THE CONTRIBUTION OF OCCUPATION HEALTH AND SAFETY POLICY TO THE WELFARE OF PUBLIC SERVICE WORKERS IN TANZANIA

THE CASE OF SENGEREMA DISTRICT

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BY

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A Dissertation Submitted to the school of Public Administration and Management in Partial/fulfilment of the Requirement for Degree of Masters of Science in Human Resource Management of Mzumbe University

2015

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled "**The contribution of occupation health and safety to the welfare of public service workers of Tanzania", The Case of Sengerema District,** in partial/fulfillment of the requirements for award of the degree of Masters of Science in Human Resource Management of Mzumbe University.

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I, Joyce Manyanda Paul, declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

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Date _____

ACKNOWLEDGEMENT

First and foremost I thank God for enabling me to pursue the course in good health and strength.

My sincere gratitude goes to various institutions and individuals who were involved in this study from the proposal level through data collection and subsequently to the final stages of this work.

I would like to give my sincere thanks to my lovely husband, Mr Wandiba P. Kongoro, who encouraged and supported me both materially and morally. I appreciate his decision to allow me pursue this course at the time when we needed each other most.

My heartfelt gratitude also goes to my parents Mr. Paul manyanda (My father) and *Clemensia Fabian* (My mother) for carefully upbringing me. I thank in a special way my young sisters Margret for taking good care of my family when I was away. Lilian is highly appreciated for taking care of my Brian when I was busy writing the report.

I would also like to thank my employer DED- Sengerema (Mr.Danstan Mallya) who financed my studies throughout the studying period.

This research report would not have been possible without the support and contribution of Mr Moses Kwayu, my research supervisor as he made detailed comments on the draft copies and equally detailed suggestion for improving them. His contribution is very remarkable; also a word of thanks goes to Dr Eliza Mwakasangula, my research instructor and all teachers who participated fully in providing authentic information competently.

Deep appreciations go to all students of Masters of Science in Human resource management (2014-2015) at Mzumbe University for their team work sprit.

Actually, I thank all individuals who have not been mentioned but contributed in one way or another in the development of this manuscript. Thank you very much.

DEDICATION

I dedicate this work to my lovely sons Brian and Brighton,

.

ABBREVIATION AND ACRONYMS

AIDS	National Examination Council of Tanzania
CMA	Commission for Mediation and Arbitration
CMT	Council Management Team
PMORALG	Prime minister's office- Regional Administration and Local Governments
CRB	Contractors' Registration Board
CRSS	Costa Ricca Social Security System
EU	European Union
ILO	International Labour Organization
LC	Labour Court
OC	Other Charges
OHS	Occupational Health and Safety
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Authority
TANESCO	Tanzania Electric Supply Company
WAHSA	Work and Health in South Africa
WHO	World Health Organization

ABSTRACT

This study aimed at assessing the contribution of occupational health and safety policy to the welfare of public service workers in Tanzania: The Case of Sengerema District, the study was conducted in Sengerema district in Mwanza Region where by Sengerema district council and TANESCO branch were studies.

The study employed a sample of 133 respondents where by various data collection strategies were used. These included questionnaires, interviews, observation and documentary review. Respondents were public service employees and their employers, Trade Union Representatives, Officers from Commission for Mediation and Arbitration, Officers from OSHA Lake zone, labour officers and heads of TANESCO Sengerema Branch and Sengerema District council. Qualitative and quantitative methods (numerical and description) were used in analyzing data. Table and figure were used in presenting the data.

The study revealed that the public service is more confronted by occupational diseases than occupational accidents. It was noted that the invisible nature of occupational health has made workers in the service unconscious and silent. This in turn has resulted into minimal compliance of occupational health and safety policy in the public service particularly Sengerema district council, few resources allocation for its implementation and enforcement, lack of monitoring and control from the responsible entities and provision of measly money given as compensations to accident victims. Again practice in the study area shows that lack of safety culture has put employers at safe side since workers neither do point directly that they are affected by occupational diseases, nor do they demand OHS. Economic factor was found to be the major factor for employer's negligence of Occupational health and safety. Poor or ineffective occupational health and safety programs in the public service resulted from the government's realization of the costs of OHS services to the state. It is recommended that payment of occupational health and safety compensations be assigned to the National health insurance Fund which has resources from statutory contributions done by both employers and employees. The researcher sees an option taken by employers of neglecting OHS as desperate and that it cannot bring development.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents a background of the problem, statement of the problem, objectives of the study, research questions, significance of the study, scope of the study and limitations of the study.

1.1 Background

The percentage of all workers in the world with access to occupational health services is estimated to range from 10 to 20% (NAO, 2013). The proportion of workers and workplaces with access to occupational health services is today diminishing rather than expanding (Burton, 2010). This is so despite the efforts made by several authoritative bodies, including the International Labour Organization (ILO), the World Health Organization (WHO) and numerous professional and workers organizations who have, for several decades, emphasized the need for occupational safety and health services. The need to be concerned about incidents, injuries and illnesses; in total occupational health and safety to agree with Cliff (2012) is an indication of a problem in the system and not simply about human error.

The European Union (EU) has paid attention to occupational health and safety in its efforts to develop the social dimension of working life. A comprehensive Framework Directive (391/89) on the minimum requirements for health and safety at work has been approved and has been supplemented with some 16 special directives in the whole region. General duties placed upon the employer include duties of awareness, duties to take direct action to ensure safety and health, duties of strategic planning to avoid risks to safety and health, duties to train and direct the workforce, duties to inform, consult and involve the workforce, and duties of recording and notification (Christer, 2009). To emphasize the need for occupational safety and health in the European Union, Burton (2010) observes that every three and a half minutes, somebody in the European Union (EU) dies from work-related causes.

Occupational safety and health is important not only to individual workers and their families, but also to the productivity, competitiveness and sustainability of enterprises/organizations, and thus to the national economy of countries and ultimately to the global economy. The European Union stresses that the lack of effective health and safety at work not only has a considerable human dimension but also has a major negative impact on the economy. The enormous economic cost of problems associated with health and safety at work inhibits economic growth and affects the competitiveness of businesses (WHO Burton, 2010). It is known therefore that poor safety hurts not only the worker, but also the company, the worker's family, the community at large and the country that may have one less taxpayer. The need for safety in work-places is an imperative because accidents are in fact costly.

WHO estimates that 160 million new cases of work related illnesses occur every year, and that workplace conditions account for over a third of back pain, 16% of hearing loss, nearly 10% of lung cancer; and that 8% of the burden of depression can be attributed to workplace risks. In recent years, globalization has played a major role in workplace conditions; however, in the developing world it has in many cases brought very dehumanizing working conditions. While international expansion provides an opportunity for multinational corporations to export their good practices from the developed world into developing nations, all too often the reverse is true. As mentioned above, short term financial gains often motivate multinationals to export the worst of their working conditions, putting countless numbers of children, women and men at risk in developing nations (Burton, 2010).

According to the International Labour Organizations (ILO) report 2012, it is estimated that 2.34 million people died from work-related accidents or diseases in 2008, of which 2.02 million deaths were caused by various type of diseases and 321,000 deaths from work–related accidents. This equates to an average of more than 6,300 work-related deaths every day. Similarly, in 2005 as per ILO report, it was estimated that there were around 3,313 of fatal accidents: 12,819 of work related diseases, 16,163 of work related mortality and 3,484 of deaths caused by dangerous substances (ILO, World Day for Safety and Health at Work, 2013).

The developed countries fair on better in terms of occupational safety and health than the developing countries. For example only 5-10% of workers in developing countries as compared to 20-50% of workers in industrial countries (with a few exceptions) are estimated to have access to adequate occupational health services. In Sweden Occupational health services have covered 70-80% of the workforce in recent decades (WAHSA, 2008). On the other hand, in the USA 60% of the workforce of some 130 million employees have such access (Christer Hogstedt and Bodhi Pieris, 2000). This confirms, a potential challenge to the smaller economies found in Africa. Where background to occupational health is characterized by: Poverty, inequality, unemployment, huge challenges to health and scarce resources for health (WAHSA, 2008).

The health status of the workforce in every country has an immediate and direct impact on national and world economies. Total economic losses due to occupational illnesses and injuries are enormous (WHO, 1999). The International Labour Organization (ILO) has estimated that in 1997, the overall economic losses resulting from work-related diseases and injuries were approximately 4% of the world's Gross National Product or about US $ 2.8 trillion in direct and indirect costs of injuries and diseases. In 1992, the direct cost paid out in compensation for work-related diseases and injuries in European countries, reached 27 000 million ECUs. In 1992, total direct and indirect costs associated with work-related injuries and diseases in the USA were estimated to be US$ 171 000 million, surpassing those of AIDS and at par with those of cancer and heart disease (Christer Hogstedt and Bodhi Pieris, 2000). In the Republic of Korea, the total economic cost of MSDs was $6.89 billion, representing 0.7% of the country's GDP in 2011 while in New Zealand's they are estimated to cost the health-care system over $4.71 billion per year and constitute about a quarter of the total annual health-care costs. With such huge losses, occupational health programs should be considered as integral components of socio-economic development because poor working conditions and sick workers become a burden to industry.

In relation to occupational health and safety, the following hazards pose threats to physical safety and health of workers: - Psychosocial exposures, ergonomics and

musculoskeletal exposures, physical exposures, biological exposures, chemical and organic exposures.

Christer (2000) discusses the above in the name of emerging risks and new challenges in the area of occupational health and safety. About psychosocial exposures, he observes that up to 50% of all workers in industrial countries judge their work to be "mentally heavy". Psychological stress caused by time pressure, hectic work, and risk of unemployment has become more prevalent during the past decade. In his view other factors that may have adverse psychological effects include jobs with heavy responsibility for human or economic concerns, monotonous work or work that requires constant concentration, shift-work, and jobs with the threat of violence, such as police or prison work, and isolated work.

Ergonomics and musculoskeletal exposures in which he states that between 10% and 30% of the workforce in industrial countries and between 50% and 70% in developing countries may be exposed to heavy physical workload or to un-ergonomic working conditions such as lifting and moving of heavy items or repetitive manual tasks. Repetitive tasks and static muscular load are found in many industrial and service occupations. In many industrial countries musculoskeletal disorders are the main cause of both short-term and permanent work disability.

Physical exposures such as noise, vibrations, ionizing and non-ionizing radiations and microclimatic conditions are known to affect health. Noise-induced hearing is one of the most prevalent occupational diseases in both developing and industrial countries, although many preventive means are available.

Many biological agents, viruses, bacteria, parasites, fungi, moulds and organic dusts have been found to occur in occupational exposures. In the industrial countries around 15% of workers may be at risk of viral or bacterial infection, allergies and respiratory diseases. In many developing countries the number one exposure is to organic and biological agents, Hepatitis B and Hepatitis C viruses and tuberculosis infections particularly among health care workers.

Chemical and organic exposures including metal poisoning which does damage to the central nervous system and the liver, pesticide poisoning, skin and respiratory allergies, cancers and reproductive disorders are among the health effects of such exposures. Pesticide exposure is the major chemical hazard in developing countries where personal protection is particularly difficult. In the 1990's too there was intense concern about the possibility of increased cancer risk from electromagnetic fields and today large research efforts about harmful effects of exposure to cellular phones are also on-going (Christer et al, 2000).

Despite the difficulties, the responsibility of governments, employers and stakeholder organizations to play an active role in safeguarding the health and safety of workers is even more important in developing than in more developed regions, where the cost of occupational injury and illness is enhanced by poor social support, and the risk of such injury and illness is much higher (WAHSA, 2008).

In the past decade there has been an active process of legal reform in occupational health and safety law in most of the Southern African region, motivated by both national and international pressures. These laws give more focus to the occupational health and safety system, particularly the tripartite roles and responsibilities (Loewenson, 1996). The SADC, member states have a charter and protocol on health for which they commit themselves to upholding. Specifically it states, '*every worker in the Region has the right to health and safety at work and to a healthy and safe environment that sustains human development'*, and *'Workers have the right to services that provide for the prevention, recognition, detection and compensation of work related illness or injury, including emergency care, with rehabilitation and reasonable job security, after injury and adequate inflation adjusted compensation'.*

However, a profile of occupational health and safety in the region has not previously been described in any detail. It is no mistake that, information systems in occupational health and safety are weak and reliable information is scanty. This is especially so because OSH is the result of not only direct influences at work, but also socio-economic and socio-political factors, which determine *if* an individual works, *with what materials and under what conditions*, and *what measures are available* to protect his or her health

(WAHSA, 2008). With exception of South Africa, the other member countries manifest what is already known of the poor states; poor occupational health and safety.

Tanzania too has not been spared the gloomy situation of the underdeveloped economies. Like the other countries where workers are desperate to get and keep jobs, workers do not press for better working conditions, or refuse to take on dangerous tasks, even if they are aware of the dangers. In 2003 and 2004, for example, the numbers of accidents reported in Tanzania mainland were 1,692 and 1,889 respectively and total amount of TZS 668.5 million were used to compensate occupational accidents victims (NAO, 2013). From the concern of scanty information systems characteristic of poor countries, this boils down to underestimation as noted by African newsletter on Occupational Health and Safety (2009). It is perverse that only a certain number of occupational accidents are reported, treated, and compensated. The situation concerning occupational diseases is even more complicated: in most countries, in fact, only a fraction of the actual cases are covered, and in fact in some cases they are not mentioned at all, Tanzania is a case in point. This reflects the challenges of defining, recognizing and reporting occupational diseases.

The need to underscore the topic therefore arises from the fact that, wide experience from many countries show that a healthy economy, high quality of products or services and long-term productivity are difficult to achieve in poor working conditions with workers who are exposed to health and safety hazards. Available scientific knowledge and practical experiences of enterprises and countries, which have achieved the best results in the development of occupational health and safety reinforce that stream of thinking (Christer Hogstedt and Bodhi Pieris, 2000). To that tune, work-related accidents and diseases continue to be serious problems in the whole world. The human and economic costs of occupational accidents and diseases remain very high and the required efforts to handle them continue looming (African newsletter on Occupational Health and Safety, 2009). For example, the International Labour Organization (ILO) in 1997 estimated, the overall economic losses resulting from work-related diseases and injuries to approximate to 4% of the world's Gross National Product. Not forgetting that health is also a basic human right. Hence the imperative with which concerted efforts

should be directed at occupational safety and health of the workers of the world, and Tanzania for that matter.

However, in diametric opposition to expectation, the reverse happens in the public service. Gallagher (2001) is of the view that work-force characteristics like that of the current Tanzania public service where labour turnover is low (high job security), no part time or casual work-force; one expects an effective occupational health and safety system. Why that is not working for the public servants in Tanzania is a fact worth investigation.

