

EFFECT OF OCCUPATIONAL HAZARD ON ORGANIZATIONAL PERFORMANCE

(A Case Study of Unilorin Teaching Hospital)

BY

**AKINOLA MARYAM ABOSEDE
HND/23/BAM/FT/1118**

**BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF BUSINESS
ADMINISTRATION AND MANAGEMENT, INSTITUTE OF FINANCE AND MANAGEMENT
STUDIES, KWARA STATE POLYTECHNIC ILORIN**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF HIGHER
NATIONAL DIPLOMA (HND) IN BUSINESS ADMINISTRATION AND MANAGEMENT**

MAY, 2025

CERTIFICATION

This is to certify that this project work has been written by **AKINOLA MARYAM ABOSEDE** with matriculation number **HND/23/BAM/FT/1118** and has been read and approved as meeting parts of the requirements for the award of National Diploma in the Department of Business Administration And Management, Institute of Finance and Management Studies, Kwara state Polytechnic, Ilorin, Kwara State.

MR. AWE O. ISRAEL
(PROJECT SUPERVISOR)

DATE

MR. IMAM A.O
(PROJECT CO-ORDINATOR)

DATE

MR ALAKOSO I.K
(HEAD OF DEPARTMENT)

DATE

EXTERNAL EXAMINER

DATE

DEDICATION

This project is dedicated to Almighty God.

ACKNOWLEDGEMENTS

First and foremost, I sincerely write to acknowledge the present of Almighty Allah who has decidedly made a colorful meaning out of mind humble background, and who enables me to bring this course to successful completion; indeed my beginning was small but ending is turning out graciously for his dream coming into reality. To Him alone be the glory.

My Special regards also go to my project supervisor **MR. AWE O. ISRAEL** and the Head of Department also all entire Staffs of Science Laboratory Technology Department.

My Special Regards goes to my loving parents MR& Mrs Akinola and my beloved Husband Mr Luqman Olawale who stood by me throughout my project, you have been my source of inspiration. I can not appreciate you enough for the love and care.

I also thank my Brother in campus Ridwan and Malik I appreciate you guys for the love and support.

Finally, my appreciation goes to my entire family and everyone else who has been there for me, God Bless you all.

TABLE OF CONTENTS

Title Page	i
Certification	ii
Dedication	iii
Acknowledgements	iv
Table of Contents	vi
CHAPTER ONE: INTRODUCTION	
1.1 Introduction to the Study	1
1.2 Statements of the Problems	4
1.3 Research Questions	5
1.4 Objectives of the Study	5
1.5 Statement of Hypothesis	6
1.6 Significance of the Study	6
1.7 Scope of the Study	7
1.8 Definition of Terms	8
CHAPTER TWO: LITERATURE REVIEW	
2.0 Literature Review	10
2.1 Introduction	10
2.2 Conceptual Framework	10
2.3 Theoretical Framework	29
2.4 Empirical Review	32
CHAPTER THREE: METHODOLOGY	
3.1 Introduction	37
3.2 Research Design	37
3.3 Population of the Study	37
3.4 Sample Size and Sampling Techniques	38
3.5 Methods of Data Collection	38
3.6 Instruments of Data Collection	
3.7 Methods of Data Analysis	38
3.8 Historical Background of the Case Study	
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION	
4.1 Introduction	41
4.2 Demographic Characteristics of Respondents	41
4.3 Analysis of Data	52

4.4	Discussion of Findings	59
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS		
	Summary, Conclusion & Recommendations	63
5.1	Summary of Findings	63
5.2	Conclusion	65
5.3	Recommendations	66
	References	

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Health is the greatest asset of a country and it is the foundation on which the entire production capacity of the people rests. The conservation of health in the economically active age groups result in increased productivity of the labour force and also facilitates return on investments. As a result of industrial revolution worldwide, of which Nigeria is inclusive, man's mode of production has greatly shifted base from the use of sheer physical forces prevalent at the primitive era of the manipulation of machine and gadgets regrettably, mechanization of production processes has ushered in a multitude of health problems of industrial origin summarily referred to as occupational health hazards (Nwachukwu, 2000). This new development has necessitated a fresh campaign for the protection of industrial works from hazards which are inimical to their health, safety and welfare through the provision of occupation health services in which prime responsibilities for occupation health lies with the employer.

