats people's ideas and beliefs as tools for problem solving and takes research objects as active participants rather than as passive descriptors of the existing world. This research demonstrates the rationality of the pragmatic research paradigm, because research is carried out in various contexts, such as political, social and

historical contexts. This paradigm helps the researcher in providing a more understanding of the problem that would otherwise not have been addressed by using only one method in understanding the problem under study Therefore, Creswell (2009) stated that this approach reflects well on social justice and political goals, therefore pragmatic research paradigm. As a result the researcher is going to use the pragmatic paradigm.

3.3 Research Method

3.3.1 Mixed Method Approach

The research was conducted using a mixed research approach which is a combination of both qualitative and quantitative method. Qualitative research is a research which is based upon philosophy of empiricism, follows an unstructured, flexible and open approach to enquiry, aims to describe than measure, believe in-depth understanding and small sections and explores perceptions and feelings than facts and figures (Kumar, 2011). It brings about the expected reactions and humanise the research process by method of raising the role played of the respondents to be equal to that of the researcher, thus is it inevitable (Swelnam, 2000). Qualitative data involve documenting real events, recording what people say, observing behaviour, studying written documents or examining visual images. Creswell (2007) is of the opinion that qualitative research is a way of discovering the thoughtful meaning of persons or groups scribed to a social perception on human problems. Douglass (2008) have also suggested that unlike quantitative research, qualitative research is considered to be an easy way of interpreting data and it is not complicated. In addition, information collected through qualitative research is mainly for academic purpose and it articulates better understanding of the research being undertaken. There are various qualitative research methods, these include surveys, observations and conversational analysis that are used to gather information and for the analysis of textual data.

Leedy (1993) stipulated that quantitative research is a method which deals with statistics, anything measurable in a logical way of investigation of observable facts and their relationship. This method is time efficient which supports (Daniel, 2006)'s view who postulate that statistical data reduces the time and effort which would have been seen in describing observed phenomena. Quantitative research is a method of collecting data that quantifies the data into quantities for easy interpretation. (Fink, 2009). Quantitative research methods include the following quantitative analysis and questionnaires which the researcher is going to use in this

study. A quantitative method is used to develop theory, identify what others in similar situations may be doing (Pannbacker and Middleton, 1994).

Mixed methods may be defined as research in which the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches and methods in a single study (Tashakkori and Creswell, 2004: 4). A mixed method approach is one that includes a qualitative and quantitative dimension, but difficulties often arise when the researcher attempts to articulate how the two elements relates to one another (Tashkkori and Creswell, 2003). Employing a mixture of both quantitative and qualitative research methods is of great importance because these methods complement each other which enables a more comprehensive understanding of a research problem (Creswell, 2014). In addition, mixed methods research helps to answer the research questions that cannot be answered by quantitative or qualitative methods alone and provide a greater repertoire of tools to meet the aim and objectives of the study. A combination of research approaches is useful in areas such as environmental management because of the complex nature of the phenomena and range of perspectives that are required. Utilising a mixed method approach provides a stronger and more accurate interference .Therefore the researcher used both qualitative and quantitative data to gather and to analyse data.

3.4 Research Design

In the view of Leedy (1989) a research design is a model for data collection that facilitates exploration, description and explanation of the phenomena in question and it is a scheme of action for answering the research question or questions. Research design is a blueprint or a print or plan for the collection of data. (Dhondyah, 2007) described research design as a systematic plan to study a scientific problem. It is a choice of an investigator about the components of the project and development of the design. Before a study is conducted it is important that a design structure be conceptualised before data collection. This help to ensure that the evidence obtained enables the researcher to answer the initial question as unambiguously as possible. In addition, research design deals with a logical problem and not a logistical problem (Yin, 1989). Therefore, research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby ensuring a proper way of addressing the research problem effectively.

The researcher made use of case study method in order to get detailed information about occupational Health and Safety at Marondera Provincial Hospital. Case study is used to answer questions that have been raised to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objective have been met, to establish baseline against which future comparisons can be made to analyse trends across time and generally to describe what exists, in what amount and what context (Isaac and Michael, 1997:136). A case study is defined as an in-depth investigation of an individual subject (Weiten, 1989). It is concerned about investigating and interpreting attributes, characteristics and behaviour patterns of an individual or group. A case study makes it possible to study human behaviour in a naturalist setting. This is very important in determining the extent to which behaviour observed reflects the true character of the object being studied. The case study's objective is to examine a given situation in detail and provide factors which may contribute to the question for example challenges faced by Marondera Provincial Hospital to operationalise OSH at work place. Such information is analysed objectively and scientifically so that its authenticity cannot be questioned.

Case study is an easy method of gathering information in a short time. It makes it possible, to a considerable degree, to study human behaviour in a naturalistic setting. This is important in determining the extent to which the behaviour is observed and reflects the character of the phenomena being studied. The case study allowed for an intensive study of selected samples to illuminate and give a general picture of OHS at Marondera Provincial Hospital. The case study also enables the examination of data to be conducted within the given context of its use, that is, within the situation in which the activity was taking place. Furthermore, through this case study, the researcher is able to go beyond the quantitative statistical results and understood the behavioural conditions through the respondents' perspective

3.5 Target Population

The study is carried out at Marondera Provincial Hospital Target population can be understood as the total number of units from which data can be collected (Castillo, 2009). At Marondera Provincial Hospital the target population is 750 as according to the (Marondera Provincial Hospital Human resources monthly returns for April, 2022). This target population consists of health care workers at Marondera Provincial Hospital that is doctors, nurses, general hands and

nurse aides. Walliman (2006) defines population as the term used to describe the total quantity of things of the type which is the subject of one's study. Shaughnessy et al (2009) defines population as a set of all cases of interest, in this study the population is by the table below.

Table 6

Targeted respondents	Reasons for selecting the respondents
Officials from the Ministry of Labour	Obtaining the views of OHS contained in the Labour Act.
Officials from the Mash East Provincial Medical Board	To understand the current policies and views of OHS regulating in the Ministry of Health and the Health Service Board.
NSSA	To review the benefits that are supposed to be given to health care workers in the event of an injury at work.
Health care workers at Marondera Provincial Hospital (nurses, doctors, nurse aides and general hands).	To obtain their views on the challenges, measures, policies in relation to Occupational health and safety and their productivity.

Source: The Researcher (2022)

3.6 Sampling Methods and Techniques

Manohara (2010) describe a sample as a portion of the population. This means that a sample can be used to represent a population in research the researcher sought to describe the whole population from which samples is drawn, and however ability to generalise from a sample to the population depends on the representatives of the population (Shaughnessy et.at, 2012). Sampling is also defined as choosing a group of subject who will represent individuals from a larger group where the subject would have been selected from (Creswell, 2007). Saunder et al (2009) pointed out that sampling is very important in research as it is a way in which one can collect data from the whole population hence sampling viewed as a way of gathering information regarding the population as a whole through investigating part of the overall population.

3.6.1 Sampling Procedure

Classification of sampling techniques is divided into two parts that is probability and non-probability sampling. Trochim (2006) pointed out that for probability sampling method to be effective it is important to organise a structure which allows all the units to have equal chances of being selected. Non probability sampling is the sampling method which depends solely on the judgement of the researcher (Walliman, 2007). Therefore, the researcher in this study is going to utilise both stratified sampling technique and purposive sampling technique where the researcher purposively selected the participants for the research. Interviews are going to be conducted and questionnaires were distributed to various stakeholders in order to obtain information which is relevant to the study.

3.6.2 Sample size

Bartlett et al (2001) takes account that selection of sample size remains problematic even when a suitable sampling method is selected. Walliman (2010) explains that the sample size must be considered against the practicality of research resources of time and expense, and that the number of entities under examination should be in direct proportion to the sample size (Glaser and Straus, 1967). According to Morse (1994 p.225) , Ethonography and ethnoscience, a typical sample size for an academic research project is around 30-50 interviews, however Creswell (1998), Grounded theory Methodology, believes that merely 20-30 respondents are sufficient. Due to limits imposed by available resources and the time span allotted to conduct this research, the researcher investigated just 35 people in light of Morse and Creswell's suggestion and Covid 19 related regulations. Information from health care workers at MPH was harnessed from 5 key informants aforementioned. Therefore, this research was steered using a sample size of 35 to represent 750 health care workers at MPH.

The key informants' interview with government departments about the impacts of OHS on workers at MPH's productivity used a sample size of 5 people. According to Taherdoost (2016), a sample size of 5 is appropriate since a bigger sample size minimizes the possibility of bias. Purposive sampling was used to pick members from government departments, and a sample size of 5 was chosen. The Ministry of Labour and Social welfare Representative,

Provincial Medical Board Representative, a representative from NSSA and Management from MPH are among the five members.