1.2 Statement of Problem

Despite the efforts that have been made by both international organizations (ILO, WHO) and national efforts by establishing the Occupational and Safety Health Authority (OSHA) in Tanzania, work-related deaths continue bourgeoning (NAO, 2013). Estimations put it at an average of more than 6,300 deaths every day at the global level in 2012 (ILO, World Day for Safety and Health at Work, 2013). Much concentration on occupational health and safety issues in Tanzania are directed at the factory and manufacturing setting, considered as high risk sectors. Established under the Ministry of Labour and Employment OSHA is charged with the responsibility of ensuring safe and healthy working conditions in all workplaces, by setting and enforcing laws and standards that will be observed by employers in every workplace. The Government also established the Labour Court (LC) which is the Division of the High Court of Tanzania, the Employment and Labour Relations Act No. 6 of 2004, the Commission for Mediation and Arbitration (CMA) and the Registrar of Trade Unions, all dealing with occupational health and safety aspects. Despite these initiatives, the occupational health and safety in Tanzania is still a serious problem and the Tanzanians workers in all social economic sectors are daily affected. And at worst, the magnitude of the above problems is not well quantified especially in the public service due to its service provision nature. WAHSA (2008) for example estimated that 17.1 million services sector workers are exposed to different hazards including biological (TB and HIV) among health workers, office ergonomic hazards' related to indoor air quality, different psychosocial stress among others. ILO (World Day for Safety and Health at Work, 2013) also report that

occupational or work-related diseases remain largely invisible in comparison to industrial accidents, even though they kill six times as many people each year. Regardless of the above statistics, the public service sector in Tanzania is still considered less risky in terms of occupational health and safety hazards; which close scrutiny seem to be in denial as revealed above. It is clear from statistics that disease related deaths surpass accident related deaths by far. In fact the service related sector, the public service sector for that matter harbors more risks than is imagined. For example, ILO report (2008) indicate that of the 2.34 work related deaths only 321,000 equivalent to (13.7%) were caused by accidents while 2.02 million constituting (86.3%) resulted from work related diseases. In contrast, not much seems to be done about occupational health and safety in the service sector; public service for that matter. However, there seems to be an agreement among scholars and practitioners about a problem that cannot be ignored. Others (World Day for Safety and Health at Work, 2013) have gone a step ahead to call the problem 'an invisible killer'.

1.3 Objective of the Study

This study was guided by general objectives and four specific objectives.

1.3.1 General Objective

The main objective of the study was to examine the contribution of the Occupational Safety and Health policy to the welfare of public service workers in Sengerema District as a case study.

1.3.2 Specific Objectives

In the course of addressing the general objective above the study was guided by the following specific objectives:

i. To examine employers' compliance with occupational safety and health policy.
ii. To examine occupational safety and health risks the public servants are exposed to in the study area.
iii. To identify the amount of resources earmarked by employers to occupational safety.

iv. To examine whether the compensatory mechanisms for occupational safety and health problems are effective in Tanzania.

1.4 Research Questions

To facilitate the achievement of the objective above the study was guided by the following research questions:

i. Does the occupational health and safety policy give equal protection to all sector workers in Tanzania?
ii. What are the factors contributing to occupational safety and health risks to public servants?
iii. Is health and safety part of performance appraisal/audit in the public institutions?
iv. Are Occupational safety and health compensatory mechanisms effective in the Tanzania?

1.5 Significance of the Study

This study has a major role in labour law regime in Tanzania. The findings are expected to create awareness to the public servants with regard to the reality of occupational safety and health risks they encounter. It will also enhance the need for equal protection of workers because all work places pose safety and health risks. Again, the study is expected to cast more light on occupational diseases as a serious problem hence inviting the government to come up with proper legislation so as to secure the welfare of the public servants.

1.6 Scope of the Study

This study covered two government institutions operating at Sengerema District, namely TANESCO and Sengerema district council, the researcher was interested at probing whether implementation of the policy in local government authorities had any resemblance to that of government agencies. The use of such institutions provided an opportunity for in-depth investigation of the subject matter. The study focused on the contribution of occupational health and safety policy to the welfare of public service workers of Sengerema District.

1.7 Limitations of the study

The researcher encountered some impediments during the study. Such obstacles included budget constrains to facilitate the movement in searching for data, scarcity of data from office, delayed responses especially in filling questionnaires, some respondents lost the questionnaire papers which forced the researcher to print for them for the second time.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This study reviewed various relevant literatures from different sources in order to establish the basis for the knowledge gap and determination of the research problem. It also attempted to investigate how far the problem was in consideration to various authors. It was done through making review of various legal statutes, texts, journals and papers of various authors.

2.1 Conceptual Overview

WHO defines health as: *"A state of complete physical, mental and social wellbeing, and not merely the absence of a disease".* According to Gallagher (2001) any definition of a healthy workplace should encompass the WHO's concept of health. However, in relation to work place, he posits that definitions of a healthy workplace have evolved greatly over the past several decades. From an almost exclusive focus on the physical work environment (the realm of traditional occupational health and safety, dealing with physical, chemical, biological and ergonomic hazards) to include health practice factors (lifestyle); psychosocial factors (work organization and workplace culture); and a link to the community; all of which he observes can have a profound effect on employees health by causing occupational diseases (ibid, 2001). The most prevalent health problems caused by work include musculoskeletal disorders, respiratory and skin diseases, stress, depression, anxiety and pulmonary disorders among others.

Occupational health has been a complex issue in work places across space and time. This begins by mere identification. Gallagher (2001) in that line observes that indicators of occupational diseases are approved by the national authorities and therefore suffer from problems of comparability among countries. Furthermore, establishing the causes of work-related diseases is complex, as other factors may increase disease exposure so work related risks may simply aggravate a pre-existing illness. An additional problem is

that it sometimes takes decades for some occupational diseases to develop for example respiratory diseases.

Technological, social and organizational changes in the workplace brought about by rapid globalization have been accompanied by emerging risks and new challenges. Though some traditional risks have declined due to improved safety, technological advances and better regulation, they continue to take an unacceptably heavy toll on workers' health. However, with the very concept has given occupational health and safety a global platform. Several international, continental and regional level organizations are striving to make sure all employees are safe at work. In contrast, new forms of occupational diseases are increasing without adequate preventive, protective and control measures; for example, new technologies, such as nanotechnologies and certain biotechnologies pose new and unidentified hazards in the workplace. Emerging risks include poor ergonomic conditions, exposure to electromagnetic radiation and psychosocial risks (Cliff, 2012).

However, there is agreement among the concerned parties that occupational safety is well developed in the most industrialized world than it is in the developing. Unfortunately, due to the global economic forces, it is the industrialised world that is contributing to the deteriorating situation of occupational health and safety in the developing countries. Gallagher (2001) observes double standards, where many multinationals manage to compartmentalize their ethical codes to allow export of the most dangerous conditions or processes to developing countries where attitudes towards human rights, discrimination or gender issues may put workers at increased risk. In this way they are able to take advantage of lax or non-existent health, safety and environmental laws or lax enforcement of the laws, to save money in the short term. In disgust, he calls it "the race to the bottom."

On the other hand, African newsletter (2009) sees solution to occupational health and safety in the same global forces. It observes globalization as forcing the industrialized countries to assist the developing countries in acquiring the minimum tools, equipment and instruments that will make it possible to investigate chronic occupational diseases. In the newsletter, one commentator puts it that:-

> *"If globalization means that even people from the industrialized world are to come to the least developed countries, it will be necessary for them, in addition to their skills and expertise, to take some tools, equipment and instruments along with them to developing countries."*

This involves, at least among others, equipment required for measuring the flow of air into and out of the lungs and equipment for analyzing blood samples taken from a person suspected of suffering from toxicity due to organic or metallic substances (ibid, 2009).

In its totality, occupational health and safety touches not only on the wealth of a nation but also aspects of human rights, law enforcement and gender issues. However, as it intensifies and crosses national boundaries, the call for its enhancement as a basic human right continues to make the matter central than it was in the past decades not only in the developed world but in the developing world as well.

2.2 Theoretical Perspective

A well-known early study into safety management was undertaken by American engineer H. W. Heinrich in 1931 and is usually referred to as Heinrich's Domino Theory. Heinrich analysed a large number of industrial accidents and determined that 88% were due to unsafe acts, and only 10% due to unsafe conditions (Cliff, 2012). His findings have formed the basis of much subsequent occupational health and safety management theory.

A similar finding emerged from the development of the Safety Engineering Model (SEM), a model that was developed in the United States of America, confirming a balance in terms of unsafe acts (85%) and unsafe conditions (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 the practices (Cliff, 2012).

Since then, a number of theories have been put forward by scholars to explain occupational health and safety including systems theory or approach. The term has

found its way into use in occupational health and safety language. Flood and Jackson as quoted by Gallagher (2001) argue for a return to the richness of the concept system as a means to enhance its practical relevance in studying health and safety in work-places.

Systems' thinking is a particular way of organizing thoughts about the world, organizations and problems. Waring (Warwick, 2001) defines the concept of a system as a recognizable whole consisting of a number of parts called components or elements that are connected up in an organized way. Checkland and Scholes (ibid, 2001) describe the purpose of systems thinking as the construction of abstract systems models against the perceived real world, in order to learn about and improve some aspect of the real world. In this instance, the aspect of the real world to be learnt about and improved is occupational health and safety. However, before systems thinking can be used as an organising framework for unifying existing occupational health and safety knowledge, it is useful to have a deeper understanding of organisations as systems.

Organizations exist as systems, having both internal and external environment comprising of inputs, processes and outputs. These rely upon feedback to keep the system in a stable state. Flood and Jackson provide some degree of clarity when describing the general conception of a system in terms of it having a boundary, an environment within which it operates, feedback loops, inputs, processes. According to Talcott Parsons' (Warwick, 2001) the most general and fundamental property of a system is the interdependence of its parts or variables.

The application of systems thinking in relation to occupational health and safety evolved during the 1960's when trial and error approaches were no longer adequate for systems that had to be safe in the first place. This new approach to system safety identified that risk control must be a life-cycle effort spanning the concept, design, production, operations and disposal phases of the life cycle, with every attempt being made to design out risks in the first instance. More recently, a number of authors have called for the application of systems ideas to learning from failures and managing and improving occupational health and safety. In the 1990's, occupational health and safety moved into the third age of safety as a socio-technical age, a move away from the technical and human error ages of previous decades. Hale and Hovden as cited by Warwick (ibid)

have argued that the third age of safety, are characterised by occupational health and safety management systems.

In drawing upon systems theory Reason as quoted by Warwick (2001) argued that: Although general systems theory have been with us for quite some time, decades passed before most scholars began fully to realize their implications for accident prevention and safety. He went ahead to suggest that for occupational health and safety to work properly, a work place must be conceived as a system, with different parts that are working together for a complete whole. A failure in one part of the system therefore brings results that are not desirable to the organization such as accidents and occupational diseases.

Christer Hogstedt and Bodhi Pieris (2009) discuss different systems for supervising and improving occupational safety and health. Gustavsen (1996) in Christer (ibid) has suggested that they could be grouped into three categories: A *specification* model, where laws and regulations are at the core and where the main actors are various types of experts. A *procedure-based* model, where the potential of a rational systems approach is at the core and the line organisation is the main actor, important being internal control. A *developmental* model, where the principle of continuous improvement is at the core and the activity is distributed as widely throughout the whole organisation as possible.

The *specification model* involves the social partners in many industrial countries. The Scandinavian model for occupational health operating under this model was built upon joint agreements between the social partners rather than on specific legislation on occupational health services. In Sweden, the Working Environment Act provides for the establishment of a safety committee that plans and supervises safety activities. It also provides for the appointment of one or more workers' safety delegates who have wide powers of inspection and access to information. This combined force is authorized to order work to be suspended when it considers a situation to be dangerous, pending a ruling by the labour inspection service and despite opposition by the employer. No penalty can be imposed on a safety delegate whose decision to have the work suspended is not confirmed by the labour inspector, and the employer cannot claim any

compensation for the suspension from the safety delegate or trade union organization (Christer, 2009).

A *procedure-based* model for improving the work environment, called "internal control" was introduced in Norway and Sweden during the 1990´s. In principle, it is a system for monitoring the work environment and for defining remedial action, with a strong resemblance to modern quality control systems (Gustavsen, 1996 as cited by Christer). The idea is to identify errors and rely on the ordinary line organisation to correct them. Essentially, the point is to bring health and safety into the orbit of ordinary managerial concerns and actions. In return for its involvement, management is given a certain authority to use its own discretion in defining problems and priorities. The role of the labour inspection is defined as systems supervision where the primary point is to ensure that each enterprise has an adequate system in place. In general, it would seem that the participation of workers in the inspection of working conditions and the working environment will continue to increase, particularly in countries that have introduced "self -inspection regimes" or internal control. Such regimes depend, however, on effective and aggressive workers' organizations and their active involvement in the audit process at the enterprise level, which is the centre-piece of any such "self inspection".

The increasingly pressing nature of the issue of management involvement has brought forth a third type of approach: To see health and safety as subject to *development* and to a principle of continuous improvement. Gustavsen (1996) study of about 1300 Swedish workplaces suggested that if there is broad active involvement, there will be strong positive improvements in work environment conditions as well as in productivity. When health and safety was part of an overall process of improvement and integrated with efforts to promote productivity there was a clear management motivation. The idea of continuous improvement is widespread in working life today. Originally introduced by the Japanese, it has become a globally accepted practice and in most versions active participation from all concerned is a part of the concept.

However, in line with the three models/approaches above a watershed event in the United Kingdom is worth recognition in relation to occupational health and safety in the contemporary setting. Having chaired the National Coal Board in 1972, Lord Robens

delivered a report into Safety and Health in Work in the UK, carried out by a Parliamentary committee which he chaired. Their findings included the idea that there was too much law in OHS models in place. According to the committee the area needed to be simplified and that a balance between "prescriptive' and "goal-setting" legislation needed to shift towards the latter and encourage self regulation (Cliff, 2012). In the report, there was a push to move from prescriptive to more enabling legislation. Reflecting a shift from compliance to self-management and greater emphasis being placed on legislation with a duty of care for risk management principles and workforce representation, a major challenge for Tanzania in relation to Robens report is that even the prescriptive model seems not entrenched.

The introduction of systems thinking therefore has provided a framework and structure for the development, implementation and review of the plans and processes necessary to manage occupational health and safety in the workplace. Since its emergence, considerable development of the approach has occurred, driven by recognition of the following: Occupational Health and Safety is affected by all aspects of the design and workings of an organization, the design and management of health and safety systems must integrate environment, people and systems in proportions that reflect an organization's unique characteristics (that is, no one system is universally effective). Health and safety is a management function, and requires extensive management commitment and involvement, and lstly unifying elements produce a set of defined responsibilities and accountabilities for those activities at all levels of the organization (Cliff, 2012).

What is the need for Occupational Health and Safety in Organizations?

Scholars have provided answers ranging from ethical, business, and legal standpoints. Burton (2010) has expounded on the above needs. In explaining ethical point of view, he see it as the "the Right Thing to Do". He approaches occupational health and safety from a religious and philosophical angle. According to him, since the beginning of time the two have stressed the importance of a personal moral code to define interactions with others. The most base of ethical principles is dealing with avoiding doing harm to others. He further states that, it has been an unfortunate but common occurrence

however, for moral codes to be kept in the realm of "personal" codes, and not always applied to business dealings. Thus causing harmful impact on people and their families, resulting from the way businesses are conducted.