Organizations are set up to achieve specific goals and objectives such objectives are achieved by harnessing the resources available including human resources. The human resources is the most critical asset of the organization because other assets are inanimate. There is need to provide the enabling environment for the performance of the job, including motivation of staff. In recent times, the issue of safety at work and occupational hazards in relation to employee's performance has become a critical one.

The importance of job as a factor of health hazards had been long recognized. Every day at the workplace, workers face health and safety hazards such as accidents, just, chemicals, noise, violence or stress. The effects range from premature death and injuries to occupational diseases such as cancer and respiratory disease.

Occupational health is a multidisciplinary actively aim at protecting and promoting the health of workers by preventing and controlling occupational diseases and accidents by eliminating factors and conditions hazardous to health and safety at work.

Occupational health has gradually developed from a mono-disciplinary, risk oriented activity to a multi-disciplinary and comprehensive approach that considers individuals physical, mental and social well-being, general health and personal development.

The degree of hazards varies from factory to factory depending on the work environment and the technical skill of the machine operators or factory workers. Developing countries of the world live in poverty and disease circle. Industrialization in the 50s/60s came as a welcoming process of breaking. This circle of poverty and disease. Thus, the peasants who were subsistence farmers, and know little about modern methods of production become readily available work force for the industries, exposing them to diseases of various occupations and hazards therein.

Certain occupations like mining, agriculture, building and construction are inherently more accident prone than others. While part of this is due to the intrinsic dangers of the work, there is little doubt that lack of safety practices is characteristics of some sectors. This is particularly marked in the construction industry where neglect of safety precaution is responsible for many serious injuries.

Occupational accidents occur in both developed and developing countries. They arise from a conjunction of hazards and an unsuspecting person, the cause of accidents can therefore be as a result of human or environment factors, the human factors include the physical capabilities of the workers, which may not meet his job requirements.

Physiological factors such as age, sex, working hours, experience and psychological problem have effects on accident. The environmental factors that can cause accident are faulty machine, poor illumination and noise (Asogwa, 1978). The effect of occupational accidents has been tremendous among workers worldwide, it has caused the loss of several lives, caused several disabling injuries and has been responsible for a lot of sickness and absence from work. Therefore, a job hazard seems to represent a potent factor on the quantity of output and view of this, it is imperative to examine the effect of job hazards on the workers productivity.

In Nigeria, we have the factory and Allied Matters Decree and later on Act of 1987 which state that everyone is responsible for making sure that work is safe, safety at work is important that the various rules and regulations for everyone at a workplace should be obeyed. The United Nations in its universal declaration of human rights recognized the right of all people to just and favorable condition of work (Tomlinson, 1987) it is therefore important to realize the need for safety at the workplace in Nigeria and world over because it should be noted that the issue of hazards goes beyond the home and industries but also penetrate into every sphere of human life.

1.2 Statements of the Problems

Over the years, job hazards have become a stumbling block to the growth and productivity of workers. It is an issue that has gained prominence in the recent past due to the adverse effects it brings along with it.

Due to the rise in the outbreak of diseases in Nigeria, it is fast becoming a norm to determine the state of health of workers in relation to the well being of the industry. As the industry starts to witness an increase, this will serve as a boost abinitio like a small doze of a drug for a new addict. But then it takes more and more increase to provide a boost for the industry just as it takes a bigger and bigger dose of a drug to give a hardened addict a high.

The point here is that, as the industry witness more and more boostthe adverse effects it has on workers in terms of greater hazards is a matter of urgency that need to be ironed out before it gets out of hands. In Nigeria, job hazards are on the rise. It has become so detrimental to the extent that workers life is always on the line every time they embark on their daily duties, it can be said with all authenticity that industries in Nigeria especially health, job hazards constitute a major setback as it relates to workers.

The concern of this research work is to establish if there is any significant relationship between the job hazards and productivity in the health industry, if there is significant difference between workers with occupational hazards across the job experiences, and if there is significant relationship between the level of training concerning safety measures and job hazards using university of Ilorin for empirical demonstration.

1.3 Research Questions

1. What are the effects of occupational health hazard on the level of productivity of workers?
2. Are the industries current occupational health and safety policies adequate?
3. What is the influence of safety measure/practice on occupational hazards?