3.6.3 Sampling Techniques

3.6.3.1 Purposive Sampling

Parahoo (1997) defined purposive sampling as a sampling technique whereby the researcher deliberately chooses who to include in the study based on their ability to provide key information relating to the study. Ames (2019) postulate that purposive sampling is a type of non-probability sampling in which researchers only rely on their own judgement when choosing members of the population to participate in the study. The researcher will utilise this sampling method to select respondents basing on his subjective judgement through the laying down of a criterion as the researcher possesses background information about some of these respondents. This sampling technique is of paramount importance as the researcher would get information from people who are knowledgeable about occupational health and safety. In addition, the researcher is going to select key stakeholders from Provincial Medical Board officials, NSSA Officials, Ministry of Labour and Social welfare and Marondera Provincial Hospital Officials based on their experience and expertise regarding the researcher's subject. The rationale for selecting these entities is that they mainly responsible for Worker's protection hence it enables the researcher to get information regarding the policies and measure to promote OSH at work Place .Purposive sampling is of advantage as it is of low cost as data is collected from people who are well versed and equipped with relevant information about the area of study assessing the impact of OHS on worker productivity and high accuracy of data to be collected.

3.6.3.2 Stratified Random Sampling

Stratified sampling is where the population is divided into strata (or subgroups) and random, a random sample is taken from each subgroup. The technique entails a process of dividing number of the population into subgroups called strata. It is within the subgroup that individuals are then selected at random to give everyone an equal chance of being involved in the research since they are picked at random. Black (1999), define stratified random sampling as the division of population into subgroups or strata and the random sampling are taken in proportions to the population from each subgroup. In addition, this sampling technique

accurately reflects the population before applying random sampling method. In short, it ensures each strata within the population receives proper representation within the sample. As a result, stratified random sampling provides a better coverage of the population since the researchers have control over the subgroups to ensure all of them are being represented in the sampling. In this case the researcher is going to use stratified sampling technique on questionnaires so as to get adequate information necessary for the study from the targeted groups of health workers that is the doctors, nurses, nurse aides and general hands also to give an equal chance for everyone in those groups to be selected for the questionnaires.

3.7 Data Collection

This type of research enabled the researcher to employ data collection method such as interview, questionnaires, observations and the use of primary and secondary data collection methods. Interviews is the major source for collecting data for example officials from Marondera Provincial Hospital, ministry of labour, Mashonaland east Provincial Medical Directorate and from NSSA on Occupational Health and Safety at work place.

3.7.1 Primary Data Collection Methods

3.7.1.1 In depth Interviews

The researcher used in depth interview in order to gather data about the impacts of OHS on worker productivity at Marondera Provincial Hospital. The in-depth interviews will be structured interviews. The researcher will rely on both open ended questions and closed ones. The researcher would make use of in depth interviews as a way of gathering enough data in order to find a way on how best to promote OHS on worker productivity. McDonald (2011) postulated that in depth interview is a type of interview with individuals that aims to collect detailed data beyond initial and surface level answers. Within the in-depth interviews they are key informants as the researcher would like to get information from individuals and organisations which specialises in health management such as Officials from Marondera Provincial Hospital, Ministry of Labour, Mashonaland east Provincial Medical Directorate and NSSA. Boyce (2006), in depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspective on a particular idea, program and situation. In depth interviews are advantageous

in the sense that they will enable the researcher to recognise and record the feeling and perception of the respondents through nonverbal communication quos. In addition, it promotes direct feedback from the respondents and they foster good communication between the researcher and the respondents through offering a conductive ground for exploration of the subject matter, in depth interviews involves conducting intensive interview with a small number of respondents in order for the researcher to explore the perspective on the challenges, measures and policies to OHS on worker productivity. Limitations of in depth interviews is that the participants are limited to structured questions but this can be addressed through interviewing many participants and adding of unstructured questions.

3.7.1.2 Key Informant Interviews

The researcher makes the use of the key informant interviews in order to collect relevant and tangible data concerning the impact of occupational health and safety on worker productivity at Marondera Provincial Hospital. Pact (2014) defined key informant interviews as involving interviewing people who have particular informed perspective on an aspect of the program being evaluated. Paul (2008), defined key informant interview as in depth interview of a selected group of experts who are most knowledgeable of the organisation or the issue. This method was used by the researcher in order to have the broad knowledge and well versed with the impacts of occupational health and safety on worker productivity. These key informants include Management from Marondera Hospital, NSSA Officials, PMD and Ministry of Labour.

3.7.1.3 Questionnaires

Shaughnessy et. al (2012) described questionnaires as one of the most common way to measure variables especially demographics such as ethnicity, age, preferences and attitudes, however they require expertise and care in their construction. Questionnaire is a powerful scientific instrument for measuring different variables (Shaughnessy et .al, 2012). Semi structured questionnaires were used to gather data and also to cover the limitations of interviews. The questionnaires were distributed to respondents and then the researcher would do in depth interview with the participants in order to gather data. The researcher also found questionnaires appropriate in this study because the questions were objective such that the respondents answered questions entirely from their own perspective. In addition, the researcher can compare the information that emerged from the two sources and this is used as a measurement of validity and reliability through other measure were still applied.

Henslin (2010) describes that the advantage of self-administered questionnaires is that they allow a large number of people to be sampled at a lower cost and these where administered to 30 respondents. Due care is taken in the construction of the questionnaires. Shaughnessy et al (2012) argues that if a questionnaire is poorly done the results of the study will be useless, he posits that a questionnaire should yield reliable and valid measures of both demographics and individual differences. Questionnaires are a particular suitable tool for gaining quantitative data but can also be used for qualitative data (Walliman, 2011). Walliman (2011) believes that questionnaires are easy to use as they enable the researcher to organise questions and receive replies without actually having to talk to every respondent, it is flexible and can have a structured format, is easy and convenient for respondents, cheap to administer to large number of cases covering geographical area.

Personal influence of the researcher is reduced and some embarrassing questions can be asked with a fair chance of getting a true reply. Their disadvantage according to Walliman (2011) is that they require a lot of time and skills to design and develop. Closed format questions the respondent must choose from set of given answers. These tend to be quick to answer, and require no special writing skills from the respondent. However, they limit the range of possible answers.

3.7.1.4 Observation

The researcher used non participant observation, during the observation the researcher carried out direct observations in the field in order to gather relevant data pertaining to the issue under study. Black (1999) defined observation as a technique provides a valuable display of the situation on the ground. This is quite essential as the researcher benefited a great deal in research through observing what is happening in the field of study. The researcher visited various places at Marondera Provincial Hospital such as Patient Wards, checking floors and checking if the workers are adhering to OHS fundamentals. Observations is a direct technique as the researcher is going to observe the activities and events on the ground. Observations validated the messages obtained in the interviews, however observation is time consuming to carry out.

3.7.2 Secondary Data

The researcher makes use of secondary data sources, secondary data is a set of all published and unpublished sources that have many information concerning the subject matter under study

for instance in the scenario of the impact of OHS on worker productivity. Secondary data entails to data or information obtained from other researchers done by other researchers (Neuma, 2000). William (2007) alluded that secondary data sources is literature already in existence which helps the researcher to come up with the historical background of the work being done. Maps and aerial photographs shows the location of Marondera Provincial Hospital Secondary data for this research is gathered from the internet, government gazettes, library textbooks and the e journals, the researcher only utilised the data sources relating to the impacts of OHS on worker productivity ranging from the global level to the regional level in order to have a preliminary knowledge.

3.7.3 Pilot Study

The researcher shall first employ a pilot pre-testing programme to ensure the validity and reliability of the questionnaire. This involves firstly administering questionnaires to a population outside the targeted sample so as to pre-test the research tool in a bid to minimise biases. This will enable the researcher to make adjustments and clarification on some questions on the research tool thus improving the validity and reliability of the study.

3.8 Data presentation and Analysis Techniques

Punch (1998), data presentation refers to the way data are laid out, in this research study, data are going to be presented as pie charts, tables, bar graphs, sketch maps and reports. Data analysis is the ordering and structuring of data to produce knowledge. In this research study, this involving sorting, structuring and scrutinizing the collected data. The purpose of data analysis is to quantify and qualify information collected by the researcher so as to reach a general conclusion. The data is collected in the field and it is organized and analysed using computer software packages such as Microsoft Excel 2016 which makes the interpretation of data easy. These software promotes effective and efficient data analysis and make it more accurate because unprocessed data is difficult to deal with without the utilization of these two software hence the use of these software is of paramount importance in this study. After the entering and coding of the information into the computer system, the data is going to be analysed to produce charts and graphs which are easy to construct and to interpret information presentation in a logical way.