Burton other than looking at occupational health and safety as an imperative in modern organizations he sees it too as a human right. This is embodied in the *Seoul Declaration on Safety and Health at Work 2008,* which specifically asserts that entitlement to a safe and healthy work environment is a fundamental human right. Clearly, creating a healthy workplace that does no harm to the mental or physical health, safety or well-being of workers is a moral imperative. That has since then been recognized by many employers who have gone above and beyond legislated minimum standards, in what is sometimes called Corporate Social Responsibility. In the industrial world therefore many case studies exist that provide excellent examples of enterprises that have exceeded legal requirements, to ensure that workers have not only a safe and healthy work environment, but a sustainable community as well (Burton, 2010). In that line he applauds trade unions who have done their best for decades, pointing out the weaknesses in the moral codes of many employers, by linking business behaviour to the real-life suffering and pain of workers and their families. For the trade unions, it is even better at the moment where OSH is included in collective bargaining agreements.

The second reason related to creating healthy workplaces; is the business argument. It looks at the hard, cold facts of economics and money. Most private sector enterprises are in business to make money. Non-profit organizations and institutions are in business to be successful at achieving their missions. All these workplaces require workers in order to achieve their goals, and there is a strong business case to be made for ensuring that workers are mentally and physically healthy through health protection and promotion. Research has demonstrated that in the long term, the most successful and competitive companies are those that have the best health and safety records, and the most physically and mentally healthy and satisfied workers (Burton, 2010). Related to this, one commentator observed that:-

"Employers are recognizing the competitive advantage that a healthy workplace can provide to them, in contrast to their competition, who would feel that a healthy and safe workplace is just a necessary cost of doing business."

Burton (2010) equates the ethical and the business points of views above to "carrot" for creating a healthy workplace, but calls the legal part of his explanation as the "stick." Most countries have some legislation requiring, at a minimum, that employers protect workers from hazards in the workplace that could cause injury or illness. Many have much more extensive and sophisticated regulations. So complying with the law, and thus avoiding fines or imprisonment for employers, directors and sometimes even workers, is another reason for paying attention to the health, safety and well-being of workers (ibid, 2010).

However, given the ethical, business and legal reasons for creating healthy workplaces, Burton is still skeptical at a global situation that reveals that many, possibly most, enterprises/organizations and governments have not understood the advantages of healthy workplaces, or do not have the knowledge, skills or tools to improve things. His argument is reinforced by ILO and WHO reports which estimate that two million women and men die each year as a result of occupational accidents and work-related illnesses. WHO estimated that 160 million new cases of work-related illnesses occur every year, and stipulates that workplace conditions account for over a third of back pain, 16% of hearing loss, nearly 10% of lung cancer; and that 8% of the burden of depression can be attributed to workplace risk (Burton, 2010). In total his observation corroborates WAHSA (2008) findings that while all countries have legislation governing fundamental principles of worker health and safety, either in OSH legislation or within labour statutes, specific regulations, including legislated maximum exposure limits, are well developed in only a few countries.

Occupational Health and Safety Implementation Methods

One way that Occupational Health and Safety Management differ arises from the various methods of implementation. Frick and Wren as quoted by (Gallagher, 2001) distinguish three types: - voluntary, mandatory and hybrid systems.

Voluntary systems exist where enterprises adopt occupational health and safety on their own volition. Often this is to implement strategic objectives relating to employee welfare or good corporate citizenship, although there may be other motives such as

reducing insurance costs. In Australia for example, the state and the territorial governments lay emphasis on the voluntary systems.

In contrast, mandatory systems have evolved in a number of European countries for example (Denmark and Norway) where legislation requires adoption of a risk assessment system. Quasi-mandatory methods may also exist where external commercial pressures take the place of legislative requirements. Thus businesses adopt occupational health and safety measures to comply with the requirements of customers and suppliers, principal contractors and other commercial bodies. An Example in case is Germany, where there is a safety and health system of the statutory accident insurance funds known as (Gesetzliche Unfallversicherungsträger - UVT) alongside the public system. All companies, establishments and administrations are subject to compulsory membership which ensures insurance coverage in the event of industrial accidents and occupational diseases for all employees in Germany. The UVT is financed through employers' contributions. One of the tasks of the UVT, is to take any suitable action to prevent industrial accidents, occupational diseases and work-related health hazards and to ensure effective first aid. Monitoring and enforcement of the regulations as well as consultancy for employers and employees is the responsibility of each UVT (Gallagher, 2001).

Hybrid methods are said to entail a mixture of voluntary motives and legislative requirements (Gallagher, 2001). In this continuum, Tanzania best fits the mandatory regime where due the involuntary nature of employers to introduce occupational health and safety systems, the government introduced legislation that require employers to comply with work place occupational safety measures.

Effective Occupational Health and safety systems

There is agreement, particularly among employer associations, that occupational health and safety systems are less likely to be effective where they are imposed from outside (Mandatory type). According to Gallagher et al (2001), where the approach is mandatory an increase in the number of ineffective occupational health and safety systems become part and parcel. However, scholars have also noted the rarity of voluntary systems (WAHSA, 2008). Therefore for effective occupational health and

safety management, the following conditions have been explored to enhance effectiveness:-

Senior management commitment is a determinant for occupational health and safety effectiveness. There is evidence however, to suggest that management accountability for occupational health and safety is often weak. Dawson et al. 1988 as cited by (Gallagher, 2001) found that health and safety performance rarely featured in formal and informal management appraisals. While some enterprises include health and safety in their performance appraisal systems, there is no evidence to suggest health and safety is approached with the same rigour applied to appraisal of production or quality objectives. Generally, health and safety is raised in appraisals only in the event of a problem, and then rarely. However, on this issue David Frith in (Gallagher, 2001) has a qualified view that the amount of resources is not as important as compared to commitment. He is of the opinion that senior management commitment should be evaluated by the quality of communications and not the budget. Thus, commitment should be revolving around transparency that is transmitted all the way down through every level of management to the workforce. An open door policy, prepared to listen to every level of employee.

Several studies have included commitment and cooperation of management as a key ingredient of success (Kochan et al., 1997; Boden et al., 1984; Coyle & Leopold, 1981; Leopold & Beaumont, 1982) as quoted by Gallagher (2001) who later hypothesized that the commitment of management and labour to solving health and safety problems, may be the critical factors for success, overshadowing the objective attributes of any committee or health and safety representation.

An effective occupational health management system is often said to require integration into broader workplace management systems. The need for integrated systems has been widely supported by many authorities (Else, 1994; Quinlan & Bohle, 1991; Rahimi, 1995) as quoted by Gallagher, 2001. Else for example, cites integration as a precondition *'to make health and safety happen in the workplace'.* Various publications give practical advice on the opportunities for integration (Work-Safe, 1995; Health and Safety Executive, 1991). The integration of occupational health and safety issues into broader management systems was regarded in the literature and in consultations as

necessary for effectiveness. Research evidence on this issue according to Gallagher (2001) is scanty and inconclusive, but suggests this to be a possible area of weakness. In fact, other scholars went as far as asserting that without aligning occupational health with the general societal health system, then success is far- fetched.

Employee consultation and involvement is the third critical requirement for occupational health and safety management effectiveness. Employee consultation covers a wide spectrum of activities. At one end are methods to inform and educate employees to play a reliable and supportive role. There may also be direct employee involvement programs, for example safety inspections and quality circles, which are also likely to be management-driven. Representational arrangements for health and safety are found further along the spectrum with health and safety representatives and committees having more direct influence over health and safety decision making. At the other end of the spectrum are strategies to achieve a high level of involvement of health and safety representatives and committee members in occupational health and safety management system planning, implementation and review.

David Shaw as quoted by Gallager (2001) supports employee involvement says *'if you haven't developed it in association with your employees, you're not going to get it to operate'.* Pasmore and Friedlander, 1982 as quoted by Gallagher (ibid) reported on a U.S. study to increase employee involvement in problem-solving activity on health and safety, resulted in a reduction in injury levels over a nine-year period both before and after the action-research intervention.
However, as scholars have noted the full involvement of the employees doesn't normally happen.

For occupational safety and health measures to work effectively too, information and networking is critical. However, in many departments of Occupational Safety and Health, the records kept are inadequate or there is even no recordkeeping. Most countries do not even know which occupational diseases are the most common among their workforce or what the leading causative factors of accidents are (African newsletter on Occupational Health and Safety, 2009). For safety information, at the onset, during the induction process for new employees, critical elements of an

organization's health and safety programs could be discussed, to make employees aware of existing company safety policies. They are told about potential hazards and risks that pertain to their work environment. WAHSA (2008) argues that because of scanty information systems, many accidents are not reported because employers don't know that they should be reported or prefer not to; and workers don't know that they should be reported, or are afraid of losing their jobs if they do. Worse, work-related diseases may not be recognized in clinics or general hospitals, and are often undiagnosed or misdiagnosed as something else.

Resources for enforcement and monitoring of occupational safety and health are another problem. The resources for enforcement of occupational health legislation are limited and unevenly distributed. In the SADC region for example, only South Africa reported numbers of labour inspectors exceeding the ILO recommended ratios for first world countries of 1 per 10 000 workers, while in Malawi there were reportedly only 9 inspectors for the whole country (1 per 500 000). Resources other than human capacity are also scarce, such as vehicles, which prevents inspectors visiting workplaces in more remote areas to carry out vital functions (WAHSA, 2008). Technical resources also limit the leverage, for example in the SADC region laboratory expertise and technical equipment is in short supply with an exception of South Africa. This makes measurement of hazards impossible in most instances. The shortage of technical equipment also limits the diagnosis of occupational diseases, such as hearing loss and lung diseases.

The understanding of potential emergencies is equally important for occupational safety and health measures. The availability of equipment for emergency response must be known, and equipment must be tested. Evacuation plans or exit maps must be clearly marked and must remain unobstructed. The emergency procedure should also ensure that the alarm and public address systems are periodically tested for their functionality. It must also be verified that the personnel is aware of what each signal means (WAHSA, 2008).

Finally, a characteristic of most of the best practice cases in Gallagher (2001) was a positive relationship between management and trade unions. A study by Reilly et al.

(1995) in the U.K. found that organizations with a health and safety committee, where employee representatives were chosen by unions, had a lower incidence of injury than enterprises with a management-driven approach to health and safety management. More generally, Walters (1998) cites research studies which stress the importance of trade union support for worker representation in health and safety. The union in this case plays an important role of a safety-net since occupational health and safety touches on the rights of workers. Related to the role of trade unions, Kassian is of the view that faced with a scenario of reducing a company's operational costs, the management is ready to reduce workers rights as far as health and safety are concerned (CRB, 2001).

Efforts to Improve Workers Occupational Health in Tanzania

Tanzania passed Occupational Health and Safety Act No. 5 in 2003. This Act repealed the Factories Ordinance Cap. 297 of 1950. The objectives of this Act is to provide for the safety, health and welfare of persons at work in factories and other places of work; to provide for the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with activities of persons at work. The OHS Act applies to all establishments in the private and public sector, local government services and public authorities. The National OHS legislation includes provisions applicable to the following branches of economic activity: Construction, Commerce and offices, Agriculture etc. Similarly, National OHS legislation includes provisions concerning the following occupational hazards: Air pollution, Noise, Ionizing radiations and chemicals. The other critical statutes administered by the Ministry of Labour and Employment include: *The Employment and Labour Relations Act, 2004* and *Workmen's Compensation Act, 2008.* Also, in existence is the OHS national policy which has adopted the tripartite approach involving the government, employers and employees. Apart from the OHS Act of 2003 and other laws (mentioned above), there are other principal legislations related to OHS. They include: the Atomic Energy Act (2003), the Industrial and Consumer Chemicals Act (1985), the Tropical Pesticides Research Institute Act (1979), and the Pharmaceuticals and Poison Act (1978).

At regional and global level, Tanzania has ratified various regional and international conventions, protocols and charters. These are not legally enforceable, and on their own

do not improve working conditions or resources for OHS, but each represents a commitment to specific principles, and in some cases to specific objectives and courses of action as well. The main conventions relevant to work-related health and safety are: Relevant sections of the Charter of Fundamental Social Rights in SADC, and the SADC Protocol on Health, ILO Conventions on Occupational Health and Safety, International conventions related to the use and movement of hazardous chemicals. Very recently, Tanzania has also been taking part in the East African Community efforts that demand the member states to develop a system similar to those in the other countries so as to have a harmonized safety and health management system in the community (African newsletter, 2008). This is meant to have a separate ministry of labour in each member state to avoid having scattering occupational health and safety matters in various ministries.

The Occupational Health and Safety Act, 2003 provides for the following: Subsection (2) and (3), stipulate that every employer who has more than twenty employees in his employment at any factory or Workplace shall (c) from such time as the number of employees exceeds four designate in writing for a specified period, a health and safety representatives for that factory or workplace, or for the different sections thereof. (2) Any employer and his employees or their representatives shall make their own arrangements and procedures for the nomination or election, the term of office; and subsequent designation of health and safety representatives in terms of subsection (1). Subsection (4), The number of health and safety representatives at a factory or workplace or section thereof shall (a) in the case of shops and offices be at least one health and safety representative for hundred employees or part thereof (b) in the case of a factory or workplace at least one health and safety representative for every fifty employees or part thereof.

Subsection (I) deals with the functions of a health and safety representative appointed for the factory or workplace under this Act to include - (a) to review the effectiveness of health and safety measures; (b) to identify Potential hazards and major incidents at a factory or workplace; (c) to collaborate with his employer, examine the causes of incidents at the factory or workplace; (d) to investigate complaints by any employee

relating to that employee's health or safety at work; (e) to make representations to the employer or a health and safety committee or where such representations are unsuccessful, to an inspector; to inspect any document which the employer is required to keep in terms of this Act in so far as is reasonably necessary to perform his functions; (9) to accompany an inspector on any inspection; (h) to Participate in any in-internal health or safety audit. (i) to report accidents, near-misses, injuries, illnesses, deaths and non-compliance to the inspector.

Subsection (2) tasks employer to Provide such facilities, assistance and training as a health and safety representative may reasonably require for the carrying out of his functions.13 (I) An employer shall in respect of each factory or workplace where two or more health and safety representatives have been designated, establish one or more Committees and at every meeting of such a Committee, consult With the Committee for the purpose of initiating, developing, promoting, maintaining and reviewing measures to ensure the health and safety of his employees at work. The Committee shall hold meetings as often as may be necessary but at least once every three months at a time and place determined by the committee.

The Committee Functions include - (a) may make recommendations to the employer or, where the recommendations fail to resolve the matter, to an inspector regarding any matter affecting the health or safety of persons at the factory or workplace or any section thereof for which such Committee has been established; (b) shall discuss any incident at the factory or workplace or section thereof in which or in consequence of which any person was injured, became ill or died, and may in writing report the incident to an inspector; and (c) shall keep record of each recommendation made to an employer in terms of subsection (1)(a) and Of any report made to an inspector in terms of subsection (1)(b).

This Act also obligates employer to register his or her work place. Before any Person occupies or uses as a factory or workplace or any Premises, which were not so occupied or used by him at the commencement of this Act, that person shall apply for the registration of the premises. (2) Where the Chief Inspector is satisfied that the premises are suitable for use as a factory or workplace he shall register the premises and shall

issue to the applicant a certificate of registration in the form set out in the Second Schedule of the Act. Any person who, occupies or uses as a factory, or workplace any premises, without a certificate of registration or compliance license, commits an offence.