1.4 Research Objectives

The broad objective of the study is aimed at determining the effect of job hazard on worker's productivity with particular reference to university of Ilorin Teaching Hospital Ilorin. Other specific objectives are to:

- i. Examine the effect of occupational health hazard on level of productivity of worker.
- ii. Determine the effect of occupational health and safety policies have on occupational hazards exposed to the workers.
- iii. Ascertain influence of safety measure and practice on occupation hazard exposed the to the workers

1.5 Research Hypotheses

The following research hypothesis were formulated to guide the conduct of the research

- i. H_0 : There is no significant relationship between occupational hazard and worker's productivity.
- ii. H_0 : There is no significant influence of the safety programmes on the reduction of occupational hazards.
- iii. H_0 : There is no significant relationship between safety measures put in place and occupation hazards.

1.6 Significance of the Study

The fact is that Nigeria is increasingly becoming industrialized daily. Therefore, workers are not exposed to dangerous machines at work, excessive noise, heat, but also exposed to chemical fumes and dust which are hazardous to health.

It is observed that in most industries or factories, most workers do not use any safety device and this makes them directly exposed to all forms of hazard that occurs in their workplace. There is an indication that the health bills incurred in these factories are on the high side almost every month because the workers are always sent to various hospitals to receive medical treatment for illness.

In addition, the fact remains that the occupational hazard exposed to by such individual. As a result of this, the researcher went further to investigate the effect of health on the level of productivity of the workers.

Most workers of the world, Nigeria in particular, are bread winners in their homes, thus the justification for undertaking this study, as it affects the well-being and safety of works in their workplace. Due to the importance of U.I.T.H, Ilorin and the employment of many Nigerians, any injury among the workers will bring hardship to the fellow worker, his immediate family, to the management and to the country as a whole, it is therefore imperative and necessary to reduce the rate and prevalence of occupational health problems.

A study of occupational health hazard among workers of the companies (U.I.T.H) will be of immense importance for the planning and implementation of safety measures in these companies and also provide data for the assessment of safety in work place. It is hoped that after this research industries will be sensitized on the peculiar problems of the group of workers involved.

1.7 Scope of the Study

This study is designed to examined the effects of job hazards on productivity in the health industries. University of Ilorin Teaching Hospital, Ilorin as a health institution with the primary aim of ensuring normalcy in the Nigeria health system.

The research work would cover in-depth study of the industry selected output at the preceding period of production for period of five years covering 2013-2017, this period has been chosen carefully because it is believed that most industries started becoming more industrialized during this period, therefore workers started getting exposed to more

occupational hazards during this period and this helps captures what the research work is all about.

Data would be obtained from the records of the industries under study and also research would be carried out among the top management, middle management and the junior staff of the industry especially the factory workers to identify their views and perception about their occupational health.

1.8 Definition of Terms

1. **ACCIDENT:** An unfortunate incident that happens unexpectedly and unintentionally, typically resulting in damage or injury.
2. **HAZARD:** Is something that can cause harm if not controlled
3. **RISK:** Is a combination of the probability that a particular outcome will occur and the severity of the harm involved
4. **EMPLOYEE:** A person who is hired to provide services to a company on a regular basis in exchange for compensation and who does not provide these services as part of an independent business.
5. **HEALTH:** Health is the art and science of preventing disease, prolonging life, promoting physical and mental health, sanitation and personal hygiene, control of infections and organization of health services.
6. **ORGANIZATION:** A social unit of people, systematically structured and managed to meet a need or to pursue collective goals on a continuing basis.
7. **PERFORMANCE:** The accomplishment of a given task measured against present known standards of accuracy, completeness, cost, and speed, in a contract, performance is deemed to be the fulfillment of an obligation, in a manner that releases the performer from all liabilities under the contract.
8. **POLICY:** The set of basic principles and associated guidelines, formulated and enforced by the governing body of an organization, to direct and limit its actions in pursuit of long-term goals.

9. **SAFETY:** Relative freedom from danger, risk or threat of harm, injury or loss to personnel and or property, whether caused deliberately or by accident.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This review is aimed at examining the issues and challenges of occupational health and safety and the compensation of injured, sick or diseased employees in the workplace in Nigeria. These three fold-objectives were sectionalized as follows: The first section deals with the meaning of occupational health and safety, history of occupational health and safety: Global perspective, the development of occupational health in Nigeria organizational performance. The second section pay attention to Health and safety policies and programmes in the workplace, and occupational health risks in Nigeria, Health, Safety and Environment (HSE) programme in Nigeria.