3.8.1 Content Analysis

Content analysis is adapted by the researcher in analysing data collected through the documentary and textbook research. Content analysis is a technique for making interference by systematic and objective identifying special characteristics of messages (Berg, 1989). The researcher first of all started by selecting the unit of analysis, unit of analysis might refer to a phrase, pages in a book or an article in the newspaper. In addition, after identifying the unit of analysis in order to sense of the data being collected in the study. There various key questions which is used to guide the researcher such as who said that, to what extent and with what effect. After the creation of various questions, the researcher moves on to categorize together the related observation in order for them to be presented. In formulating the categories, the researcher made a decision through his own understanding by putting the same contents in each category especially with similar characteristics.

3.8.2 Thematic Analysis

After collection of data from the interview the respondents from key informants such as PMD, the information is going to be analysed using the thematic analysis. Thematic analysis is a method for systematically identifying, organizing and offering insight into, patterns of meaning across data set (Braun and Clarke, 2006). Braun and Clarke (2006) outlined six stages of thematic analysis in analysing information these include familiarizing yourself with data, this phase involves immersing yourself in the data by reading and re re-reading textual data, generating initial codes, searching for themes. Searching a theme captures something important about the data in relation to the research questions and represents some level of patterned response or meaning with the data set (Braun and Clarke, 2006). Reviewing potential themes is another stage of content analysis which involves recursive process whereby the developing themes are reviewed in relation to the coded data and entire data set, defining themes is another stage in thematic analysis that clearly state what is unique and specific about each theme. Producing a report is the final stage in content analysis which involve the production of dissertation and journals. The researcher made this of data analysis technique because it is relatively easy and quick to use and can be used by the researcher with little or no exposure to qualitative research. This technique is helpful in the sense that it summarizing the key elements of a large body of information and can identify difference and similarities in data analysis.

Table 3.1 Research Methodology Matrix Table summarizes information required to address objectives. The table shows methods used to collect data and strategies employed to analyse data.

Table 3.1: Research Design (Methodology) Matrix

OBJECTIVE	DATA REQUIRED	PARTICIPANTS	DATA COLLECTION METHOD	DATA ANALYSIS STRATEGIES
To analyze the challenges of OHS on the productivity of the health care workers at Marondera Provincial Hospital.	**Challenges faced by health care workers at Marondera Provincial Hospital.**	**-Employees** **-PMD** **-NSSA** **-Marondera Provincial Hospital Officials** **- Health care workers at MPH**	**-Interviews** **-Questionnaire** **-Observation guide**	**-Content Analysis** **-Thematic Analysis**
To determine the measures to solve the challenges of OHS on the productivity of the health care workers at Marondera Provincial Hospital.	**Measures to solve the challenges of OHS on the productivity of health care workers at MPH.**	**Ministry of Labour Officials** **-PMD** **-NSSA Official** **-Health care workers at MPH** **-MPH Management**	**Interviews** **Questionnaires**	**Content Analysis** **--Thematic Analysis**

To examine health and safety standards and policies which uphold the Occupational health and safety.	**Health and safety standards and policies which uphold OHS.**	**-NSSA** **-PMD** **-MPH management** **-Ministry of Labour** **Health care workers at MPH.**	**-Interviews** **-questionnaires** **- Observation Guide**	**Content Analysis** **Thematic Analysis**
To establish the relationship between OHS and the productivity of its health worker Marondera Provincial Hospital.	**- relationship between OHS and the productivity of the health care workers at MPH.**	**-Marondera Provincial Hospital health care workers and their Management.**	**-questionnaires** **- Interviews**	**Thematic Analysis** **Content Analysis**

Source: Researcher (2022)

3.9 Ethical Consideration

Punch (1998), ethical consideration are those aspects of research that may have moral and social implications. In addition, ethical considerations are the conditions that enabled the researcher to undertake data collection without breaching the rights of participants (Orb et al, 2009). The researcher is going to ask the permission from all the respondents of the research by first all writing letters seeking permission to undertake the research The researcher is going to explain to the participants about the research and emphasized that participation is voluntary and interviews is carried out with those who felt up for it. The participants are informed that

they could withdraw if they could no longer continue. The respondents are assured that no names to be written down and that questionnaires were designed strictly for academic purpose.

Punch (1998), confidentiality is a type of informal privacy in which one individual or organization agrees to safeguard information about another individual or organization. Confidentiality of the participants is also a matter of importance in this study, other ethical considerations that were of great importance in this study include fairly acknowledging of the individuals who have contributing their ideas or time and effort, manage resources honestly and reporting the results honestly and accurately. The researcher is going to submit for approval to the Bindura University of Science Education of Human Resources. Participants will be assured that the information they divulge would be kept confidentially in the strictest form, no information shall be divulged without their consent to ensure the protection of respondents. Punch (1998), privacy is the right of individuals to demine how, when, to whom and for what purpose information would be divulged. The researcher is going to use personal files in the records department to get some of data that is required for this research.

In the opinion of Leedy (1998), informed consent is the process of agreeing to take part in a study based on access to all relevant information about what participation means in particular, in terms of harms and benefits. During this research study informed consent by participants is observed, the researcher is going to get consent from relevant authorities for this research to be conducted in their organization. The consent is also sought from participants for them to participate in this research study. The researcher made sure that the participants understand the nature and procedures of the research to be conducted.

3.10 Chapter Summary

This chapter, initially the introduction looked at the research methodology that was adopted in the process of acquiring data and the research design was also highlighted that the research will be a mixed approach that is a combination of both qualitative and quantitative in nature so as to get statistical and descriptive information in the research. The chapter looked at population which shaded more light on the participants while sampling explained thee technique used in choosing participants and its advantage and disadvantages were also discussed. The research instruments both primary and secondary data were discussed and it was highlighted that both interviews, questionnaires and observations would be employed to gather data. The use of questionnaires above interviews is to cross check the reliability and validity of some items in

the interview guide. The chapter also highlighted that a pilot study was undertaken to measure the usability of the questionnaire as well as the appropriateness and understandability to the targeted participants. The pilot study also helped to measure the issues to do with reliability and validity of information. In addition, content analysis, thematic analysis and Microsoft excel where used as data analysis tools in this study. Ethical considerations also form a crucial part of the chapter and this topic looked at some ethical issues that the researcher made an effort to observe. The next chapter presents data presentation, analysis and discussion.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The chapter presents, interprets, analyses and discusses the data collected through the questionnaire, interviews and observations. Presentation of data is followed by interpretation of data and analysis of results. The interpretation of data will be based on the impacts of occupational health and safety on worker productivity. The researcher presented the results of the study in a systematic way in relation with the objectives of the study in themes created from research questions. The data was presented in the form of tables, charts, pictures and in a narrative form. Research findings of this study are also discussed relating them to previous studies that have been done in Zimbabwe and globally.

4.2 Response Rate

4.2.1 Response rate from interviews

The research was scheduled to carry out 5 in-depth interviews for the understanding of challenges faced by employees in terms of occupational health and safety, measures to the challenges of occupational health and safety, attitudes and perceptions towards OHS and health and safety standards and policies of OHS. Interviews were conducted at Marondera Provincial Hospital, Ministry of Labour and The Provincial Medical Director's office (Ministry of Health and child care).

Table 1 Interview response rate

Participants	Number of interviews per organization	Successful interviews	Failed interviews	Percentage response rate (%)
MPH	2	2	Nil	100%
PMD	1	1	Nil	100%
Ministry of Labour	1	1	Nil	100%
NSSA	1	1	Nil	100%
Total	5	5	Nil	100%

Source: (The Researcher, 2022)

As indicated in the table above from the data of the interviews, two officials from MPH were interviewed, each from PMD, NSSA and Ministry of Labour were interviewed, giving a 100% response rate. The researcher managed to interview all the targeted government departments and Marondera Provincial hospital in order to answer the objectives of this research. Therefore, the researcher managed to conduct 5 interviews as indicated by the sample size in chapter 3 and in this case no participant failed the interview.

4.2.2 Response rate from questionnaires

The questionnaire was issued to 35 Health workers at Marondera Provincial Hospital targeting the frontline health workers that are doctors, general hands, nurses and nurse aides. The questions were intended to solicit information on the impacts of Occupational health and safety on worker productivity.