The Act also gives the employer the duty to ensure that (a) factories or workplaces are provided and maintained in an accessible position, and there is a supply of fire extinguishing equipment which shall be adequate and suitable having regard to the fire risk involved; (i) every window, door, or other exit affording means of escape in case of fire or giving access thereto except the means of exit in ordinary use, is distinctively marked by a notice printed in red letters on a white background and all notices are in English and Swahili and any other language as the inspector may direct; and ensure that all persons employed are familiar with the means of escape, and the routine to be followed in case of fire.

The Act also takes care of health and welfare provisions. The employer shall ensure that adequate supply of clean supply of safe and wholesome drinking water is provided and maintained and is readily accessible to all persons employed on the premises. (2) A supply of drinking water which is not laid on shall be contained in suitably covered vessels and shall be renewed daily. (3) For every number of females or males the provision of sanitary conveniences shall be one toilet for every twenty five persons or part thereof up to one hundred one additional urinal for males shall be provided in excess of forty persons. Sanitary conveniences shall be made separately for disabled employees.

Every employer who has more than four employees in his employment in any factory or workplace shall have the duty (a) to prepare a written policy on the protection of health and safety of employees and description of the organization for implementing the policy; to prepare guidelines concerning the implementation of the contents of the policy; to display a copy of the policy at any conspicuous area within the factory or workplace; to distribute copies of the policy and guidelines to all employees. To take reasonable care for the health and safety of himself and of any other person who may be affected by his actions or omissions at work.

However, regardless of the regime above and many statutes elsewhere occupational health and safety in Tanzania as it is elsewhere in the developing countries is best described by (WAHSA, 2008) who observe that while all countries have legislation governing fundamental principles of workers' health and safety, either in OSH legislation or within labour statutes, specific regulations, including legislated maximum exposure limits, are well developed in only a few countries (WAHSA, 2008).

In total, when a government or employer decides not to invest in necessary measures to protect its workers, the cost is transferred to those workers, who pay with their health, the wholeness of their bodies, and sometimes their lives. Occupational health and safety is not a luxury for wealthy countries and million dollar companies, but a reality wherever work is done. What is needed therefore to agree with ILO is a comprehensive paradigm of prevention that focuses on occupational diseases and not only injuries (World Day for Safety and Health at Work, 2013).

Workers' Compensation

When prevention efforts fail and a worker is injured or made ill at work and is unable to continue to work, he or she has an immediate financial situation to deal with, as income from work ceases. Many countries have installed "workers' compensation" systems to financially compensate injured workers while they are recovering, until they are able to go back to work. In the absence of such a system, workers with the means and the capacity to do so have often pursued litigation against the employer to recover some financial compensation for their injury. In many countries, employers and workers have chosen to endorse state or private insurance schemes to provide guaranteed income to injured workers, sometimes giving up the right to sue (Burton, 2010). In Tanzania and the public sector for that matter, the government runs a public sector compensation mechanism, which has a specific regime in labour issues "Work-men Compensation Act of 2008. Its effectiveness in compensating public servants' who happen to get injured or contact occupational diseases however, is topic for another study. Nevertheless, many governments have realized that the results of poor OHS performance are costly to the State (e.g. through social security payments to the incapacitated, costs for medical treatment, and the loss of the "employability" of the affected workers. Employing organizations also sustain costs in the event of an incident at work (such as legal fees,

fines, compensatory damages, investigation time, labour turnover, lost production, lost goodwill from the workforce, from customers and from the wider community). Hence the need for preventive and curative services for work-related health problems in many developing countries, including Tanzania is in open glare.

2.3 Empirical Literature Review

Mangasi F. N did a survey in Mulago hospital in Uganda, where he found that, about half of the respondents who had sustained a needle stick injury had never reported it. About a third of the respondents sometimes reported a needle stick injury. Only little over one in ten respondents always reported a needle stick injury. Of the 278 respondents who reported needle stick injuries, only 14 reported to the clinic staff, 182 reported to the ward manager, 23 to the head of the department, 12 reported to the casualty/accident and emergency room and 47 reported the needle stick injury to others, mainly colleagues and friends (African newsletter on Occupational Health and Safety, 2009).

The study demonstrated a high prevalence of needle stick injuries among the nurses working at Mulago Hospital, and that the majority of needle stick injuries are not being reported. The causes for not reporting needle stick injuries are lack of awareness of the policy on needle stick injury and lack of knowledge about the reporting procedure. Lack of knowledge about the reporting procedure was attributed to the lack of formal training on needle stick injuries. The lack of a policy and the absence of training on needle stick injuries depicted lack of commitment by the management to address such injuries at the workplace. Although most of the nurses were concerned about needle stick injuries, they felt neglected and thought that no one seemed to take charge of the issue; thus they saw no reason to report needle stick injuries. Even those who endeavored to report needle stick injuries claimed that they didn't get the proper support that they deserved (ibid, 2009).

A similar study of work-related injuries and accidents in public hospitals in Costa Rica in 1994 documented a disturbing increase in occupational injuries in the nations' hospitals, as well as increased costs due to time lost from work and treatment of these

injuries. The 1994 study, which was conducted by the Costa Rica Social Security System (CCSS) Department of Occupational Health, also revealed a general lack of support for, and participation in, occupational health programs throughout the health care system (Christer, 2009). The number of work-related injuries was found to be very high among all hospitals and the percentage of injuries reported extremely low. The relationship between safety climate and work injuries was found to be significant and inverse, suggesting that if safety climate could be improved, work injuries would decline. The two most significant predictors of safety climate were training and administrative support for safety. Safety climate was a statistically significant predictor of workplace injuries and safety practices, respectively, and there was an underreporting rate of 71% of workplace injuries.

In Tanzania, studies have shown that some people believe that occupational diseases are caused by witchcraft and therefore such diseases are not likely to respond to prevention or modern treatment. It has been noted that there is a tendency not to consult a physician because the individual believes that s/he has been bewitched by fellow workers (African newsletter, 2009).

WAHSA (2008) study of tanzanite miners, where deaths from work occur so regularly carries the Tanzanian notion. There is a belief among the miners that deaths are necessary for the precious stones to be found, that it is the cost that the earth demands for giving them up. WAHSA (ibid) is of the opinion that whereas this scenario may be dismissed as a result of ignorance or superstition on the miners part. It may just be an extreme example of a group of workers that has had no choice but to accept one of the fundamentals underlying occupational health and safety concept; that the health and safety of workers is a basic cost of production that cannot be avoided.

In the construction industry, a small baseline study on health and safety in construction sites was conducted in Dar-es-salaam, Mwanza, Arusha and mbeya by CRB (2001) found out that local contractors who failed to adhere to safety requirements reasons termed by the researcher as ‘excuses’ related to culture, hostile climate, theft and low productivity as the grounds for their reluctance to use safety gear. However, they did not

register such excuses with foreign contractors working under similar environment, though defaults were also observed.

In the researcher's view, though these could be examples of extreme cases of occupational health and safety scenarios in Tanzania, behind the façade lie the truth on occupational health and the beliefs and culture of the local people in their conception of occupational health and safety.

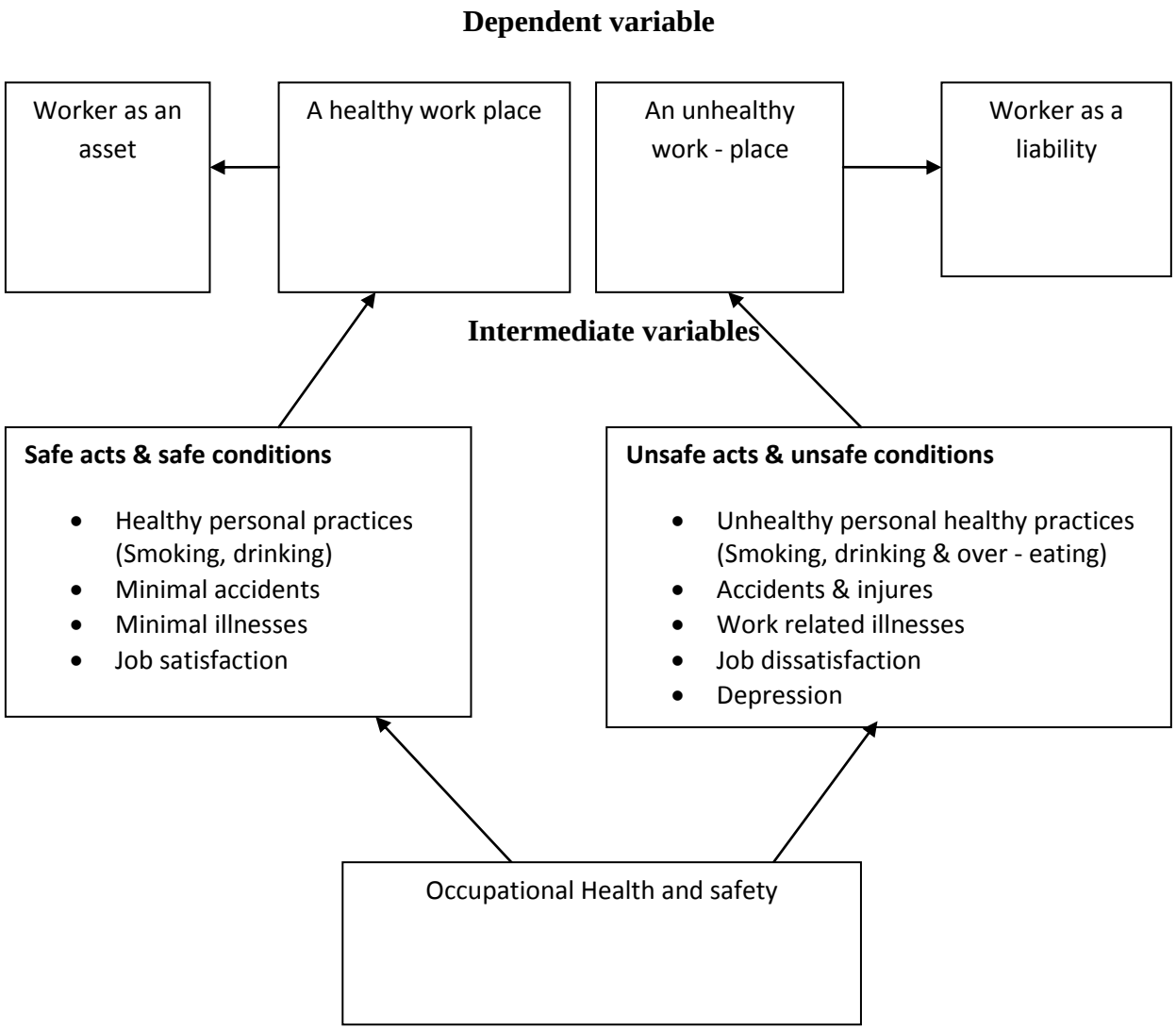
However, studies conducted at other scales also indicate that work-related risks and health problems are not evenly distributed among all working groups. The ILO notes that, "Women's safety and health problems are frequently ignored or not accurately reflected in research and data collection. Occupational health and safety inquiries seem to pay more attention to problems relating to male-dominated work (Burton, 2010).

2.4 Conceptual Framework

A conceptual frame work acts as a map that guides a researcher to be organized in a manner that makes them easy to communicate to others (Kothari, 2004). It enables the researcher to find links between the existing literature and his own research goals. The independent variable for the study is Occupational Health and Safety in Tanzania. The intermediate variables are safe/ unsafe acts, safe/ unsafe conditions in-built in the policy which eventually determines the behavioral and engineering patterns in a work place and dependent variables are poor/healthy work-places. That is occupational health and safety as an independent factor requires a good policy which embraces both safety acts and safety conditions to create a healthy work-place which is a dependent variable. If there will be a good policy, better enforcement of safe acts and safe conditions in-built in it, then working places will be healthy and workers will be healthy too leading to optimal public service delivery and vice versa. In total, good public delivery depends on a healthy worker who also depends on a healthy work-place which is a product of occupational safety and health policy.

The following structure/ diagram is my conceptual frame-work for the study which indicates the relationships between independent variables, intermediate variables and dependent variables; that is Contextual factors (supporting and non-supporting).

Figure 2. 1: Conceptual Framework



Source: Own researcher's design.

2.5 Research Gaps

Different literatures were reviewed to identify the research gap that need to be fulfilled by the study. In doing that, the researcher was guided by the available theoretical underpinnings and empirical findings by various researchers in the study topic.

A number of researches on OHS have focused on what is considered hazardous work, giving primary attention to workers in sectors where the risks to life and safety are

manifestly high, such as agriculture, mining and construction, workers in the informal sector, and those occupationally exposed to abuse and exploitation, such as women, children and migrants (Christer Hogstedt and Bodhi Pieris, 2009). While it is customary to think only of physical hazards as having an effect on the safety of workers, this is not always the case. Sometimes non-physical or psychosocial hazards in the workplace can also affect physical safety (Burton, 2010). The ILO has provided statistics showing that deaths resulting from occupational diseases by far outweigh those resulting from accidents. Whereas it is also true that all work places pose potential risk to workers, in Tanzania the service sector which is the bulk of government activities is easily ignored in studies related to occupational health and safety problems. It is therefore in the interest of this study to look into the service sector as an equal health risk to workers especially with regard to the public service and mainly the local government level.

On the other hand, a major impression is that very little has been published on occupational safety and health from developing countries where 80% of the workers are exposed to occupational hazards (Christer Hogstedt and Bodhi Pieris, 2009). It is in the interest of the researcher therefore to localize the study of occupational health and safety in Tanzania and specifically the public service sector which in most cases hasn't attracted the eyes of occupational health researchers'.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

This part presents methodology of the study, the research methods which was adopted, target population, the sampling procedures, techniques and sample size, the study location, data collection methods, types and sources of data and method of data analysis. Generally, research methodology focuses on the way the data was collected, analyzed and interpreted for attainment of research objectives.

3.1 Locations of the Study Area

The study was carried out in Sengerema District which is in the lake zone part of Tanzania. Sengerema was selected for the study due to its geographical location; it is one of the farther districts from the regional headquarters where OSHA's regional offices are located. It has work places located in small islands far away from the mainland which need to be inspected and trained on occupational safety and health management.

3.2 Research Design

A research design is an outline or plan used to generate answers to research problems (Orodho, 2003). In this study therefore, a case study design was used for the study. Case study design was employed in this research work due to the following reasons: first, it was an interest of the researcher to have in-depth exploration of the contribution of occupational health and safety policy to the welfare of public service workers at Sengerema district. Second, the researcher wished to triangulate the study through full use of the potential of multiple methods. Third, lack of fund made the case study more suitable for this research since the study covers small area. Under this study, data was collected from selected work places in Sengerema District. Also, OSHA regional officials were contacted for relevant information. Public servants who have had safety and health related complications were identified and asked the remedies they received.

3.3 The Study Population

A population in research refers to those elements that make up the focus of the study that fit fixed criteria (Wood and Haber, 2010). It is therefore a collection of elements about which one wishes to get information from. The study confined itself to public servants but the case study was Sengerema District from where sample were taken. However, since labour and OSHA offices are arranged regionally, the researcher also drew a sample from the two institutions in Mwanza. For the purpose of this study, research population included, District Executive Director, Tanzania Electric Supply Company (TANESCO) District head, Heads of Departments/Divisions/ Sections, supporting staffs, victims of occupational safety and health of the two institutions in Sengerema district and trade union officials. At the regional level, heads of the two institutions (labour and OSHA) were also involved. All of these were included in order to allow a researcher to get in-depth information on the policy's effectiveness in protecting the health and safety of public workers.