2.2 Conceptual Framework

2.2.1 Occupational Safety and Health (OSH)

Occupational safety and health (OSH) is a branch of health services specifically concerned with health, safety and welfare of workers of all categories. It is a health service which demands that employers, both government and private should show concern for practical measures of protecting the health of workers or employees (Adeniyi, 2001).

The International Labour Organization and World Health Organisation in (1950s) define “occupational health and safety as protecting and maintaining the highest level of physical, mental and social well-being of workers in all occupations”.

Also according to World Health Organization (WHO) in Carl (2005): “occupation health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupation. The prevention, among workers, of department from health hazards caused by their employment, risk resulting from adverse factors to health in the placing and maintenance of workers in an occupation environment adapted to his physiological and psychological equipment: and to the adaptation of work to man and each man to his job”.

OSH involves preventing ill-health caused by working conditions; protecting workers in their employment from risks resulting from factors adverse to their health; placing and maintaining workers in an occupational environment adapted to their physiological and psychological capabilities (Flin et al., 2000).

In adapting employees' physiological and psychological capabilities to their works, Miller (2006) added that employee health and safety is the effect of work on employees and the effect of employees on their work. This places greater responsibility on organisations to help employees adapt to their work effectively in order to avoid risk of hazards, sickness and diseases at the workplace. Industrial work honestly poses a lot of health and safety challenges to employees, and employees depend on management for protection. Therefore, occupational health deals with the well-being, safety and comfort in the workplace.

Safety has been defined as the condition of being free from danger of harm and as a legal concept (Gray, 2000). It also implies as state of relative security from accidental injury or death due to measures designed to guard against accidents (Burdine and Mc Leroy, 2002).

Folawiyo (20055) asserted that safety problem of today are enormous in contrast to those of yesteryears. He stressed further that we must depend more on our versatility in a social setting where element of intelligence, tolerance, courtesy and emotional stability have become important. Due to rapid scientific and technological advances, an imposing list of new hazards has been added to our daily lives.

According to Encyclopedia Americana (2008), safety is the condition of being free from danger or harm. As a legal concept, it implies a state of relative security from accidental injury or death due to measures designed to guard against accidents (Burdine and Mc Leroy, 1992). Safety in broadest sense is a condition of being free from injury or risk.

Based on the above explanation, occupational health and safety deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards. The health of the workers has several determinants, including risk factors at the workplace leading to cancers, accidents, musculoskeletal diseases, respiratory

diseases, hearing loss, circulatory diseases, stress related disorders, communicable diseases and others. Occupational health and safety is a cross disciplinary area concerned with protecting the safety, health and welfare of people engaged in work.

The goal of all occupational health and safety programme is to foster a safe working environment.

2.1.2. Occupational Hazards

An Occupational hazard is a situation that poses a level of threat to life, health, property, or environment. Most hazards are dormant or potential, with only a theoretical risk of harm; however, once a hazard becomes active, it can create an emergency situation. A hazardous situation that has come to pass is called an incident (Wikipedia, 2014). There are various potential health hazards in which workers are exposed to in their place of work. Health hazards such as industrial hazards, physical hazards, heat hazards, noise hazards, mechanical hazards and so on (Borman, 2004).

The International Labour Organization (ILO) estimated that, globally, about 2.2 million people die every year from occupational accidents and diseases, while some 270 million suffer serious non-fatal injuries and another 160 million fall ill for shorter or longer periods from work-related causes. This represents an enormous toll of suffering for workers and their families (ILO, 2006).

Furthermore, the ILO estimated that the total costs of such accidents and ill health amount to approximately 4 percent of the world's GDP. Other organisations have estimated that about 5 percent of the burden of diseases and injury in established market economies can be attributed to work, which corresponds roughly to the ILO's figure. It is also worth mentioning a previous study by the European Commission which estimates that the costs of occupational accidents in the EU15 (15 European Union Member States) in the year 2000 was €55 billion a year (ILO, 2006).

2.1.3. Concept of Occupation Health and Safety: Global Perspective

The evolution of modern industrial safety movement had its roots in England, at the dawn of the 18th century industrial revolution era. By 1750, machines had been invented and

mining and Health industries became established. Men, women and children were employed to work in factories under very terrible conditions. They worked for many under crowded conditions and with little or no food or good water to drink (Entwistle, 2003).