Table 2 Questionnaire response rate

Nature of response	Number of responses	Percentage
Usable	35	87.5
No response	5	12.5
Total	40	100

Source: (The researcher, 2022)

Table 4.2.2 shows the rate of response. Out of 40 questionnaires were administered, 35 were completed and returned five respondents did not return the questionnaires. Out of the 5 uncompleted questionnaires, 3 were doctors and cited work commitments of emergency operations and time constrains due to their busy nature of their job whilst 2 were nurses and were afraid of their contribution being regarded as disclosing official secrecy and confidentiality. This brought response rate down to 87.5%. Researchers indicated that for an academic study, a response rate of 52.7% is considered to be enough threshold to authenticate and validate research findings (Baruh and Halton, 2008). Fincham (2008), opines that a minimum response rate should above 70% to authenticate and produce acceptable results. Therefore, this research study had a response rate of 87.5 this authenticate and provide reliable results for the study.

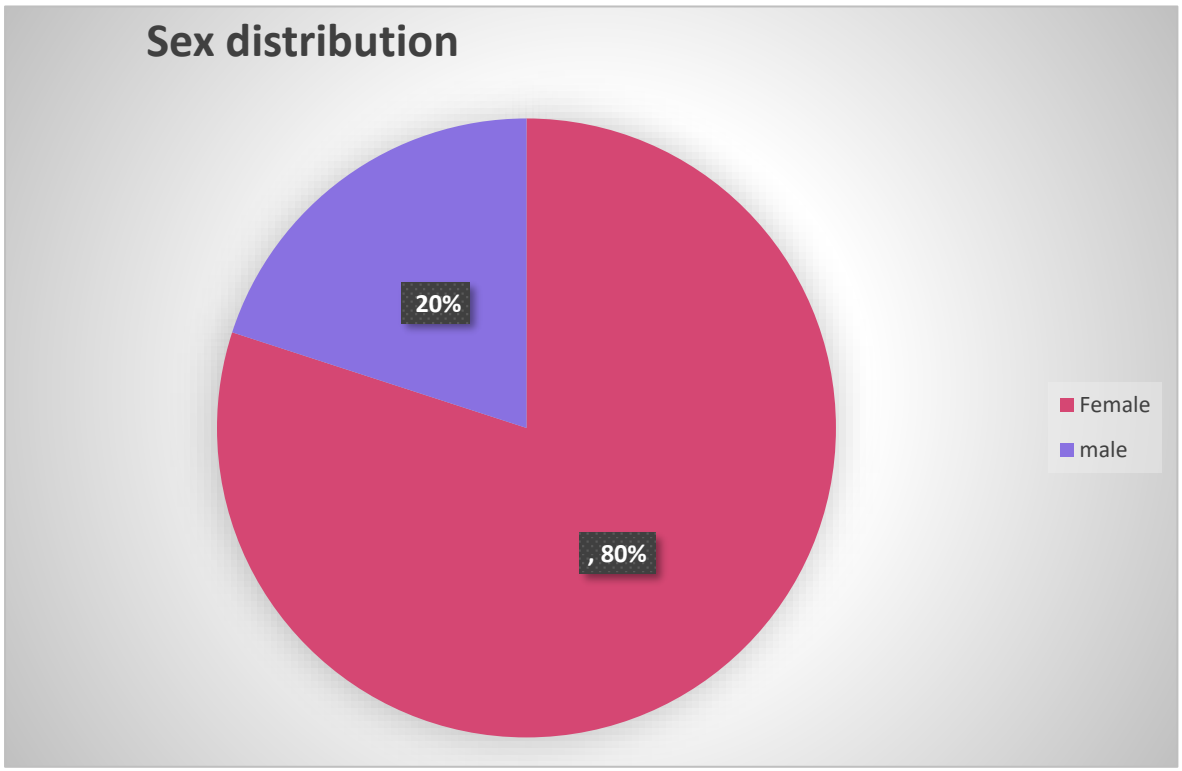
4.3 Demographic data

4.3.1 Sex Distribution

4.3.1.1 Sex distribution of Health workers

Marondera Provincial Hospital has many departments in which four of the targeted health workers' designations revolve around. The targeted designations are doctors, nurses, nurse aides and general hands as they are the front-line health workers. The total sample size for the research was 40, about 35 health workers responded to the questions. Of the respondents to questionnaire 20% were male and 80% were female (Figure 2). The dominance of female population in the area is largely attributed to the fact females are largely working in the health sector.

Figure 1: Sex distribution of Health workers at Marondera Provincial hospital

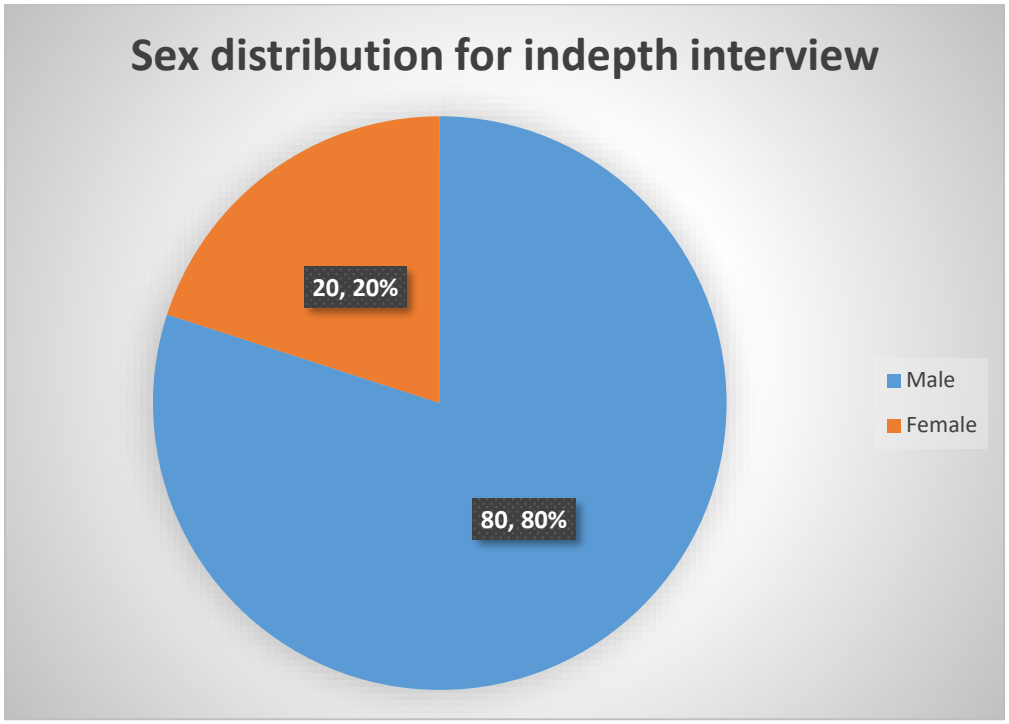


Source: (The researcher, 2022)

4.3.1.2 Sex distribution for in-depth interview

About five people were interviewed from Marondera Provincial Hospital, Ministry of Labour, NSSA and Provincial Medical Directorate (PMD). Of the interviewed 80% were male and 20% were female (Figure 3) The dominance of male population in the area of specialisation can be largely attributed to the fact that the type of positions is largely occupied by male.