3.4 Sampling Methods

Purposive sampling is the deliberate selection of particular units of the universe for constituting a sample which represent that universe (Kothari, ibid). For this study, respondents in the purposive procedure were employees who have had occupational related diseases or accidents (victims), employers, Occupational Safety and Health Authority officials and labour officers, trade union officials. These categories of respondents were purposively selected because they had an in-depth understanding of the phenomena under study Mapp (2008). The labour and OSHA officials as compliance and enforcement agents, the employers/head of organizations as implementing institutions, trade union officials as protectors of employees interests and the victims as having experiential knowledge on the matter.

Simple random sampling is where each and every item has equal chance of inclusion in the sample and, in case of finite universe, has the same probability of being selected (Kothari, 1990). The respondents in simple random sampling were picked randomly from among the employees in the work-places visited by the researcher. This is because it is

the largest group among the categories (100 respondents) in the study. It is important to carry simple random sampling procedure to avoid coming up with biased conclusions.

3.4.1 Sampling Frame

According to Kombo and Tromp (2006:22) sampling frame is a list of individuals/objects from which a sample for the study is drawn. Individuals in the frame normally have the same property that is identifiable in every single element. The sample frame obtained from Sengerema district included employees in different work-places in public service in the district including such sectors as:- administration, agriculture, security, health, works among others and involved employees in various ranks and gender. This sample frame was manageable in terms of data collection since it was not easy to collect data from the whole population.

3.4.2 Sampling Unit

Sampling unit refers to the geographical location or unit the researcher would adopt in selecting items for the sample (Kothari, 2004). Sampling unit may be a geographical one such as Region, District, or Village. For the purpose of the study, the sampling unit was Sengerema District which is situated in the lake region of Tanzania.

3.4.3 Sample Size

Sample size is the exact number of items selected from a population to be sampled for study (Kothari, 2004). The sample size was determined by the number of workers and employers in Sengerema District. Therefore, in this study the researcher used a sample as indicated in the table below;

Table 3.1: Sample Size

S/N	Description of respondents	Number of respondents
1	District Executive Director	1
2	Officer Heading TANESCO District	1
3	Occupational safety and health official (OSHA)	1
4	Sengerema D/C Heads of Department/Division/Section	6
5	Labour department official	1
6	TANESCO district employees	10
7	Supporting staff in the D/C	90
8	Occupational safety & health victims	20
9	Trade union officials	3
	Total sample size	**133 respondents**

Source: Field Data 2015

3.5 Methods of Data Collection and Tools

Data are a collection of facts, such as values or measurements. It could be numbers, words, measurements observations or description of things (Kothari, 2004). For the purpose of this study, both primary and secondary data were collected as described below:

3.5.1 Primary Data

Primary data are information gathered directly from respondents or firsthand records which are both qualitative and quantitative (Kothari, 2004). This study collected data from the field in Sengerema District Council. Primary data were collected using the following methods and tools;

3.5.1.1 Observation

Under this method, information is obtained by the researcher's own observation. It was good for surveying the work places by the researcher. The method was also help to compliment and supplement information collected through face to face interviews. This technique is good for its independence of the respondent's willingness (Kothari, 2004).

3.5.1.2 Focus Group Discussion

Focus Group Discussion (FGD) is also a technique which was used for primary data collection. The researcher conducted group discussions with groups of six informants

with the guidance of the researcher as a facilitator. This method allowed the researcher to hear the views of the respondents on the subject matter. The participants were selected basing on the service they are engaged in, sex, grade and the longevity of their service.

3.5.1.3 Interview Method

Kothari, (2004) states that, interview is a purposeful discussion between two or more people and it refers to presentation of oral, verbal stimuli and getting replies through oral verbal responses. Structured interviews consist of the interviewer asking each respondent the same questions in the same way (Henning et al, 2004). Structured interviews were preferred in this study because they are easier to prepare and manage while at the same time providing the researcher with detailed information on the problems raised, it also provided adequate information about particular cases of interest to the researcher. Structured interview will also allow the investigation to be explored in depth and breadth to enable us address specific aspects of the study (Hancock, 1998). However, for flexibility to accommodate the nature of respondents at the local level, semi-structured and unstructured interview were used.

Interview was conducted with the employers, labour officers, OSHA officials and the occupational safety and health victims. Through interview the researcher was able to get a complete and detailed understanding of issue from the respondents. Interviews were carried out at the interviewees' work places and recording was done to avoid misreporting the respondents.

3.5.1.4 Survey Method

Survey method is the method of gathering data by asking questions to people who are thought to have desired information. The advantage of survey method is its effectiveness in producing information; questions are simple to administer and also data are reliable. Before distributing the questionnaires, the researcher explained the purpose of research to the respondents and they were assured confidentiality of information so provided.

3.5.1.5 Questionnaire Tool

Pannerselvam (2007) defined questionnaire as a well formulated set of questions to probe and obtain responses from the respondents. This tool is most accurate because it was user friendly, faster and most efficient in data collection. It gathered and provided the information that is not contained in other sources like books, newspapers and internet sources. The questionnaire was prepared and filled by the staff and their employers. This tool was employed to reduce bias and it gave the respondents convenient time and freedom in responding to questions. Structured questionnaires which allowed respondents to choose among the choices and a few open ended questions to ensure validity and reliability were used. However, the researcher employed more of closed ended questions which are recommended by other researchers (Kothari, 2004) for its ease of data coding, time saving and wider coverage within a short time, that is, its convenience to the researcher.

3.5.2 Secondary Data

Secondary data are data obtained from the existing records or publication (Panneerselvam, 2007). For the purpose of achieving objectives of this study, secondary data were collected because most of them are permanent in nature; it cost less time and money to obtain them. In this study secondary data were collected through surveying various researches in the field, different publications (pamphlets, leaflets and booklets) and magazines discussing the topic under study. These documents were helpful in obtaining various data for comparison and references.

3.5.3 Documentary Review

Documentary review was done by using the documents available at the employers' premises. Documentary review of different reports, committee recommendations, employers' records, workplace occupational health and safety policies and the over-all policy paper, MTEF and business plans were reviewed.

3.6 Data Analysis

The data was analyzed by a computer package, statistical package for social sciences (SPSS) 2013. In this analysis, data were cross-tabulated to produce percentage of responses. Frequency, mean, and percentage were used to determine respondent's profiles and opinions. In analyzing data for this study, both qualitative and quantitative methods of analyzing data were applied. Under the qualitative techniques, data were analyzed by content analysis and ranking them into clear patterns of information. Open ended questions in questionnaire and information from interview were coded before being entered into the computer for the purpose of analysis. With regard to quantitative data they were analyzed by making use of MS-excel and SPSS.

3.7 Reliability and Validity of Data

To ensure the validity and reliability of the research tools, questionnaires were pre-tested and refined at different times and areas. The language, wording and extent to which tools are able to capture information responding to research objectives were also be pre-examined during the pilot study. Pre- testing of the research tools checks for the consistence of the research tools to the objectives and the respondents (Mikkelsen, 1995).

3.7.1 Reliability of Data

Many authors argue that the broad and abstract concepts of reliability and validity can be applied to all researches because the goal of finding plausible and credible outcome explanation is central to all research (Hamersley, 1992: Kuzel and Engel, 2001).

The extent to which results are consistent overtime and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology then the research instrument is considered to be reliable (Joppe, 2000). To ensure reliability, the tools were pre-tested before they are used in the actual collection of data. At the same time data were analyzed uniformly to ensure that the results and conclusions drawn from the study if reproduced, give the same results if the research is conducted again using similar methodology.

3.7.2 Validity the Data

Validity refers to tests for determining whether a measure is measuring the concept that the researcher thinks is being measured. It determines whether the means of measurement are accurate and whether they are actually measuring what they are intended to measure, hence, validity provides a lens of evaluating the findings of a qualitative research (Hoepfl, 1997). In this study, validity was ensured using different methods of data collection hence increasing complementarities for avoidance of error in use of one method. The use of various methods including questionnaire, focus group discussion (FGD) and interview which resulted into triangulation which turn ensures validity of the collected data.

3.8 Ethical Considerations.

In research, ethical considerations are very important for smooth operation especially in the process of data collection. Ethical issues in research are to protect human rights and privacy from being infringed by scientific experimentation as well as to safeguard the credibility of the research (Keya and Makau et al, 1989). In this study, the following ethical considerations were necessary; informed consent, confidentiality and privacy. The decision to participate or not was on free will of the respondents thereof. To maintain confidentiality, the identity of the respondents was concealed through coding and labelling instead of naming. And for privacy the respondents took the decision on where and when to take the interview as advised by (Leary, 2001).

CHAPTR FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter presents the findings, analysis and discussion of the findings that were obtained through questionnaires, interviews, observation, and discussions to investigate the contribution of occupation health and safety policy to the welfare of public service workers in Sengerema District. The findings are based on the main objective and specific objectives of the study which were to examine employers' compliance of occupational safety and health policy, to examine the nature of occupational safety and health risks the public servants are exposed to in the study area, to identify the amount of resources earmarked by employers to occupational health and safety and to assess the effectiveness of occupational health and safety compensation mechanisms. The chapter covers introduction, respondents' profile, presentation of findings and summary of the findings.

4.1 Respondents' Profile

The characteristics of the respondents in terms of age, sex and respondents' level of education were obtained to find out whether they had any relation to occupation health and risks.

4.1.1 Age of the Respondents

The parameters which were used in interrogating the age of the respondents were from 18 to 60 years. These parameters were chosen as employee in the public service enter into employment from the age 18 and exit employment when they 60 by compulsory retirement.

Table 4.1 the distribution of respondents by age

Respondents Age- rank	%	No
18-28	25.6	34
29-39	39.8	53
40-50	23.3	31
51-61	11.3	15
Total	100.0	133

Source: Field Data Survey, 2015

In the study it was noted that employee whose age ranked from 29-39 were most vulnerable to accidents due to the fact that most of such employees worked in extension offices and the nature of their transport put them in such situations. Also the findings depicted that newly employed employee were more likely to get injuries especially in the field of health due to errors caused by lucky of experiences. The trend of accidents in the study was higher to newly employed workers then it appeared to drops at the age of 40s and rose at the age ranking between 51and 60 due to exhaustion and stressing responsibilities.

4.1.2 Respondents' Level of Education

With reference to level of education, the study indicates that 16 (12%) respondents had ordinary certificates, 66 (49.6%) Diploma, 40 (30.1%) had bachelor degree and11 (8.3%) had Masters. The table below has the details.

Table 4:2: Respondents' level of education

	%	No
Certificate	12.0	16
Diploma	49.6	66
bachelor degree	30.1	40
Masters	8.3	11
Total	133	100.0

Source: Field Data Survey, 2015

In the study it was found out that worker who had bachelor degree and above were aware of the existance of occupational health and safety policy than those whose education were in the level of diploma and certificate(form four).This is under the

explanation that at the university level some people are taught some policies related to the working environment

4.1.3 Respondents distribution by sex

The study findings show that 62.4 % were male and 37.6 were female. The table 4:3 below has the details.

Table 4:3: The distribution of respondents by sex

	%	No
Male	62.4	83
Female	37.6	50
Total	100.0	133

Source: Field Data Survey, 2015

These results suggest that the findings of this study have been equally influenced by both males and female respondents.

4.2. Employers' compliance of occupational safety and health policy.

The compliance status was reflected by the responses on questions related to prevalence of prerequisites stipulated by the policy as well as the Occupation safety and health act such as presence of Health representatives, registration of work places, supply of fire extinguishers, presence of emergency exits, supply of clean and safe drinking water, provision of sanitary conveniences, preparation of institution health and safety policy and guidelines and communication of occupation health and safety issues to other employees of the institution.

Table 4:4: the rate of compliance through an assessment of key issues

Compliance Requirement	SENGEREMA		TANESCO	
	Yes%	No%	Yes%	No%
Presence of health and safety committee	11.1	88.9	100	0
Registration of the organization by OSHA	0	100	100	0
Presence of Written OHS policy	33.3	66.7	100	0
Pre- employment medical examination done	65	35	100	0
Presence of first aid boxes	24	76	80	20
Presence of fire extinguishers and emergency exits	40	60	100	0
Presence of sanitary conveniences such as latrines and urinals	80	20	60	40
Supply of safe clean drinking water	4.4	95.6	0	100
Appraisal of welfare services	35.6	64.4	100	0
Average score	**32.5**	**67.4**	**74**	**26**

Source: Field Data Survey, 2015

The findings revealed that, employer's compliance at Sengerema District council was minimal while at TANESCO it was relatively reasonable. This implies that district council failed to implement even the most basic elements contained in the occupational health and safety policy while TANESCO was comparatively far much ahead in nearly all aspects of safety. However it seems that more effort is devoted on Occupational Safety than Health.

The findings from questionnaires were then complemented by interviews, observation and documentary review which then confirmed that Sengerema district council was not

registered by OSHA, it has no occupation health and safety policy, Representatives as well as health and safety Committee. It has also not been inspected by OSHA as required by the policy.

The researcher also consulted the OSHA officials with the aim of finding out what could be the reasons for such a large working place with 5011 employees to be unregistered. OSHA officials affirmed not to have Registered Sengerema district council under the reasons that Government entities with the exception of government agencies have been reluctant to pay registration and inspection fees. One official said

"*We have been dealing much with private institutions such as mining companies because government organizations do not pay us registration and inspection fees which is basically required to run our Authority*"

According to documentary review and interview with OSHA officials, OSHA is required to collect revenue for its operations, this demand has diverted its focus from prioritizing inspection based on work places which are more vulnerable and exposed to risk, to inspection based on revenue collection. This is to say Workplaces whose inspections were seen to be costly compared to the expected revenue to be collected from them were given less priority regardless of how risky their operations were. This is mainly what transpires in Sengerema District council and actually work places of that nature.

Again 83.3% of the surveyed respondents were not satisfied by the way their institution handled OHS. Also there was no exit emergencies in the working places, only 3 fire extinguishers at the district council headquarter of which 80% of the employee did not know how to operate.

Table 4:5: Employees 'ability to operate fire extinguishers

	%	**No**
yes	7.8	7
No	92.2	83
Total	100.0	90

Source: Field Data Survey, 2015

4.2.1 Policy compliance at TANESCO

On the other hand, policy compliance at TANESCO was high and satisfying. This attracted the researcher to find out how could the two government institution working at the same place differ that much. It was then revealed that TANESCO as an Independent government agency had established an internal control of Occupational Health and safety. This was basically a result of several reported occupation deaths and accidents that had become a threat to the organization.