Injuries, diseases and deformities multiplied among the workers. They suffered in silence as medical services were not readily provided. Employers did not take interest in the welfare of their employees seriously. In fact, the employees had no right as they could be sacked or relieved of their jobs at will without notice or warning until the evolution of occupation health services in 1897 (Kalejaiye, 2013).

The evolution of occupational health services brought about the enactment of safety laws and Regulations in 1833. The general conviction then that accidents were predestined and inevitable was no longer acceptable to a growing population of the English public (Nwajei, 2003). They argued strongly that accidents could indeed be controlled, and that it was ignorance of safety precautions, inefficiency and carelessness that prevented people from living safely in the expanding mechanized world. They therefore called for safety education and other occupational health services to put a stop to the suffering of factory workers (Nwajei, 2003).

It all started in 1802 when the British parliament passed the “Health and Morals Act,” aimed at regulating the labour of children and adults in the cotton industry. In 1833, the British Factories Act was passed, limiting the hours of work for children and providing for factory inspection to monitor working condition. Among other things, this act required that workers be adequately protected from injuries in their places of employment by applying guards to moving parts of machinery (Duebenspeek, 2004).

Several trades were brought under the control of the British Factories Act in 1864. Later, the Act was broadened to include many industries and places that employed more than 50 persons. This Act prohibited the eating of meals in poisonous or very unpleasant plant atmosphere and required the artificial ventilation of factories by mechanical means for the control of toxic and other types of dust injurious to health. Medical

inspection of factories was inaugurated in 1897, in which the idea of compensation of workers was adopted (Entwistle, 2010).

2.1.4. The Development of Occupational Health in Nigeria

The development of occupational health in Nigeria followed the pattern in other developing countries. Originally, the main occupation was un-mechanized agriculture and animal husbandry. The workforces were mainly women and children. Payment for work was not known. Workers were exposed to many types of health hazards. Treatment then was not organized. Later, Health industries including construction industry came into being.

According to Achalu (2012), modern occupational health report started as a result of colonization and industrialization by Britain. The first occupational health service in Nigeria was introduced by the medical examination board of Liverpool infirmary in 1789 with the main aim of caring for the health of British slave dealers from Africa to Britain.

However, after the abolition of slave trade, the Royal Niger Company of Britain increased its exploitation and trading activities in Nigeria. The company organized its own health services which were later inherited by the United African Company (UAC).

During the British colonial rule, many of their soldiers were dying of malaria which led Colonel Luggard to establish health services to take care of the health and welfare of soldiers and other colonial administrators. Later, during the Second World War, the Medical Corps were separated to cater for the military alone leading to the creation of public health service which became the nucleus of the National Health Service (Kalejaiye, 2013).

2.1.5 Occupational Health Risks (OHRs) In Nigeria

Risk is the likelihood and severity of hazard from exposure (Ekop, 2004); thus, risk is equal to hazard exposure. Because of the enormous number of people usually affected, the impact of air pollution on cardiovascular disease represents a serious public health problem.

In fact, results from NIEHS funded studies (National Institute of Environmental Health sciences (NIEHS, 2010)) demonstrated a strong relationship between levels of airborne particles sulfur dioxide, and other fossil fuel emissions and risk of early death from heart diseases.

Pollution occurs as a result of man's activities in the environment, resulting in the emission of harmful substances that have deleterious or toxic effects on humans. The presence of pollutants in the atmosphere causes occupational health risk on the worker or residents that are in close proximity with the pollutants.

Common atmospheric pollutants encountered in different occupational sites include: sulphur oxide, oxides of nitrogen, hydrogen sulphide, carbon monoxide, sulphur dioxide, hydrogen cyanide, ammonia, particulate matter, heat radiation and noise (Axelong, 2000). A good case can be found in the Uyo metropolis where there are a number of industrial/occupation sites.

Due to industrial processing, project construction activities, petroleum products marketing, industrials and municipal waste disposal, etc. these sites may generate atmospheric pollutants that pose serious risks/threats to human health. Ekop (2004) has documented environmental problems of Uyo metropolis. The study showed that people living in the more polluted cities had a higher risk of hospitalization and early death from lung cancer than those living in the less polluted cities (NIEHS, 2010).

2.1.6 Health and Safety Policies and Programmes in the Work Place in Nigeria

The health and safety of every employee in an organization is important if the organization is to continuously operate to meet its stated goals and objectives. A healthy worker is an able worker, and a safe worker is a focused worker. An unhealthy or unsafe environment affects an employee's ability and motivation to work (Achal, 2010).