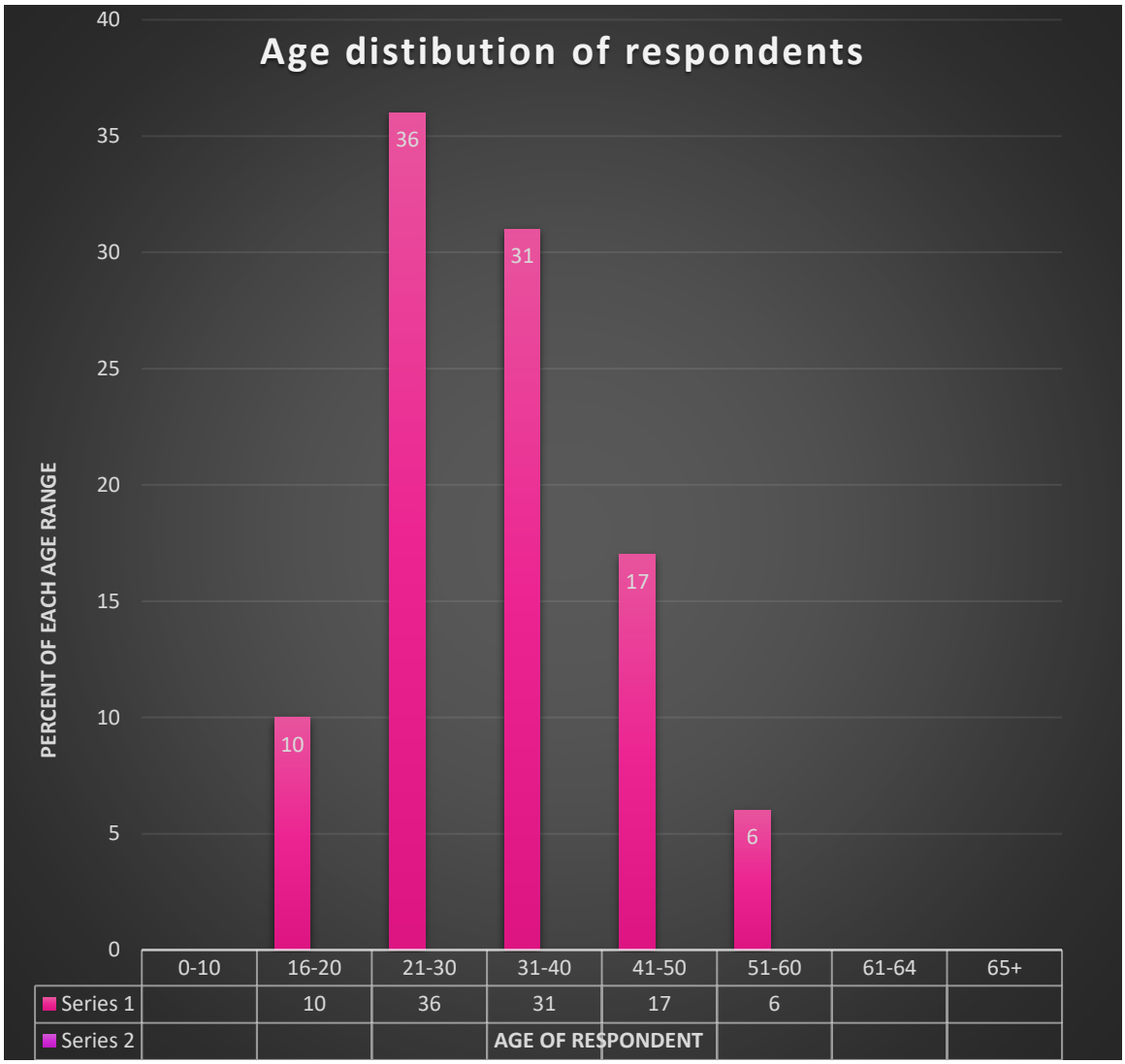
Figure 2: Gender composition for in depth interviews



Source: (The researcher, 2022)

4.3.2 Age of participants

Figure 3: Age distribution of respondents



Source: (The researcher, 2022)

Figure above shows that the majority of health workers who participated were between the age ranges of 21-30 which made up 36% of the respondents followed by the age range of 31-40 which constitutes 31% of the respondents. The other age ranges contributed less than 20% each and there were no participants of who fell in the age range of 0-10 years. This is due to the fact that the minimum age for one to start working in Zimbabwe in the government is at the age of 16 years (Labour act 28:01). At same at fifty plus age there is a smaller percentage due to the fact that one will be in the retiring range of age. The retiring age in Zimbabwe is 65years and at the period of 50 to 65 years one can go for early retirement (Labour act 28:01.

4.3.3 *Staff Education Level distribution and working experience*

EDUCATIONAL LEVEL	NUMBER	PERCENT
No formal education	nil	Nil
Primary education	nil	Nil
Secondary education	20	57,1
Tertiary education	15	42,9
Working experience		
0-5 years	10	28,6
6-10 years	10	28,6
11-15 years	9	25,7
15-20 years	4	11,4
20 years+	2	5,7

Source: (The researcher, 2022)

The sample characteristics of health workers include educational level and working experience. The results show that the respondents The results are shown above in table.

4.3.4 Job designations distribution

JOB POSITION	FREQUENCY	PERCENTAGE
Government medical officers (Doctors)	2	5,7
Nurses	13	37,1
Nurse Aides	10	28,6
General Hands	10	28.6
Out of	35	100,0

Source: Researcher (2022)

The researcher managed to issue questionnaires to the above number of health workers in each targeted designation. 5,7% were doctors, 37,1% were nurses and 28,6% each were nurse aides and general hands to make a percentage of 100% sample size.

4.5 Challenges of occupational health and safety to the productivity of healthcare workers at Marondera Provincial Hospital

From the analysis of hazards faced due to the nature of the jobs at Marondera Provincial Hospital, the researcher managed to group them in the following headings: Safety hazards, mechanical, biological hazards, ergonomic, physical hazards and psychological hazards. Table 3 shows the detail result.

TYPE OF HAZARDS	NUMBER	PERCENT
Safety hazards	12	34,3
Mechanical hazards	8	22,7
Biological hazards	18	51,4
Ergonomic hazards	13	37,1
Physical hazards	10	28,5
Chemical hazards	11	31,4
Psychological hazards	16	45,7
Out of	35	100.0

The Researcher (2022)

4.5.1 Safety hazards

34% of the respondents cited that they are facing challenges of safety hazards. They further highlighted that this is due to the slips and falls on the damaged floors at the hospital which is then leading to injuries and sprains which leads to low productivity. They also highlighted that the issue of safety hazards is due to the use of outdated machinery at the hospital like the washing machines and irons for cleaning linen for patients with naked wires which becomes a threat to one's life.

4.5.2 Mechanical hazards and Ergonomic hazards

23% of the respondents highlighted that they are facing a challenge of mechanical hazards which is due to the exposure to sharp objects which may result in cuts, stabs and needle stick. This goes in line with the findings that needle stick injuries are prevalent as this can also attest to the WHO‘s estimation that sharp injuries contribute 30% of new cases of Hepatitis B virus and 2,5% of annual infections of HIV among health care workers in the Sub Sahara. 37% of the respondents also highlighted that they facing a challenge ergonomic hazards due to frequent movements checking the patients and cleaning the wards. The respondents also mentioned that they are facing ergonomic challenges due to lifting and transportation of patients as a result leading to musculoskeletal disorders.

4.5.3 Biological hazards and psychosocial hazards

The majority that is 51 % of the respondents cited that they are facing a challenge of biological hazards. They mentioned that the causes of the biological hazards are due to the close contact with patients leading to the spread of viruses, infections and bacterium. Some of the respondents mentioned that the challenge is due to PPE shortages at the hospital which may lead to exposure to viruses and infections. A high percentage (46%) of the respondents also highlighted that they are facing a challenge of psychosocial hazards. They further mentioned that this hazard is due stress, work overload and exhausting shifts. This gives credence to Krause et al (2001) that the most common health problems arising out of work are a result of psychosocial hazards and musculoskeletal disorders.

4.5.4 Physical hazards and Chemical hazards

28, 5% of the respondents highlighted that they are facing challenges of physical hazards at the hospital. They further cited that the physical hazards are a result of slippery floors, dropped objects by the patients in the wards which may lead to falls and injuries. The respondents also mentioned poor lighting at the hospital which may lead to accidents and injuries. 31% of the respondents highlighted that they are facing challenges of chemical hazards due to the continuous use of detergents and reagents when cleaning which may lead to reactions and allergies. The respondents mentioned that they face a challenge of chemical hazards due to the exposure to some dangerous drugs that do not require direct contact to the skin.

4.5.5Challenges on the implementation of the policy

The management of Marondera Provincial Hospital highlighted that lack of funds to implement and maintain OHS measures and also purchase tools and equipment is another challenge they face as a hospital. Management contended that the central government through the ministry of health and the Health service Board have failed to provide funding and also attach a trained Occupational Health Specialist to the hospital which are requirements in the OHS policy of the Ministry of health. Management also highlighted that lack of cooperation and adherence by junior staff to rules, regulations at the workplace. It is not surprising to see employees reluctant to use safety equipment. There is also no clear administrative structure responsible for the implementation of the OHS policies in the hospital. Table 6 displays the results and the percentage associated with each challenge.

	NUMBER	PERCENT
Lack of funds to implement and maintain OHS measures	2	100
Lack of cooperation from junior staff	1	50
No administration structure in place	1	50
Out of	2	100

Source: Researcher (2022)

After interviewing two managers at Marondera Provincial Hospital, 2 mentioned the lack of funds to implement and maintain OHS measures, 1 mentioned lack of cooperation from junior staff and 1 mentioned no administration structure put in place as the challenges in implementing the OHS measures.

The researcher noted that some of the health workers both the juniors and the experienced end up ignoring the right safety procedures to get work done quickly. Some health workers ignore the right safety procedures to get work done quickly and at times using work experience as an excuse for instance some doctor and nurses end up ignoring the use of PPEs and other safety procedures in theatres. However this threatens the lives of other health workers as they are exposed to diseases and this can be viewed as a sign of carelessness. According to Hosseinian and Torghabeh, fault of person (carelessness) are negative features of a person personality although these unwanted characteristics might be acquired. Carelessness results in unsafe acts

or conditions, these unsafe acts and/or mechanical or physical conditions include the errors and technical failures which may cause the accidents which subsequently leads to injuries and exposure to infections causing diseases.