Table 4:6: The trend of Occupation accidents in TANESCO nationwide up to 2011

	2009		**2010**		**2011**	
	No of accidents	Deaths	No of accidents	Deaths	No of accidents	Deaths
Electrocution	1	1	2	2	1	-
Electrical shocks	4	0	2	-	-	-
Hit by pole	-	-	1	-	-	1
Hit by bolt	-	-	2	-	1	-
Hit by tree branch	-	-	1	-	1	-
Falling from height	6	6	10	2	4	2
Motor Vehicle accidents	6	2	23	2	1	1
Total	27	5	41	6		

Source: Field Data Survey, 2015

Following such a situation, TANESCO instituted mechanisms to ensure that it becomes an accident free working company. These included right employee placement (relevant expertise),Training on Occupation health and safety, Safety inspection and audit, daily safety meetings, safety competitions, safety tours and application of both positive and negative reinforcement. The institution also insists on implementation of company OHS policy and it is determined to observe rectification of discrepancies and use of safety documents such as accident/near miss register, RMF and Personal protective equipments. The efforts have resulted into diminished number of accidents. For instance there were no accidents for two consecutive years in TANESCO Sengerema Branch

2013and 2014. There were mere 4 near misses which were reported, cured and registered in the near miss register.

The company also had an accident register in which all accidents and occupational diseases were recorded giving detailed information on the accident/ disease and the way it was solved or dealt with. Surprisingly even minor clashes were recorded. This was said to have apart from safety purposes some psychological impact to employees and job satisfaction at last.

Moro ever TANESCO had a department to deal with occupational health and safety issues which comprised of a Safety Manager, safety staff and inspectors at the head quarter and there are Safety representatives at every branch.

Such good practices could be adopted by Sengerema District council and actually the Ministry of Prime Minister's office regional administration and local governments (PMORALG) since some of the practices need no use of fund at all for example morning safety meetings could be conducted during the morning prayers done by the Council management Team(CMT). Orientation programs could encompass occupation safety and health topics. Health and safety record keeping can be adopted as well as departmental safety competition.

Generally, it was revealed that, employer's compliance at Sengerema District council was minimal while at TANESCO it was relatively reasonable. The reasons that were given by respondents for minimal compliance include the following:-economic factors, insufficient managerial commitment, poor enforcement from responsible authorities and lack of mechanisms for accountability on issues related to occupation health and safety. This brings us to the conclusion that the compliance of the OHS policy depends much on managerial commitment and it works better when it is internally owned by the institution members.

4.3 The occupational safety and health risks the public servants are exposed to

In attempt to examine occupational safety and health risks, respondents were inquired on the kind of risks that they are exposed in their workplaces basing essentially on occupations. The findings portrayed that risks varied in respect to nature of activities

conducted in different occupations and this explains why risks encountered by drivers were different from risks of health workers, likewise risks facing employee at TANESCO were different from those in Sengerema District council.

4.3.1 Occupational risks at Sengerema District council

The study revealed accidents (motor vehicle, electrical shorts cuts and fracture), and occupational diseases such as back pain, eye problems, TB,HIV/AIDS(to medical practitioners), and heart problems to be the major risks the public servants are exposed to in the study area: this is supported by the number of victims the risk scored as stipulated in the table below.

Table 4:7:-The kind of occupational complications

	%	No
Fractures	5.0	1
Needle prick	10.0	2
Motor accident	20.0	4
cuts	5.0	1
back aches	15.0	3
back ache and eyes problems	5.0	1
eyes problems	20.0	4
HIV/AIDS	5.0	1
Allergies	10.0	2
Heart problems	5.0	1
Total	100	20

Source: Field Data Survey, 2015

It was observed that most employees who use computers in their daily activities especially personal secretaries complained of suffering from back aches and eye problems. One respondent commented that:-

"Working with computers requires us to drink some milk for the safety of our eyes, however, the employer rarely provides and we cannot afford to buy milk ourselves"

However, when interviewed, employees with eye problems, back pain, work stress, explained that they were not aware if such problems needed to be reported to their employers and so they did not bother to report the matters to their employers.

Teachers complained of been affected by chalk dusts which resulted into allergies related to flue, coughing and respiratory problems.

The findings from Health workers portrayed that nearly half of respondents in this field had experienced at least one occupational injury in the past 12 months. The majority of healthcare workers reported HIV transmission as one risk factor when occupational safety is lacking. Most of the occupational exposures to HIV and other transmitted diseases were experienced by female nurses, Doctors and nurses frequently encountered occupational injuries in surgery room and labor room respectively. Staffs with knowledge on the possibility of transmission of diseases and those who knew whom to contact in event of occupational exposure to HIV were less likely to have poor practice of managing occupational exposure.

This suggests that lack of awareness makes the public service more risky and important actors of OHS unaware of the risks that the public servants face in the course of their employment as a result employees in the public service end up sacrificing their health and lives.

Again drivers and extension officers were noted to be more vulnerable to motor accidents and back pains due to daily travel for drivers and means of transport (motor cycles) to the extension officers. for example between 20 occupation and safety victims, 5 were Agriculture and livestock field officers, 3 drivers,1fisheries officer, 1 ward executive officer, , 1teacher, 4 health workers(nurses) as shown below

Table 4:8: Distribution of OHS victims occupational wise.

	%	No
Agriculture and livestock officer	25.0	5.0
driver	15.0	3.0
Fisheries officer	5.0	1.0
personal secretary	20.0	4.0
Teacher	5.0	1.0
WEO	5.0	1.0
Health staff	20.0	4.0
Office assistant	5.0	1.0
Total	100.0	20.0

Source: Field Data Survey, 2015

Furthermore, the findings show that male employees were more affected by occupational accidents where as female employees were more exposed to occupational diseases for instance the cadre of nurse midwives and medical attendants was mostly comprised of female staffs who were daily injured by sharp objects such as needles, scalpels and splintered bone during execution of their duties. The table below shows the rate of occupational accidents found in the study population.

Table 4:9: Distribution of OHS victims by sex

	%	No
Male	60.0	12
Female	40.0	8
Total	100.0	20

Source: Field Data Survey, 2015

It was further observed that extension officers were more vulnerable to accidents due to the use of motor cycles in their daily activities. For example the distribution of council motor cycle departmental wise is as follows:-

Table 4:10: Distribution of council motor cycle at Sengerema District.

No.	DEPARTMENT	NUMBER OF MOTOCYCLES	%
1	Agriculture and livestock	30	57
2	Health	5	10
3	Community Development	4	8
4	Water	7	13
5	Education	2	4
6	planning	1	2
7	Finance	1	2
8	Administration	2	4
	TOTAL	**52**	**100**

Source: Field Data Survey, 2015

The researcher was also interested to know whether employees using motorcycles were trained on how to drive and had driving license or not and the findings were that about 20 employee use motor cycle without having driving licenses.

This implies that some employees use motor cycles without required qualification thus making them more vulnerable hence there is a need for both the employer and the employee to revisit their responsibilities so as to facilitate safety and health at work place.

More over the study found that 45.6% of respondents believed that their health was affected by their work. Overall fatigue, eye problems and backache are the most commonly cited negative health effects of work. Heart problems, anxiety and headache are other key health problems mentioned by the respondents. One important consequence of these health effects is the high incidence of absenteeism resulting from health problems. According to the interview with the District human resource officer, it

was reported that Over a period of 12 months, 58% of workers were absent from work at least one day for health-related reasons. The following chart shows the cited causes of occupational diseases and accidents.

Table 4:11: causes of occupational diseases and accidents

	%	No
Domestic environment	10.0	9
Life style	31.1	28
Work place	45.6	41
Others	13.3	12
Total	100	90

Source: Field Data Survey, 2015

Generally, surveyed respondents at Sengerema District council said that they were exposed to various types of risks including accidents and occupational diseases. They also reported inadequate safety and health standards. However, they are often poorly informed of the risks at work which means that they are not well prepared to cope with them. Hence public service workers at Sengerema district council are exposed to a risky working environment which needs to be addressed.

4.3.2 Occupational Risks at TANESCO

According to the findings obtained from questionnaires and interview, TANESCO employees pointed out electrocution, electrical shocks, falling from height, hit by pole and bolt, cutting/ falling objects and motor accidents to be the major risks they are exposed to.

However it was found that the institution is striving to minimize them as possible, for example every day before workers went to sites they were reminded on what jobs were to be done on that day, risks available and ways to avoid such risks then records were kept through the so called risk management forms. Also they protected themselves through the use of Personal Protective Equipments such as helmets, belts, special uniforms and technical means such as the use of circuit breakers which are preset so as to reduce the magnitude of electrical accidents.

Further more accidents and near misses were managed through the use of timely provision of first aid services and treatments. Workers were trained on how to provide first aid services and other safety principles during orientation training. There was an accident register where all accidents were recorded.

The rate of satisfaction of TANESCO employees when interviewed on the way the organization handled OHS was as shown in the table below:-

Table 4:12: The rate of satisfaction of TANESCO employees on OHS

	%	No
Yes	70.0	7
No	30.0	3
Total	100.0	10

Source: Field Data Survey, 2015

4.3.3 Factors contributing to occupational safety and health risks to public workers

The focused group discussion revealed that most of occupational risks were caused by different factors as follows:-

Poor risk management, for example in Sengerema district council the risks that were mentioned in the council risk management policy were fraud, employee turnover, strikes, and dysfunctional conflicts. Occupational risks were not mentioned at all. Failure to identify occupational safety and health risks makes the organization unsafe and not ready to cope with them and this can explain the rationale of not earmarking enough resources for occupational health and safety.

The second factor mentioned was employee negligence when performing their duties. For example some drivers were reported not to wear car belts until when they saw the traffic police and they sometimes drive cars in high speeds, Again some ignored wearing of helmets, boots, jackets and groves when driving their motor cycles and few were ignorant of safety principles.

Working under stress also increases occupational risks for examples Employees like drivers who had stress were likely to get accidents than those who were stress free. When asked the source of stress respondents mentioned delayed allowances such as promotions, transfer and overtime allowances to be one of the reasons that caused stress

at the workplace. For example 83.33 % of respondents answered that allowances were not provided in time and that it stressed them.

Table 4:13: The rate of stress arising from untimely provision of allowances

	%	No
Yes	16.7	15
No	83.3	75
Total	100.0	90

Source: Field Data Survey, 2015

Moreover, poor working environment is another factor for occupational health and risk in Sengerema district council. For example registry employees complained of getting affected by dust due to the fact that files had piled up in the few shelves available and some files were kept in boxes. The office used as registry was small and not well ventilated. Such situation deprived employees of ventilation. Hence they are in high risk of getting dust and poor ventilation related health problems.

Economic factor and Political interference was another cited factor for occupational risks. Occupational health and safety is not the priority to politicians. During budgeting elements of OHS were replaced with other prioritized items. Occupational health and safety was viewed as cost and that it could surpass what was termed as important programs of the council.

4.4 Resources earmarked by employers to occupational safety

Implementation of OHS interventions requires resources both human and financial resources. In this light, the exploration of resources earmarked for OHS by important actors was important in the understanding of implementation of the policy and ultimately its contribution to the improvement of the welfare of public service workers of Sengerema district. This went in hand with the assessment of monitoring and evaluation commonly known as OHS audit.

4.4.1 Resource allocation at Sengerema district council

According to the interviews held with the District executive director, it was noted that the council has a minimal budget for occupation health and safety. The district executive

officer argued that, they have been budgeting for various interventions aiming at improving working conditions for workers, however the release of fund from the central government has been very low and this has affected much the implementation of occupation health and safety programs. For example in the year 2014, Tshs 200,000,000 was budgeted for construction of offices and employee houses but the fund was not released.

When passing through the Council Medium term Expenditure framework (MTEF) 2013/2014 and 2014/2015, there was no allocation for OSHA registration fees and inspection. The budget allocated for emergencies which could accommodate diseases not covered by National health insurance and compensation scheme and other compensations was very minimal in relation to the number of employee the council is having (5011 employees).

Table 4:14: Element of payment code that can be used to pay for compensations

No	Payment code description	Amount
1	Emergency medical treatment	2,210,000
2	Medical and dental refunds	8,000,000
3	Total	10,210,000

Source: Field Data Survey, 2015

Again it was noted that the organization under study was more prepared for burial expenses than for occupation health and safety of the employees. For example in the MTEF surveyed Burial expenses were allocated 28,625,000 (each department had budgeted for burial expenses) where as there was only 10,210,000 (located in the department of administration and education alone) allocated for Occupation health and safety.

From this observation, it is obvious that even what is termed as budget for occupational health and safety, covered only one party related to preparedness for accidents the part of occupational diseases which is the main threat to the public service is ignored.

Again if all departments in the council allocated funds for burial expenses it was possible that they could have done the same for occupational health and safety. What seems to miss is managerial commitment and political will.

4.4.2 Resource allocations at TANESCO

When interviewed about the amount of resources that were allocated by TANESCO for occupational health and Safety, The manager said that the budgeting for occupational health and safety was done at TANESCO zone office and the head quarter. The branch manager only submitted occupational health and safety requirements which were procured at the head quarter. Even compensations were paid by the zone officers after accident inspection.

4.4.3 Resources Mobilization and Financing of OSHA's Operations

According to the interviews held with the OSHA officials it was noted that the major source of fund for OSHA operations was through its own source of revenues which is raised from OSHA's operations including fees charged on inspections, registration, training and compound offences. Additionally, OSHA receives government subventions which include personal emoluments (PE) for paying salaries and other charges (OC) for paying various expenses and Development fund for financing development projects.
While passing through the business plan of OSHA .It was found that the authority projected revenue which was supposed to be collected from work places in the lake zone 2013/2014 was to the tune of TShs. 636,600,000 while the estimated value actually collected by the OSHA from the workplaces registered was TShs. 110,804,400 only equivalent to 17%.

In addition OSHA was said to have a shortage of human resources especially inspectors and medical practitioners required to inspect work places and examine employees at work places respectively.

Low compliance was as well attributed to the parent ministry, the Ministry of Labour and Employment which has not adequately provided resources to OSHA to enable it conduct its duties such as the identification and registration of workplaces, inspection of workplaces, conducting health and safety audits, monitoring and evaluation of workplace health and safety hazards. The ministry had also not performed the monitoring and evaluation function focusing on OSHA's performance and inspections conducted.

4.4.4 Health and safety audit at Sengerema District council

The findings show that 24.4 % agreed to have been inspected on issues related to health and safety where as 75.6 responded negatively. The table below shows the details:-

Table 4:15: The rate of inspected employees on OHS

	%	No
Yes	24.4	22
No	75.6	68
Total	100.0	90

Source: Field Data Survey, 2015

According to the study it was noted that most respondents who affirmed to have been inspected on health and safety practices were those from the health department. This is because health and safety in that department is among the indicator questions in the national supervision checklist for quality in regional and district hospital level. Therefore safety audit in this case is conducted by officers from the ministry of health and social welfare and not OSHA as recommended by the policy.

4.4.5. Health and safety audit at TANESCO

The findings show that all respondents confirmed to have safety audit at their appraisals. Likewise, auditing at this institution was conducted by auditors from TANESCO head quarter. It was done annually. Occasionally it was done by OSHA.

4.5 Effectiveness of compensatory mechanism for occupational safety and health

In examining the effectiveness of occupation health and safety at Sengerema District, It was revealed that although there is a policy, various laws and actors responsible for their welfare, still effectiveness of Compensatory mechanisms to public service workers in the public service especially local government authorities is questionable. For instance among respondents interviewed, 78.89% did not know the procedure required to be followed for one to be compensated.