Thus, health and safety policies and programme are directed at protecting employees from health and safety policies, and programmes are directed at protecting employees from health and safety hazards that may arise in the course of performing their work (Achal, 2010).

According to Adeniyi (2001), managing health and safety at work is usually a matter of developing health and safety policies, conducting risk assessment which identifies the hazards and assessing the risks attached to them, carrying out health and safety audits and inspections, implementing occupational health programmes, managing stress, preventing accidents, measuring health and safety performance, communicating the need for good health and safety practices, training in good health and safety practices and organizing health and safety.

Health hazards relate to those aspects of the work environment that slowly and cumulatively often irreversibly lead to deterioration of an employee's health. Examples are cancer, poison and respiratory diseases as well as depression, loss of temper and other psychological disorders.

Occupational health programmes are thus primarily concerned with the prevention of ill-health arising from workplace conditions, while safety programmes deal with the prevention of accidents and with minimizing the resulting loss and damage to lives and properties (Adeniyi, 2010).

Since ill-health and injuries inflicted by the system of work or working conditions jeopardize employee's ability to effectively discharge their duties, close and continuous attention to quality health and high standards of safety must be maintained at all times in the work place. This places a moral as well as economic responsibility on employers to take measures in ensuring the highest standards of health and safety in the workplace.

However, since it is the government that takes the primary responsibility for ensuring the safety of its citizens, government of many nations have developed laws that prescribe the scope of workplace health and safety policies. In the United States of America for example, the law that governs health and safety in the workplace is the Occupational Safety and Health (OSH) (2005).

The Act was designed to remedy safety problems on the job. The law established safety and health standards that organizations are expected to comply with and when these

standards are violated, the law prescribed penalties depending on the severity of the outcome of the violation. In Britain, the Health and Safety at Work Act (2004) and other related Acts provide the legal framework for the code of practice on matters relating to workplace health and safety.

In Nigeria, the government's attempt to ensure the health and safety of its citizens in the workplace is contained in two acts. These are the Factories Act (1987) and the Workmen's compensation Act (1987) which has been replaced by the Employee Compensation Act. The object of the Factories Act (1987) was defined as: "An Act to provide for the registration of factories: to provide safety for factory workers and a wider spectrum of workers and other professionals exposed to occupational hazards, but for whom no adequate provisions has been made; to make adequate provisions regarding the safety of workers to which the Act applies and to impose penalties for any breach of its provisions (Laws of the Federation of Nigeria, Vol. 6, Chapter F1:F1-4)".

Primarily, the Factory Act (1987) prescribes the aspect of the workplace for which employers are expected to develop health and safety policies in order to protect their workers. The general provision for health in this act covers areas such as: cleanliness, overcrowding, ventilation, lighting, drainage of floors, and sanitary conveniences.

The general provisions for safety covers equipment and facilities such as prime movers, transmission machinery, powered machinery, construction and maintenance of lifting vessels containing dangerous liquids; hoist and lifts, chains, ropes and lifting tackles; cranes and other lifting machines, self-acting machines, etc.

The Workman's compensation Act is an "Act to make provisions for the payment of compensation to workman for injuries suffered in the course of their employment (Law of the Federation of Nigeria. Vol. 16, Chapter 6-12). This act specifies the liability of the employers to the employee in the event of any personal injury or harm sustained in the course of his work. Section 32 of this act, which is on occupational disease, specifies that compensation is to be made as if any disease so specified was a personal injury by accident arising out of and in the course of the employment. Paragraph (a) of this

section emphatically states that the disease must be due to the nature of the employment. Though the Factory Act generally covers the hygiene and safety requirement of work environment, it however focuses purely on factory workplace, and only by its extension could it be applied to non- factory workplace.

Also, the health issues addressed in the Act are merely factory hygiene issues that do not take cognizance of serious health issues that may arise in the workplace. In the Workman Compensation Act, where various degree of accidents that could occur in the workplace and the compensation for them were identified, no mention or description of such was made concerning occupational diseases except that compensation would be made for them as if they were accident arising from the course of work. However, as stated earlier, the Workman Compensation Act has been replaced by the Employee Compensation Act. The new Act deals with every aspect of the contract of employment entered between employees and employers. Issues therein include: wages, working hours, and holiday, compensation during illness or infirmity, and suspensions among others (Kalejaye, 2013).