4.5.6 Other challenges

The majority respondents from the interviews highlighted that the hospital is facing a challenge in lack of funds to facilitate the OHS program. They further highlighted that the hospital is facing challenge of lack of OHS training and education so as to allow familiarity to the subject of OHS.

4.6 Measures of Occupational Health and Safety to the productivity of health workers

According to Cliff (2012) the prevention and control of occupational diseases and accidents leads to the development and promotion of a healthy and safe workplace, the enhancement of the physical, mental and social wellbeing of employees as well as the empowerment of employees to conduct socially and economically productive lives.

	NUMBER	PERCENT
Provision of adequate Personal Protective equipment (PPEs)	30	85,7
OHS Education and training	20	57,1
Enforcement of the OHS policy	20	57,1
Safety warning signs	18	51,4
Improved sanitary conditions	19	54,3
Seek for financial assistance from donors	10	28,6
Provision of medical assistance and psychosocial support to injured and sick employees	15	42,9

(The researcher, 2022)

4.6.1 Psychosocial Support

43%of the respondents from the questionnaires cited that one of the measures of occupational health and safety to worker productivity at Marondera provincial hospital is that the hospital offers psychosocial support to stressed employees and the employees with complicated family issues. They further highlighted that this is done through counselling from well trained counsellors employed at the hospital. The results are shown above.

4.6.2 Provision of Personal protective equipment various departments

86% of the respondents from the questionnaires highlighted that another measure of occupational health and safety to worker productivity at Marondera Provincial hospital is that the hospital provides personal protective equipment like face masks, disposable gowns, gloves and theatre caps so as to reduce the exposure of employees to bacteria and viruses since they work closely to patients. The results are shown above.

4.6.3 Provision of safety warning signs

51% of the respondents from the questionnaire cited that another measure of occupational health and safety to worker productivity at Marondera Provincial hospital is that the hospital provides safety warning signs. The respondents further highlighted that this reduces the chances of the employees to slip or fall on the floor which may lead to injuries.

4.6.4 Medical assistance

43% of the respondents from the questionnaires cited that another measure of occupational health and safety to worker productivity at Marondera provincial hospital is that the hospital offers medical assistance to employees in the event of workplace accidents or illness.

4.6.5 Enforcement of the OHS policy

The interviewed management of Marondera Provincial hospital cited that the hospital has an occupational health and safety policy as a measure of occupational health and safety to worker productivity. They further highlighted that they ensure the enforcement of the policy consisting of guidelines and procedures of health and safety which are to be enforced by every health worker at Marondera Provincial Hospital.

4.6.7 Provision of Occupational Health and safety training and health inspectorate

The interviewed official from NSSA highlighted that to solve the challenges of OHS to the productivity of health workers at Marondera provincial hospital, they offer the hospital OHS training, health services and health inspectorate as well ensuring the enforcement of the NSSA

act 17:04. The interviewed official from the Ministry of Labour and Social welfare highlighted that another measure of occupational health and safety to the productivity of health care workers at MPH is they provide the hospital with health and labour inspectorate as well as ensuring the enforcement of the labour act which reduces the occurrence of hazards.

From the observation list using the five likert scale the majority respondents agreed that some measures to Occupational health and safety are there. The respondents highlighted that there is the presence of health and safety guidelines at the hospital in every department, the presence of alcohol based hand rub, running water, waste management facilities and colour coded waste bags which reduces the occurrence of health hazards.

Health components	NUMBER	PERCENTAGE
Availability of running water	35	100,0
Colour coded waste bags	25	71,4
Waste Management facilities	32	91,4
Presence of alcohol based hand rub	35	100,0
Out of	35	100,0

The Researcher (2022)

*4.*7 Health and Safety standards on Occupational Health and Safety at Marondera Provincial Hospital

4.71 Availability of the OHS Policy at Marondera Provincial Hospital

The majority (71, 4%) of the respondents at MPH highlighted the availability of the OHS policy at the hospital whilst the other 28, 6% highlighted that there is no OHS policy at the hospital. The table shows the results

	NUMBER	PERCENTAGE
YES	25	71,4
NO	10	28,6
Out of	35	100,0

The Researcher (2022)

The majority also highlighted that they have the knowledge on what is written in the policy. They also mentioned that the hospital enforces the regulations of the policy through displaying the safety guidelines in various departments and wards at the hospital. They also highlighted that, the hospital enforces the policy through regular checks in the hospital department by the hospital Human resources department, SHE officers and Matrons.

4.72 National Social Security Authority (NSSA) Occupational Health and Safety standards

The respondent from NSSA highlighted that the health workers at Marondera Provincial hospital are registered to NSSA and they provide them with social security and a public policy measures which intend to protect the health workers' life situations or conditions in which their livelihood and wellbeing maybe threatened that is sickness, workplace injuries, unemployment, invalidity, old age, retirement and death. The respondent also mentioned that NSSA administers the schemes which are pension and other benefits scheme and Accident and prevention and workers scheme on which they provide the services to the health workers at Marondera Provincial hospital. More so, the respondent from NSSA cited that the occupational health and safety of the MPH is guided by the NSSA Act of 1989 chapter 17:04.

4.73 Ministry of Labour and Social welfare OHS Standards

The respondent from the Ministry of Labour and social welfare cited the occupational health and safety of Marondera Provincial Hospital is also regulated by the Labour act 28:01 that stands for the rights of employees in the event of unfair treatment and poor occupational health and safety.

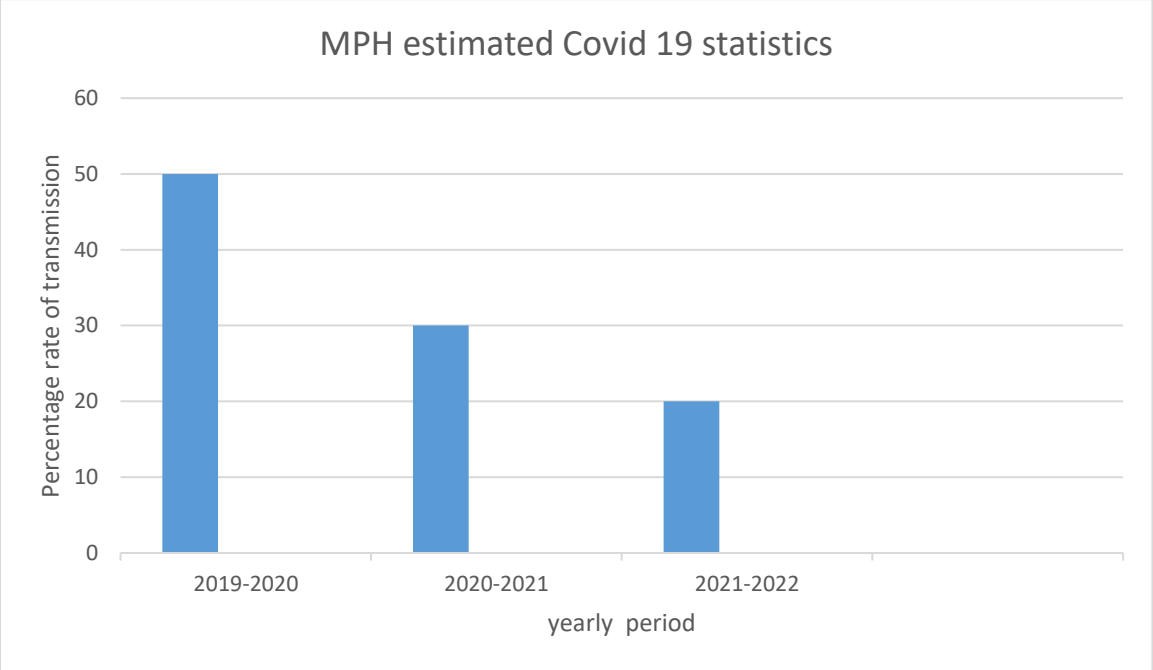
4.74 The Ministry of Health and child care (MOHCC) Standards

The respondent from PMD highlighted the OHS at Marondera provincial Hospital is regulated by the Occupational health and safety act (1981 no.155) which ensures the health and safety of the health workers at the same time ensuring that health and safety is followed at the hospital.