Table 4:16: knowledge on compensation mechanism

	%	No
Yes	21.1	19
No	78.9	71
Total	100.0	90

Source: Field Data Survey, 2015

Again the few who knew the procedures claimed it to be too bureaucratic thus they were not prepared to go through it if they encountered an accident for the second time. One respondent said,

"I spent too much time and money making follow up of my compensation and yet I ended up getting a little amount of money!"

Moreover, among 20 occupation safety and health victims, only three equivalent to 15% were compensated and it ranked between Tshs. 180,000 to 300,000/=.which is actually not satisfactory. The table below has the results on the number of compensated workers.

Table 4:17: The rate of compensated OHS victims

	%	No
Yes	15.0	3
No	85.0	17
Total	100.0	20

Source: Field Data Survey, 2015

The labour officer when interviewed about effectiveness of compensation system was certain that it has not been effective due to factors like insufficient knowledge to employees and some employers on the process of compensation. This in turn had made many cases not to be reported on time or not reported at all.

The second factor was lack of periodic amendments of the law which has made it outdated. This has resulted into complains from compensated employees. During the interview, an accident and occupational diseases Ordinance 1952 was cited as an example. Since calculations of how much to be compensated were done using laws of the same nature.

Again it was pointed out that the trainings that labour officers are supposed to conduct in work places are not sufficiently conducted due to lack of funds for the same. Such trainings could have raised awareness of the policy and safety matters such as first aid issues, compensation procedures and use of personal protection equipments.

4.6 Summary of the findings

Generally the findings from this chapter portrayed that the public service is more attacked by occupational diseases than accidents. There is minimal compliance of the policy especially to the district council and that resource allocation for occupational health and safety is unsatisfactory. The practice at the study area also revealed absence of Occupational health and safety audit from OSHA and ineffective compensation scheme. Economic point of view was the major cited reason for non compliance of the policy. The study also revealed TANESCO to be far better in the side of occupational safety with least elements of occupational health.

The study also found out that the National occupational Health and safety policy (2009) as well as its corresponding act of 2003 provides for equal protection to employees of all sectors. It was further noted that all workplaces have risks; as a result, workplace inspections are supposed to be given equal weight. In the study however it was revealed that the institution responsible for enforcement of the policy OSHA appeared to have neglected some actors in the public service particularly local government Authorities under the excuse of failure to pay for registration and inspection fees. This is supported by the fact that among 48 registered work places in Sengerema, all were private and one government agency (TANESCO). Inspections of work places and medical examinations were done in similar settings.

It was also revealed that, although work places in local government have not been trained, inspected or registered by OSHA, employees in the health sector in the local government are more fortunate than others. This is due to the fact that guidelines provided by their parent ministry provides for some safety and health conveniences such as training on first aid services, personal protection techniques and provision of self protection equipment such as medicine ,gloves, uniforms and safety education in general.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.0 Introduction

This chapter covers the discussion of the major findings that were presented at chapter four. The discussion is centred on the specific objectives and intends to cast more light at the factors that has been facing the implementation of OHS interventions at the study area and the public service at large.

5.1 Employers' compliance of occupational safety and health policy.

Experience from the study area revealed that one concept that explains reluctance of complying with occupational health and safety policy in the study area is lack of safety culture. Workplaces that are characterized by occupational health risks are found to develop workplace culture and attitudes that are incongruent to those found around workplace affected by safety risks. Whereas safety is approached from technological and scientific angles, health complications were sometimes associated with witchcraft. Without proper diagnosis following absence of occupational health infrastructural facilities, workers turn to other explanations. The most common being witchcraft either by fellow workers or in the community at large. Although health complications among the workforce was rampant, the interviews found no indications of any blames at the employer unlike safety complications where failure to procure one or more protective gear was mentioned. The African Newsletter on occupational health and safety (2009) reached a similar conclusion in which they suggested that some people believe that occupational disease are caused by witchcraft hence do not respond to prevention or modern medicine. This in effect displaces the problem and its solution too. The workers therefore fail to do one noble duty, demand for occupational health as a right from the employer. Lack of safety culture too explains why the district council failed to implement even the most basic elements contained in the occupational health and safety policy while TANESCO was comparatively far much ahead in nearly all aspects of safety. Similarly, employees were also found to contribute to occupational health and safety problems in the work place by refusing to comply with safety measures. This

draws explanations from the cultural angle just as employers concern for burial expenses in the budget while paying negligible attention to occupational health and safety.

Since culture is the totality of a people's way of life, the total environment that surround workers life influence their perception on occupational health and safety. For example no households belonging to the workers were found to have a fire extinguisher or anything comparable to first aid kit or box. Lack of safety culture further explains why fire extinguishers we found in various work place premises but with only a handful (only 7.8%) knowing how to use the gadget. It wouldn't matter to such an employee if the above were not in his or her work place. This applies to emergency exits, sanitary conveniences and supply of clean water which by the way were demands of the policy itself. In fact, it was found in comparison that the domestic environment in which the workers lived posed much threat to health and safety than workplaces. Thinking in the line of safety culture we agree with Gallegher (2001) who similarly argues that occupational health safety discussion should buttress to encompass health practice factors; psychosocial and a link to the community which in total have a profound effect on employees' health. Our concern with safety culture among workers explains why they are ready to easily accommodate risky behaviour to such a threshold. The work environment studied for example extorted risks that anybody conscious or sensitive to safety would have placed demands for modification in order for work to proceed. In a nutshell, if occupational health included such defects as back pains, allergies, hearing losses, drinking, smoking, lung cancers among others, then the general environment surrounding the worker is potential for explanation.

Although Gallagher (2001) by definition and character expects effective occupational health and safety in the environment under study, by suggesting that public service work force enjoys high job security and no part time or casual work, indeed the results are in the contrary. Such job security amid a feeling of joblessness in the country has failed to boost occupational health and safety even in the public service. This affects negotiation powers of the employed even on matters as central as health and safety. ILO (2003) reported that there are some African countries that are refusing to provide occupational health and safety services for its public sector workers. While Howard (2012) equates this to ignorance, we found echoes of job insecurity even among permanently employed

public service workers. This is captured by Aditya et al (2012) who characterizes the African continent to be enmeshed with poverty, job insecurity and unemployment. In total it boils to a culture of silence. What was found is best described as lack of safety consciousness on the part of workers in Tanzania. The employers then take advantage of employees' failure to demand safe working conditions.

5.2 Occupational health and safety risks

The findings show that occupational health and safety problem in Tanzania begins by the conjoining of two concepts which have a remarkable difference in what each entails. Whereas safety connotes accidents injuries and fatalities, health on the other hand connotes diseases and infections. Safety effects are immediate on the victims while health is hidden, long term and invisible. Examples could be psychosocial and linked to health related issues such as; mental health (depression and anxiety), social and behavioural health (smoking and drinking) and physical health (heart disease, musculoskeletal disorder and diabetes) among others (Aditya et al, 2012). It follows therefore that, workers are forced by the nature of workplace safety to put an agenda related to occupational safety because of its fatalistic and immediate nature than on occupational health which is a silent killer. Though the policy and other legislative instruments mean to solve both, actual practice has only stressed safety. This is happening even though statistics have proved health to be affecting workers more than safety. For example the experience at the study area shows that 60% of identified OHS victims were affected by occupational health where as only 40% had suffered from Occupational Safety. Aditya et al (2012) confirms that as more work shifts towards the service sector, accidents and fatalities are decreasing while health related problems are on the rise. ILO (2012) reports that it kills six times compared to industrial accidents each year. This manifests that attention too has to shift towards occupational health.

The invisible nature of occupational health further explains why it is tolerated by workers. Whereas several health problems from mild to severe were identified in the work-places under study, no struggles were marked to show workers resentment of the fact that employers were nonchalant about their lives. In contrast from an employer/employee relationship history has already registered that occupational health

and safety is a constant struggle between workers fighting for protection and preventive measures and employers seeking to deny or reduce their liability for work related diseases and injuries (WHO, Report of the regional Director). The marked progress found within TANESCO district offices and the health sector of the district council is achievements in the line of struggle against safety with least elements of health.The employer basically concerned with econometrics think occupational health and safety costs are better avoided in favour of more service provision. A common opinion shared within the business community too (Africa News letter, 2009) reports that in the developing countries implementation of safety and health measures are thought to increase the cost of doing business.

The understanding of this is that any workplaces which are inflicted by occupational health will continue to be neglected because of the complexities that are involved since health is contentious from the beginning. The likelihood that it will be ignored is higher. Gallagher (2001) for example observes that establishing the cause of work related disease is complex and sometimes it takes decades for some occupational diseases to develop. Practice in the study area has proved that health is the ignored partner in occupational health and safety implementation in Tanzania. However, the practice in the study area contradicts the concerns of (WHO, 2006) who have stressed that occupational diseases have become by far the most prevalent danger faced today at work.

5.3 Occupational health and Safety against economic development

The findings portrayed that given the nature of occupational health and economic point of view, employers including the government has taken the option of avoiding it.This explains why OHS was not allocated sufficient resources. However the researcher views the option taken by governments of poor countries especially neglecting occupational health and safety as suicidal. To give a glimpse, Aditya et al (2012) brings our attention to the fact that mental health is an essential prerequisite for both creativity and innovation! It is then clear that a nation that is not mentally healthy can neither grow nor prosper. This is where Tanzania like other developing countries is as a result of failure to address occupational health and safety, in a vicious cycle of poverty and disease. The governments of poor countries while running away from costs related to

effective promotion of occupational health and safety are not conscious of the impact that its neglect unleashes for development. For example, Aditya rightly argues that, it is only through maintaining and promoting health at work place can the governments of poor countries sustain the process of industrialization. The finding of Ridge and colleagues (2008) as cited by Aditya is instrumental to this end. Having considered the UK data for a period of ten years, they found out that as the proportion of people with ill health increased, economic growth slowed down. Unfortunately, there were no indications or evidence that the organizations under study were conscious of costs related to occupational health and safety, in particular Sengerema district council

5.4 Effectiveness of compensatory mechanism for occupational health and safety

Occupational health and safety compensatory mechanism, promotion and rehabilitation are not only ineffective but also systematically masked hence making most victims unable to access the services. Having seen the huge occupational health problem in the study area, the researcher argues that such kind of compensatory arrangement for occupational health and safety complications is officially designed to discourage the would be benefactors. On the other hand, occupational health and safety promotions were scanty while rehabilitation was not encountered. It is therefore not by mistake that victims are complaining of too meagre, TZS 300,000/= or no compensation at all, inadequate health and safety information and victims left for themselves. Poor or ineffective occupational health and safety programs in the public service result from the governments' realization of their costs to the state. It has therefore decided to remain apathetic about the matter because of silence of the very stakeholders; workers and trade unions. However, the seriousness that occupational health and safety deserves seems to be forgotten in the process. Aditya et al (2012) remind that injury and illness are matters of health, but they are also matters of economics. Aditya et al (ibid) exemplify this using the European Union. The European Commission estimates that employment costs related only to mental health disorders in 2004 were approximately 132 billion Euros, costs for low severe accidents and ill-health approximately 1651.54 Euros, for medium severity 4985.90 and for high severity 1161.69 Euros. These figures suggest a considerable financial case for improving health and safety. He further observes that in Finland and the Netherlands, two countries known for effective occupational health and

safety promotion use 2-4% of their Gross Domestic Product (GDP) for occupational health and safety. From the economic point of view of a poor economy like that of Tanzania, the systematic masking by the state is justifiable. Because it is an avenue that has not been placed by workers and trade unions on national agenda, it is relegated to fate. Nuwayhid (2004) also concluded that occupational health and safety issues in the developing world will always remain neglected because of competing national and sector issues.

NAO (2013) estimated the use of TZS 668.5 million as compensation for accident victims alone. African News letter on occupational health and safety (2009) equates the figure to gross underestimation due to scanty information, a characteristic of the poor economies. Masking compensation, promotion and rehabilitation of occupational health and safety is a reasonable argument because occupational risks are estimated to be 10 or 20 times higher in developing than in developed countries. In Southern Africa for example, only about 2% of occupational disease is recognized and reported (Aditya ibid). The argument that comes to mind is that; had all the statistics been put on the table, can the government pay?

5.5 Summary of the discussion

Generally, the discussion in this chapter was centred on the major factors that face the implementation of occupational health and safety in the public service. It was observed that the problem started with the conjoining of two important concepts which has concealed the occupational health part leading to unconsciousness and silence of workers of the public service, the sector which is mainly faced by occupational health. Lack of safety culture to workers has made them fail to identify the true enemy. It was also found out that Occupational health and safety compensatory mechanism, promotion and rehabilitation was not only ineffective but also systematically masked due to its bureaucratic procedures and mode of payment. The discussion ended with economic point of view of occupational health and safety which have made employers reluctant of implementing occupational health and safety programmes at their institutions.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.0 Introduction

This chapter presents a summary for the study, conclusion and recommendations based on the findings presented and discussed in chapter four and five.

6.1 Summary of the study

The study focused on assessing the contribution of occupational health and safety policy to the welfare of public service workers in Tanzania. Four specific objectives and four research questions were employed to accomplish the study. From them the researcher sought to explore employers' compliance with occupational safety and health policy, examine the nature of occupational safety and health risks the public servants are exposed to in the study area, identify the amount of resources earmarked by employers to occupational safety and try to find whether compensatory mechanisms for occupational safety and health problems are effective in Tanzania.

The study involved 133 respondents; these formed a study sample which helped the researcher to arrive to some conclusions. The sample included Sengerema public service employees and their employers, Trade Union Representatives, Officers from Commission for Mediation and Arbitration, Officers from OSHA Lake zone, labour officers and heads of TANESCO Sengerema Branch and Sengerema District council. The researcher employed various methods in data collection, which include questionnaire, interviews, documentary review, focused group discussion and observation. Simple random sampling and purposive/judgemental sampling were used to select sample. The qualitative and quantitative analytical methods were employed and applied in the analysis of the obtained data.

The study revealed that the public service is more confronted by occupational diseases than occupational accidents. As noted earlier, the invisible nature of occupational health has made workers in the service unconscious and silent. This in turn has resulted into minimal compliance of occupational health and safety policy in the public service

particularly Sengerema district council, few resources allocation for its implementation and enforcement, lack of monitoring and control from the responsible entities and provision of measly money given as compensations to accident victims. Again practice in the study area show that lack of safety culture has put employers at safe side since workers do not only point directly that they are affected by occupational diseases but also did not demand OHS interventions from employers , some associated them to witch craft. Economic factor was found to be the major factor for employer's negligence of Occupational health and safety. Poor or ineffective occupational health and safety programs in the public service resulted from the governments' realization of their costs to the state. The researcher views options taken by employers to be desperate and that it cannot bring sustainable development.

However marked progress found at TANESCO and Health sector of the district council in the line of struggle against safety with least elements of health, cannot be ignored and the researcher is calling upon the employers and the government at large to devote more effort to other sectors of the public service.

6.2. Conclusion

From findings of the study therefore, it can be deduced that since the implementation of occupational health and safety policy has been questionable, it is obvious that the welfare of public service workers of Sengerema district and actually the public service as a whole is at stake. If workers welfare is at risk, likewise productivity of the public service is at peril. It is imperative consequently that stakeholders come up and review available policies, acts, strategies and regulations so that they come out with an effective mechanism of promoting occupational health and safety which is highly demanded given the advancement of technology and presence of occupational diseases such as HIV/AIDS and Ebola.