Occupational health and safety is concerned with the detection, evaluation and control of environmental health and safety hazards associated with working environment (Deubenspeek, 2004). Such hazards include physical, chemical, biological, ergonomic and psychosocial factors that may have adverse effects on the health and well-being of workers. These hazards are brought about by two broad categories of causes namely “unsafe work conditions” and “unsafe work behaviors”. Unsafe work conditions focus attention on the various aspects of work environment, physical, chemical, biological, ergonomic and psychological as already indicated (Deubenspeek, 2004).

On the other hand, unsafe work behavior focuses attention on habits, lifestyle, compliance with rules and regulation, body types and proneness to accidents (Adeniyi, 2010). Interactions between these two broad factors are the major cause of hazards resulting in injuries and health problems.

Therefore, occupational health practitioner presumes that each employer of labour has a general concept of hazards. Every employee on the other hand has the “special duty” of complying with standards of safety and health established by the employer. The debilitating and often fatal consequences of dangerous working conditions on man in various occupations have been well documented by several researchers in occupational health (Nwajei, 2005; Nwachukwu, 2010) of the various sources of industrial health hazards, chief among them are the ergonomic stress vectors.

In an industrial setting, health problem could be physical like injuries and other forms of impairment of physiological problems arising from diseases or emotional imbalance. For example, in Nigeria, employees in Health industry encounter operational problem of noise, toxic, material, heat and stress, radiation trauma and other hazards (Nwahei, 2003).

The occupation or the nature of work performed by a person exposes him or her to health hazards associated with that occupation. Diverse occupations exist and they include: traditional Health industries (automobile, automotive and appliances): services industries (banking, health care, and restaurant), education, agriculture, construction, mining and high technology firms, etc. These health hazards interact with numerous nutritional, hygienic, microbial and social factors in the workers’ environment to aggravate their effects on health.

There is also interaction between work hazards and chronic diseases such as malaria, diabetes, hypertension and cancer. Types of health problems include labour accident, occupational diseases, chemical hazards and many others. The figures are uncertain due to reporting irregularities. The hazards seriously affected the health of the employees and invariably their productivity. Death toll was much and morbidity very serious. The employers paid no or little attention to the sufferings of the employees. This brought about the provision of occupational health services to alleviate the sufferings of the employees and to provide preventive and management services for the welfare of employee (Folawiyo, 2005).

2.1.6 Productivity

Productivity is the ratio of output to inputs in production; it is an average measure of efficiency of production (Wikipedia, 2014). Efficiency of production means production's capability to create incomes which is measured by "Real Output Value minus Real Input Value".

The Memorandum of EANPC defines productivity in a broad sense. Productivity contributes to value creation or added value by making continuously better use of resources to contribute to growth, innovation and employment; it is not seen just as a statistical ratio.

Productivity is an expression of how efficiently and effectively goods and services (i.e. goods and services which are demanded by users) are being produced. Thus, its key characteristics are that it is expressed in physical or economic units - in quantities or values (money) - based on measurements which are made at different levels: on the level of the economy overall, that of a sector or branch of the economy, that of the enterprise and its individual plants/units and that of individuals (EANPC, 2005).

Productivity is a crucial factor in production performance of firms and nations. Increasing national productivity can raise living standards because more real income improves people's ability to purchase goods and services, enjoy leisure, improve housing and education and contribute to social and environmental programmes. Productivity growth also helps businesses to be more profitable. Moreover, productivity is not only measured by quantity and quality, but also by the benefit the customer obtains. This is especially true for the service industry. The concept of productivity is also increasingly linked with quality of output, input and the process itself. An element of key importance is the quality of workforce, its management and its working conditions and it has been generally recognized that improving quality of working life and rising productivity do tend to go hand in hand (Prokopenko, 2008).

Generally speaking, productivity could be considered as a comprehensive measure of how organizations satisfy the following criteria (Prokopenko, 2007):

- **Objectives:** The degree to which they are achieved.

- **Efficiency:** How effectively the resources are used. (Doing things right)
- **Effectiveness:** What is achieved compared with what is possible. (Doing the right things)
- **Comparability:** How productivity performance is recorded over time.

According to Owoeye (2002), productivity is a quantitative or statistically weighted measured of how efficiently a given set of resources is used in achieving a given set of objectives. It therefore connotes efficiency within a defined effectiveness context.