4.8 The relationship between Occupational Health and safety and worker productivity of health workers at Marondera Provincial Hospital

The respondents from the questionnaire cited that there is a relationship between Occupational health and safety and worker productivity at Marondera Provincial hospital as this was evidenced by a reduction in transmission rate of Covid 19 among the health workers at the hospital during the period of 2020 to 2021, 2021 to 2022. The respondents further highlighted that this happened after the emphasised use of Occupational health and safety measures like

the provision of medical assistance by the hospital, provision of PPEs and other sanitary measures. The results are shown below



Source: MPH Covid 19 report (2022)

4.9 Discussion

The purpose of the study is to examine the impact of occupational health and safety on worker productivity. The objectives of the study were to examine the challenges of Occupational Health and Safety on the productivity of Health care workers at Marondera Provincial Hospital, to determine the measures to solve the challenges of Occupational health and safety on the productivity of health care workers at Marondera Provincial Hospital, to examine the health and safety standards and policies which uphold the Occupational Health and Safety at Marondera Provincial Hospital and to establish the relationship between Occupational Health and safety and the productivity of health workers at Marondera Provincial Hospital.

The findings show that one of the challenges of occupational health and safety on worker productivity at Marondera provincial hospital are psychosocial hazards which is caused by stress, workload and exhausting shifts. This gives credence to a study by Quinlan et al (2011) where by the findings from the interviews and observations showed that the challenge of

psychosocial hazards and low worker productivity was due to stress, workload, limited training, resourcing constraints, deficiencies in regulation and fears of victimization amongst workers. More so, another challenge of occupational health and safety on worker productivity at Marondera provincial hospital is challenge of ergonomic hazards which are leading to musculoskeletal disorders thus low productivity. This goes in line with a study in chapter two by Chandrasekar (2011) who stated in his studies of occupational health and safety that the challenges of poor ergonomics result in different kinds of diseases and injuries, for instance backaches, repetitive strain injuries as a result of using computers in an area with poor ergonomics. As result this reduces the level of productivity in employees as most of them will be spending more time on sick leaves and breaks so as to gain strength to do work and recover from injuries.

More so, the findings the management at Marondera Provincial Hospital are facing challenges in implementing the policy on the hospital. This gives credence to a study in Australia by Andonakis et al (2007) who reviewed that small subcontractors who represent the vast majority of firms in the Australian construction industry faced significant challenges in adapting to the Occupational health and safety regime due to lack of implementation costs.

The study used Maslow's theory on which the theory emphasizes on safety as a need. As a result all the measures from the study findings emphasizes on the need for safety. That is the provision of personal protective equipment, safety warning signs, medical assistance and enforcement of OHS policy. This goes in line with a study carried out by Katsuro et al (2010), it was recommended that organisations should upgrade their occupational health and safety through training programmes and use up to date equipment. Training is essential in OHS because it provide with important tips on preventing accidents, minimising risks and develop ways of reducing the risks before an accident occurs.

The findings show that there is a relationship between occupational health and safety and worker productivity as this is shown by a reduction in Covid 19 virus as there was a provision of protective equipment. This goes in line with in a study in Zimbabwe of a food factory by Katsuro et al (2010), as it was noted that bad occupational health and safety practices in food factories decreases the workers' productivity due to the fact that a worker who is suffering from an occupational illness is slower and weaker, thereby missing the targets. The study noted that the decreases in productivity due to occupational health and safety hazards in different stations and work related illness which reduce level of productivity in individuals.

4.10 Chapter Summary

The research shows that occupational health and safety has a positive influence on the worker productivity the health workers at Marondera Provincial hospital. This chapter focused on data presentation, interpretation and discussion of the research findings. The next chapter gives the summary, conclusions and recommendations of the study.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter looked at data presentation, interpretation and discussion of research findings. The present chapter covers the research summary, conclusions and recommendations emanating from the study.

5.2 Summary of the findings

The Summary of the findings were presented in accordance with the research objectives of the study.

It has been observed that Health and safety has a great impact on the employee productivity. Marondera provincial hospital needs a safe and healthy working environment to prevent injury, accidents, promote health and safety by putting in place health and safety measures.

The first objective was to study the challenges of OHS on the productivity of employees at Marondera Provincial Hospital and it was noted that the health workers are exposed to hazards like psychosocial hazards, chemical hazards, mechanical hazards, physical hazards, safety hazards, ergonomic hazards and biological hazards. It was noted that these hazards are caused by the sedentary nature of their job, slips and falls, transport and lifting of patients, stress, poor lighting, chemicals like reagents and detergents and needle stick injuries.

The second objective was to study the measures of OHS on the productivity of employees at Marondera Provincial hospital and it was noted that the provision of PPEs is essential including OHS training, safety warning signs, good sanitary conditions and a functional OHS policy leads to an improved Organisation.

The third objective was to study the standards that upholds OHS at Marondera Provincial Hospital and it was noted that there is that the hospital OHS policy that has all the safety guidelines also there is the NSSA act, Labour act and the occupational health and safety act which also needs to be regulated by the hospital.

The last objective was to study the relationship between OHS and the productivity of employees at MPH and it was noted that good health and safety measures lead to high employee performance and productivity. Employees indicated that if all the challenges at the hospital are addressed their productivity will increase.

5.3 Conclusion

From the above study it has been proven that health and safety are important and have a great impact on employee performance and thus productivity.

According to the main objective of the stud, it was established that health and safety measures have direct and indirect impact on employee productivity. Direct impacts include injuries, accidents and damaged machines. Indirect costs include compensation costs to injured employees, hospital bills and repairs to damaged machines.

5.4 Recommendations

On the basis of the findings of the study, the researcher cited areas that needed improvement to have a healthy and safe environment.

First it was recommended that Marondera provincial hospital should provide a safe and healthy working environment by removing hazards mentioned above. The researcher also recommended that compensation policy should be enforced and practiced to injured employees. Training of employees on healthy and safe working techniques should be done at the same time communication of all health and safety policies, rules, and procedures needs to be done consistently on a more regular basis. This will enable gathering of useful suggestions, better decisions from employees that lead to better conditions.

The researcher recommends that staff induction programs should contain reasonable volume of organisational health and safety standards, rules, procedure, responsibilities, liabilities and sanctions. The researcher recommended that the hospital management need to know specific health and safety responsibilities and goals, which can be built into job descriptions and contracts, and morale accessible to all the stakeholders of the organisation.

More so, the researcher recommends that the hospital need to give enough insight of the risk and dander in their workplace. Through education of some of the accidents that could be minimised not eradicated entirely.

5.5 Suggestions to future researchers

Further researchers should investigate the impact of occupational health and safety of worker productivity in other ministries or sectors in Zimbabwe as this research was only limited to the health sector (case of a hospital in Zimbabwe) therefore the research findings cannot be generalized to other industries.

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Appendices

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

RE: REQUEST FOR YOUR PARTICIPATION IN MY STUDY

I B1852895, am a final year student at Bindura University of Science Education doing a Bachelor of Commerce degree in Human Capital Management. I am kindly requesting you to participate in my research study on: **The Impact of Occupational Health and safety on worker productivity.**

This research is for academic purposes, therefore information provided would be treated with utmost confidentiality and the participant will not be required to provide his or her name. Your response to the questionnaire is most appreciated.

For any information contact the undersigned on **0783956894**

Yours Sincerely

……

B1852895

Appendix A

QUESTIONNAIRE FOR HEALTH CARE WORKERS

SECTION A: Background Information

Instruction: Please Mark [√] the box corresponding to your choice concerning each statement below:-

1. Sex: Male [ ] Female [ ]

2. How old are you?

16-20 years	[ ]
20 - 30 years	[ ]
31 - 40 years	[ ]
41 - 50 years	[ ]
51 - 60 years	[ ]
61-64 years	[ ]
65+	[ ]

3. Highest educational level

No Formal Education	[ ]
Primary Education	[ ]
Secondary Education	[ ]
Tertiary Education	[ ]

4. How long have you been working at Marondera Provincial Hospital?

0-5 years [ ] 6-10 years [ ] 11-15 years [ ] 16-20 years [ ] 20+ [ ]

5. Do you work on shift bases? Yes [ ] No [ ]

6. What is your job position? ……

SECTION B:

Instruction: Please respond to the following statements by marking [√] the column that most accurately represents your opinion of the extent to which you agree or disagree to these statements.

Section A: Challenges of Occupational health and safety on the productivity of health workers at Marondera provincial Hospital.

Staff Commitment on Health and safety

1. Do you have any knowledge on what Occupational health and safety is all about?
   YES [ ]

   NO [ ]

   If YES what is it all about?

   ……

   ……

   ……
2. Do you think Occupational Health and safety is important in your organisation?
   YES [ ]

   NO [ ]

   Explain why

   ……

   ……..

   ……..
3. Do you face any Occupational Health and Safety challenges at your organisation?
   YES [ ]

   NO [ ]

   If YES, what are the challenges?