6.3.1 General Recommendations

In light of the above remarks, the following recommendations, which might be useful to policy makers, are suggested. First, payment of occupational health and safety compensations should be assigned to the National health insurance Fund which has

resources from contributions done by both employers and employees. This could minimize the bureaucracy and could assist the process of recording the trend of occupational health through the payment done for treatment and would solve the challenge of mobilizing fund since it is among employees' statutory contributions.
The second recommendation is that Occupational health and safety clinic should be established in the health sector to facilitate employees' examination of health at the entry point, in the course of employment and at exit. This will also enable record keeping and trucking of occupational diseases.

Training at college level should cover Occupational health and safety in their curriculum so as to impart awareness of the matter to prospective workers. The difference between workers at TANESCO and health sector compared to other sectors at the study area proved its effectiveness.

Occupational health and safety should be taught as a field of specialization in colleges and Universities. This will solve the challenge of OHS experts that the public service is currently facing.

OHS should be considered as human right since the constitution provides for right to life; it is through OHS arrangements that the right to life can be realized by workers. It is unfortunate however that there is nowhere in human resource management documents that OHS has been mentioned as a basic human Right.

6.3.2 Recommendations for further studies

This research was more interested in examining the contribution of occupational health and safety policy to the welfare of public service workers. Further studies are needed to be conducted on the impact of occupational health and safety on economic development. The findings from such a study could add knowledge on the subject matter and rekindle its importance to various actors including policy makers. Hence improve working environment for workers and stimulate productivity and national development at large.

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APPENDICES

CATEGORY A

QUESTIONNAIRES FOR THE EXECUTIVE OFFICER, HEADS OF DEPARTMENTS AND OTHER PERMANENT PUBLIC OFFICIALS

This questionnaire is designed to capture information that will be used to analyze the contribution of occupational health and safety policy to the welfare of public service workers in Sengerema. The information will be treated with highest confidentiality and shall be used solely for academic purposes. I am requesting your support and cooperation in this task by responding to the following questions. [Please fill in the form or tick in the relevant box]

1. Your position ----------Date of birth----------Age----------
   Sex----------Marital status----------Nationality--------
   Academic and professional qualifications; Educational level----------
   Professional qualification----------
2. Do you have safety and health representatives at your organization
   YES ( ), NO ( )
3. Is medical examination conducted on entering and exiting employment
   YES ( ), NO ( )
   If **yes** specify when exactly it is conducted----------
4. Do you have fire extinguisher? YES ( ), NO ( )
   If yes, do you know how to operate it? YES ( ), NO ( )
5. Does the employer provide you with safe drinking water YES ( ), NO( )
6. Are you aware that there is a national policy on occupational health and safety?
   YES ( ), NO ( )
7. Does the Institution have occupational health and safety policy? YES ( ), NO ( )
   If Yes is it distributed to all employees YES ( ), NO ( )
8. Do you have First aid kit at your working premises? YES ( ), NO ( )
9. Have you ever encountered an occupational accident/disease?
   YES ( ), NO ( )

If **yes** did you report it? YES ( ), NO ( )

How were you compensated?

Please explain----------

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10. Does the employer timely provide you with your rights like salary, allowances, leave, promotions? YES ( ), NO ( ) Can these result into health complications? Please explain shortly.

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11. Is the organization registered by Occupation Health and safety Authority? YES ( ), NO ( ),
12. How much is budgeted for improving occupation health and safety as well as for Compensations ----------
13. Is your working environment safe? YES ( ), NO ( ),

    If No, What do you think could be the risks of your occupation? Please list

    1. ---
    2. ---
    3. ---

14. Is health and safety part of performance appraisal/audit in your institutions? YES ( ), NO ( ),
15. What do you think could be done to improve safety and health at work? Please explain shortly----------

    ---

16. During orientation of new employees, is occupational health and safety part of the training?
17. Are you aware of the existence of any compensatory mechanism to occupational health and safety victims? Name it ……..
18. Do you have a health complication which could be related to your work? Yes/No. Please mention it/them
19. What do you think could be number one cause of health problems to workers? Domestic environment/ life style/ work-places. Mention any other……..

20. What are the most common occupational and safety problems in your organization?
21. Does the health of your employees affect your organization? Explain.
22. Do we need to care about occupational health and safety YES ( ), NO ( ),
23. Are satisfied by the way occupational health and safety is handled in your organization? YES ( ), NO ( ),

Thank you for your cooperation!

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CATEGORY B

QUESTIONNAIRES FOR OCCUPATIONAL HEALTH AND SAFETY WORKERS

1. Your position ----------Date of birth----------Age----------
   Sex----------Marital status----------Nationality----------
   Academic and professional qualifications; Educational level----------
   Professional qualification----------
2. What are the responsibilities of OSHA. Please list
   a. ----------
   b. ----------
   c. ----------
3. How much is budgeted for OSHA activities2013/2014 and 2014/2015?----------
   is it enough? YES ( ), NO ( ),
4. How many workplaces has OSHA registered in Sengerema district. Public----------Private----------
5. What are the challenges that the institution is facing when carrying its functions? please list----------
   ----
6. Is health and safety part of performance appraisal/audit in your institutions? YES ( ), NO ( ),
7. How many times has the OSHA visited public organizations for the sake of improving employee's occupational health and safety for the last five years?-
8. Are you satisfied with the compensation of occupational health and safety victims? YES ( ), NO ( ),
9. What do you think could be done to improve Occupational safety and health in public institutions? Please explain shortly----------
   ----
10. Have you ever been trained on how to protect yourself from occupational risks? YES ( ), NO ( ),
11. Do you have workplace training program? Yes/ No. How many trainings have you done in Sengerema? Public institutions…….Private……

12. Based on your experience in occupational health, which complications are most frequent? Illnesses/ accidents.
13. Between public and private institutions, which one do you frequently inspect……..Why……..?
14. Do you have a fire extinguisher? Yes/ No.
15. Do your employees know how to use it? Demonstrate
16. Does your employer provide clean drinking water in your office?
17. Who are mostly involved in occupational health and safety problems? Gender (Women/Men), Status (officers/subordinates). Why is this so……..?
18. Do you think workers are well informed about occupational health and safety policy?
19. Don't you think we should treat occupational health and safety as a basic human right? Yes/ No. Explain……..
20. Do we need to care about occupational health and safety YES ( ), NO ( ),
21. Are you satisfied by the way occupational health and safety is handled in your organization? YES ( ), NO ( ),

Thank you for your cooperation!

CATEGORY C

QUESTIONNAIRES FOR LABOUR OFFICERS (CMA)

1. Your position ----------Date of birth----------Age----------

   Sex----------Marital status----------Nationality----------

   Academic and professional qualifications; Educational level----------

   Professional qualification----------
2. How many occupational health and safety cases have being reported to your office for last two years?-------. What were the resolutions of such cases? Please explain shortly----------
3. Do employers comply with your decisions/judgments? ( ), NO ( ), if not what do you do?----------
4. What are the challenges that the institution is facing when dealing with occupational health and safety issues?----------
5. Do you think the occupational health and safety policy is well implemented? YES ( ), NO ( ), If NO why……
6. Are you satisfied with the compensation of occupational health and safety victims? YES ( ), NO ( ),
7. What do you think could be done to improve Occupational health and safety in public institutions? Please explain ----------
8. Who are mostly involved in occupational health and safety cases? Gender (Women/ Men), Status (officers/subordinates) Why is this so----------?
9. Do you think workers are well informed about occupational health and safety policy? YES ( ), NO ( ),

10. Don’t you think we should treat occupational health and safety as a basic human right? Yes/ No. Explain----------
11. Do you have a fire extinguisher? YES ( ), NO ( ), Do your employees know how to use it? YES ( ), NO ( ), Demonstration.
12. Does your employer provide clean drinking water in your office? YES ( ), NO( ),
13. Do we need to care about occupational health and safety YES ( ), NO ( ),
14. Are you satisfied by the way occupational health and safety is handled in the public service sector? YES ( ), NO ( ),

Thank you for cooperation…..!

CATEGORY D: QUESTIONNAIRES FOR TRADE UNION LEADERS

This questionnaire is designed to capture information that will be used to analyze the contribution of occupational health and safety policy to the welfare of public service workers in Sengerema. The information will be treated with highest confidentiality and shall be used solely for academic purposes. I am requesting your support and cooperation in this task by responding to the following questions. [Please fill in the form or tick in the relevant box]

1. Your position ----------Date of birth----------Age----------
   Sex----------Marital status----------Nationality----------
   Academic and professional qualifications; Educational level----------
   Professional qualification----------

2. What are the roles of trade unions in occupational health and safety of the employees being represented?
   a. ----------
   b. ----------
   c. ----------
   d. ----------

3. Mention the issues on which you frequently represent your members----------
   ----

4. Are you aware of the existence of occupational health and safety policy in Tanzania? Yes/ No.
5. Is there any compensatory mechanism for occupational victims? Yes/ No. If yes, please explain how it works----------
6. Are you aware of occupational health and safety complications that your members face in their work-places? YES ( ), NO ( ),
7. Do you think trade unions can play some role in occupational health and safety matters? Yes/No. Explain----------
8. Are you satisfied with safety of your members in their work-places? YES ( ), NO ( ), If NO what has your organization done……

9. Do we need to care about occupational health and safety YES ( ), NO ( ),
10. Are satisfied by the way occupational health and safety is handled in the public service sector? YES ( ), NO ( ),

Thank you for cooperation……!

CATEGORY E: QUESTIONNAIRES FOR OCCUPATION HEALTH AND SAFETY VICTIMS

This questionnaire is designed to capture information that will be used to analyze the contribution of occupational health and safety policy to the welfare of public service workers in Sengerema. The information will be treated with highest confidentiality and shall be used solely for academic purposes. I am requesting your support and cooperation in this task by responding to the following questions. [Please fill in the form or tick in the relevant box]

1. Your position ---------- Age----------Sex-----Marital status----------Nationality----------Academic and professional qualifications; Educational level----------Professional qualification----------
2. What kind of occupational health and safety complication have you faced----------
3. Where did you report the problem?----------what action was taken----------
4. Were you aware of the reporting procedures before----------How did you come to know----------
5. Were you compensated----------If yes how much----------
6. Was the compensation satisfactory----------
7. Do you think these kinds of complications are rampant among workers? Yes/ No/ I don't know.-------
8. Other than work, don't you think your problem could be caused by your domestic environment or even your life style? Yes/No.---------
9. Do we need to care about occupational health and safety YES ( ), NO ( ),
10. Are you satisfied by the way occupational health and safety is handled in your organization? YES ( ), NO ( ),

Thank you for cooperation…….!!

QUESTION GUIDE FOR INTERVIEW

1. Your position ---------- Age----------Sex----------Marital status----------Nationality----------
   Academic and professional qualifications; Educational level----------
   Professional qualification----------
2. Are you aware of the existence of occupational health and safety policy in Tanzania? Yes/ No.
3. Is there any element of occupational health and safety in the structure of your organization (Department, division, section etc) YES ( ), NO ( ), If YES mention…….
4. Do you have any occupational problem? If yes mention it/them
5. Have you ever been trained on how to protect yourself from occupational risks? YES ( ), NO ( )
6. Does the institution have a safety and health committee? YES ( ), NO ( )
7. Is there a mechanism for risk assessment? YES ( ), NO ( )

   If yes, how often is it conducted? ----------
8. Are you able as an organization to diagnose work-related illnesses? YES ( ), NO ( ) If no why?.....
9. Do you have a fire extinguisher? YES ( ), NO ( ), Do your employees know how to use it? YES ( ), NO ( ), Demonstration.
10. Does your employer provide clean drinking water in your office? YES ( ), NO ( ),
11. Do we need to care about occupational health and safety YES ( ), NO ( ),
12. Are you satisfied by the way occupational health and safety is handled in your organization? YES ( ), NO ( ),

QUESTION GUIDE FOR FOCUSED GROUP DISCUSSION

1. What do you think are the factors contributing to occupational risks/accidents/ diseases.
2. What do you think are the problem in dealing with occupational health and safety issues in your organization?
3. What should be done to improve occupational health and safety in your working-places
4. Who are the most affected categories in your organization and why?
5. Is it easy to delineate whether the health complication that an employee has is caused by his/her occupation?

WORK PLAN

The Gantt chart will be used to describe the work plan for this study. Here under is the Gantt chart for description of the work plan.

DESCRIPTION OF TASK	OCTOBER 2014	NOVEMBER 2014	DECEMBER 2014	JANUARY 2015	FEBRUARY 2015	MARCH 2015
Preparing Research Proposal						
Develop Questionnaires						
Data Collection						
Analysis of data						
Compilation of results						
Preliminary Report Writing						
Finalizing Report Writing						

My employer will sponsor all research cost as part of my course expenses

Activity	**Unity cost**	**Total**
Consult supervisor on the research idea (concept paper)	Concept paper preparation • Researcher @65,000x7 • Transport cost (Sengerema – Mwanza – Morogoro) 50,000x 2 • Drafting paper 1 ream @ 8,000/= • Printing paper 2 reams @ 8,000/= • Typing cost 10,000	 455,000 100,000 8,000/= 16,000/= 10,000/=
Sub- Total		**589,000/=**
Develop questionnaire and interview questions	Questionnaire preparation • Drafting paper 1 ream @ 8,000 • Printing paper 1 ream @ 6,000/= • Photocopying charges	 8,000/= 6,000/= 20,000/=
Sub- Total		**34,000/=**
Consulting supervisor for proposal correction	Proposal correction (7 days) • Researcher @ 65,000x7 • Printing paper 2 ream @ 8,000 • Photocopy charges 500 @ 50 • Transport cost (Sengerema – Mwanza – Morogoro) 50,000 x 2	 455,000/= 16,000/= 25,000/= 100,000/=
Sub Total		**596,000/=**
Data Collection	Data collection (28 days) Subsistence allowance • Researcher @ 65,000 x 28	 1,820,000/=
	• Transport cost (car hire) • 2 Enumerators @ 10,000 x 28 • USB Flash disk	1,080,000 560,000 250,000
Sub-Total		**3,710,000**
Data processing, analysis And Dissertation production	Data analysis and Dissertation production • Drafting paper 4 reams @ 8,000 • Printing paper 4 reams @ 8,000 • Typing costs 200 pages @ 500	 32,000 24,000 100,000

	• Thesis loose binding, 4 copies @ 5,000/=	20,000
Su –Total		**176,000**
Correction of 1st draft	Correction of first draft and submission of the report • Researcher @ 65,000 x 14 • Transport cost (Sengerema – Mwanza – Morogoro) – 50,000 x 2 • Printing paper 4 reams @ 8,000 • Typing costs 200 pages @ 500/= • Thesis loose binding, 4 copies @ 5,000 • Hard binding, 4 copies @ 9,000 • Printing paper 2 ream @ 8,000 • Photocopying charges 500 @ 50	910,000 100,000 24,000 100,000 20,000 36,000 16,000 25,000
Sub-Total		1,231,000
Total cost		**6,336,000**