   ……

   ……

   ……
4. Have you ever suffered from an injury or accident or any illness at the workplace?
   YES [ ]

   NO [ ]

5. Did you communicate about the cause of the injury or accident or illness to the management?
   YES [ ]

   NO [ ]

6. If YES, what was the management‘s response to your complaint?
   PROMPT [ ] MODERATE [ ] SLOWLY [ ] NO RESPONSE [ ]

7. How can you rate your feeling and productivity on the next day of receiving the particular response?
   GOOD [ ] VERY GOOD [ ] USUAL [ ] POOR [ ] VERY POOR [ ]

Section B: Measures to challenges of Occupational health and safety on the productivity of health workers at Marondera Provincial Hospital

1. What do you think are the effective measures to the challenges that are faced in terms of Occupational health and safety?
   ……

   ……..

   ……..

2. What does the management do in the event of an accident, injury or illness at work?
   ……

   …….

   ……..

3. Are you provided with safety equipment and/clothing at work?
   YES [ ]

   NO [ ]

4. Is there any Occupational Health training performed in your organisation?
   YES [ ]

   NO [ ]

Section C: Health and safety standards on occupational health and safety

1. Does your organisation have a safety policy?
   YES [ ]

   NO [ ]

   If YES, How does your organisation enforce the policy?

   ……

   ……

   …….

2. Do you have knowledge on what is written in the policy?

   YES [ ]

   NO [ ]

Section D: The relationship between Occupational health and safety and the productivity of health workers at Marondera Provincial Hospital

1. Do you think Occupational health and safety leads to improved productivity?
   YES [ ]

   NO [ ]

   Explain how?

   ……

   …….

   ……..

THANK YOU FOR YOUR CONTRIBUTION

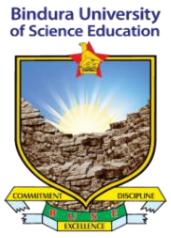
Appendix B

Personal observation checklist for Health and Safety at Marondera Provincial Hospital

Instructions: May you please tick in the appropriate column based on the scoring table.

Health and Safety Components	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Health and Safety Coordinator Available Trained					
Health and safety guidelines available and displayed					
Functional Hand washing facilities available and in use (running water, draining hand wash basin, soap, paper towel, pedal bin)					
Alcohol based hand rub facilities available and in use					
Waste management facility available and in use					
Personal Protective Equipment available and in use					
Safety warning signs available and in use					
Organisation's OHS Policy					
Recommended PPE available in sufficient quantities					
Good ventilation, artificial and natural lightning available in all units					
Checklists for routine cleaning and terminal cleaning available and in use					
Hospital approved detergents and disinfectants in use					
Cleaning equipment dedicated to specific areas					
Colour coded waste bags in use					

Appendix C



BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF HUMAN CAPITAL MANAGEMENT

B.COM HONS. HUMAN CAPITAL MANAGEMENT

INTERVIEW GUIDE FOR MINISTRY OF LABOUR OFFICIALS

I B1852895, am a final year student doing a Bachelor of Commerce degree in Human Capital Management it with Bindura University of Science Education (BUSE). I am carrying out a study on the Impact of Occupational Health and Safety on worker productivity as part of my fulfilment to the University regulations.

I would like to ask you questions about your experiences in the health and safety issues at your workplace. The information you are going to provide shall be treated with utmost confidentiality and so be free to answer the questions truthfully.

The information you are going to provide will provide guidance to hospital management on measures/systems to the challenges instilled by Occupation health and safety. The interview should take about 10 minutes.

1. How long have you been working in this organisation?
   ……
2. What is your job position in this organisation?
   ……
3. Which department do you work in? ……

4. What do you understand by the term Occupational Health and Safety?

……
……
……

5. What do you think are the challenges faced by employees in hospitals as far as occupational health and safety is concerned?

   ……
   ……
   ……

6. What are some of the systems/measures put in place by your organisation to address Occupational Health and Safety issues?

   ……
   ……
   …….

7. What are the standards and policies put in place by your organisation to address issues to do with Occupational health and safety?

   ……
   ……
   …….

8. I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know about health and safety issues at the hospital?

   ……
   ……
   ……

Thank you.

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF HUMAN CAPITAL MANAGEMENT

B.COM HONS. HUMAN CAPITAL MANAGEMENT

INTERVIEW GUIDE FOR NSSA OFFICIALS

My name is Tavonga Jean Kumire and I am a final year student doing a bachelor of Commerce degree in Human Capital Management it with Bindura University of Science Education (BUSE). I am carrying out a study on the Impact of Occupational Health and Safety on worker productivity as part of my fulfilment to the University regulations.

I would like to ask you questions about your experiences in the health and safety issues at your workplace. The information you are going to provide shall be treated with utmost confidentiality and so be free to answer the questions truthfully.

The information you are going to provide will provide guidance to hospital management on measures/systems to the challenges instilled by Occupation health and safety. The interview should take about 10 minutes.

1. How long have you been working in this organisation?
   ……
2. What is your job position in this organisation?
   ……
3. Which department do you work in? ……
4. What do you understand by the term Occupational Health and Safety?

……
……
……

5. What is the main function of your organisation in enforcing occupational health and safety?

   ……
   ……
   …….

6. What do you think are the challenges faced by employees in different institutions as far as occupational health and safety is concerned?

   ……
   ……
   ……

7. What are some of the systems/measures put in place by your organisation to address Occupational Health and Safety issues?

   ……
   ……
   …….

8. What are the standards and policies put in place by your organisation to address issues to do with Occupational health and safety?

   ……
   ……
   …….

9. I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know about health and safety issues at the hospital?

   ……
   ……
   ……

Thank you.

Appendix D

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF HUMAN CAPITAL MANAGEMENT

B.COM HONS. HUMAN CAPITAL MANAGEMENT

INTERVIEW GUIDE ROR THE PROVINCIAL MEDICAL BOARD OFFICIALS

I B1852895, am a final year student doing a bachelor of commerce degree in human capital management it with Bindura University of Science Education (BUSE). I am carrying out a study on the Impact of Occupational Health and Safety on worker productivity as part of my fulfilment to the University regulations.

I would like to ask you questions about your experiences in the health and safety issues at your workplace. The information you are going to provide shall be treated with utmost confidentiality and so be free to answer the questions truthfully.

The information you are going to provide will provide guidance to hospital management on measures/systems to the challenges instilled by Occupation health and safety. The interview should take about 10 minutes.

1. How long have you been working in this organisation?
   ……
2. What is your job position in this organisation?
   ……
3. Which department do you work in? ……

4. What do you understand by the term Occupational Health and Safety?

……
……
……

5. What do you think are the challenges faced by employees in hospitals as far as occupational health and safety is concerned?

   ……
   ……
   ……

6. What are some of the systems/measures put in place by your organisation to address Occupational Health and Safety issues?

   ……
   ……
   …….

7. What are the standards and policies put in place by your organisation to address issues to do with Occupational health and safety?

   ……
   ……
   …….

8. I appreciate the time you took for this interview. Is there anything else you think would be helpful for me to know about health and safety issues at the hospital?

   ……
   ……

Thank you.

APPENDIX E

Appendix E

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF HUMAN CAPITAL MANAGEMENT

B.COM HONS. HUMAN CAPITAL MANAGEMENT

INTERVIEW GUIDE ROR THE MARONDERA PROVINCIAL HOSPITAL OFFICIALS

I B1852895, am a final year student doing a Bachelor of Commerce degree in Human Capital Management it with Bindura University of Science Education (BUSE). I am carrying out a study on the Impact of Occupational Health and Safety on worker productivity as part of my fulfilment to the University regulations.

I would like to ask you questions about your experiences in the health and safety issues at your workplace. The information you are going to provide shall be treated with utmost confidentiality and so be free to answer the questions truthfully.

The information you are going to provide will provide guidance to hospital management on measures/systems to the challenges instilled by Occupation health and safety. The interview should take about 10 minutes.

Management commitment on Health and Safety

1. How long have you been working in this organisation?

   ……

2. What is your job position in this organisation?

   ……

3. Is there a health and safety program in at Marondera Provincial Hospital?

   ……

   ……

   ……

4. Does it work well at Marondera Provincial Hospital?

   ……

   ……..

   ……..

5. How does the programme influence the productivity of the staff?

   ……..

   ……..

   ……..

6. Is there any reason for the organisation to insist on health and safety programmes at your workplace?

   ……

   ……..

   ……..

7. How does your organisation enforce occupational health and safety?

   ……

   ……..

   ……..

8. Do you have a safety policy in your organisation?

……

……

……

9. What are the challenges of Occupational Health and safety in your organisation?
   ……

   ……

   ……

10. As the management of the hospital, how do you solve the challenges of Occupational Health and safety at your organisation?
    ……..

    ……..

    ……..

THANK YOU FOR YOUR COOPERATION

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