Productivity means balance between all factors of production that will give the greatest output for the smallest effort (Drunker, 2009). The advanced learners' dictionary defined productivity as being productive, the power of being productive and increased efficiency and the rate at which goods are produced. Productivity management for a rationalized organization with specific product as common in many organizations in Nigeria is the process or technique of achieving the highest level of effective performance with the least expenditure of resources through motivated and committed people (Owoeye, 2002).

Mental, physical and social conditions of workplaces and the adequacy of health and safety measures are the main indicators of quality of working life. In this context, to include health and safety measures to the list of productivity improving techniques at work places is gaining popularity in recent years. Similarly, as shown in figure 1 below, the productivity flower of EANPC consists of contributing factors which have considerable effects on the productivity levels of work places. These factors determine the approaches and techniques for improving productivity.

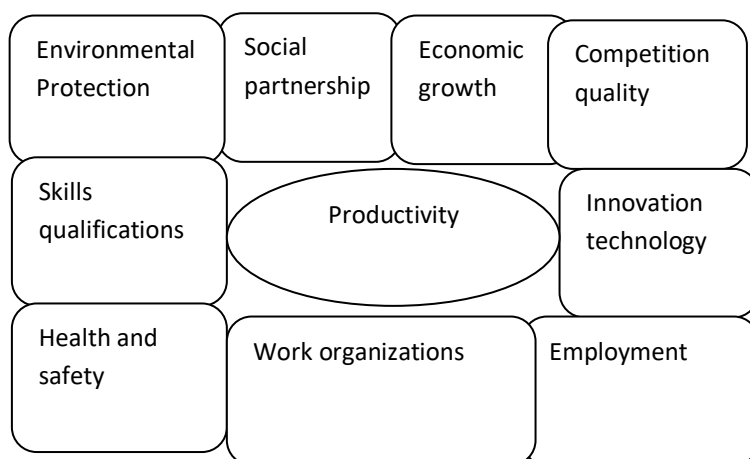


Figure 1: Productivity and its contributing factors

Source: The finish work environment fund (EANPG 2005).

2.1.7 Productivity as a Performance Measures

Measuring performance is one of the most important aspects of operation management, and which has received a great deal of attention during the past few years. In order to make any improvements to the functioning of the transformation process, there must be methods for measuring its current effectiveness.

Productivity is the broadest and most common measures of operations management performance and basically assesses how resources are utilized and managed to achieve a set of desired results. Productivity is defined as the ratio output to input (Hannagan, 2005).

$$\frac{\text{Output = results achieved}}{\text{Input results consumed}}$$

An increase in productivity can therefore result from either an increase in output or a decrease in input. However, the problems of measuring output and input in the same units, and the debate about whether the resulting ratio has any meaning have lead to productivity being considered in relative terms i.e. considering changes in ratio, comparing result in one period with those in another.

Productivity has been a popular measure for many years, primarily because is directly linked to profit, and therefore attracted a good deal of senior management attention. There are three levels at which productivity may be measured.

1. **NATIONAL:** Where the productivity of a nation or group of nations is measured, international comparisons are then made and the resulting debates often lead to blame being allocated to various groups such as stock holders, operation managers and research managers.
2. **INDUSTRY:** Where the productivity of particular sectors within the economy is measured. Most governments issue statistics on the relative performance of both health and service industries. Often expressed as output per employee per hour. Such statistics are useful for individual firms to compare their performance to the industry average, although, relative change is probably more important than absolute measure.
3. **ORGANIZATION:** Where the productivity of a particular organization is measured. Undertaking a quality improvement programme is one way to address the issue of

improvement. Often, companies have trouble getting started on productivity improvement because; they do not have measures of productivity commitment to change or feedback on result received. It should be born in mind that any improvement in productivity should be made within the context of the organization as a whole, and after consideration on how productivity improvement affects other performance objectives, such as increased flexibility and reduced lead time (Nwaochei, 2007).

Considering the effect of job hazards on productivity, prevention of job hazards need to be adequately put in place by ensuring that works are in good health at the point of employment and that their health is not in jeopardy by virtue of their jobs (Shilling R.S.F, 2001) shilling suggested that n enterprises must be re-rooled for higher productivity in order to compete successfully in the nearest future and that there is need to prevent the incidence and prevalence of job hazards to enhance the working ability of the working population.

2.3 Theoretical Framework

2.3.1 Maximization Theory

The basic position of enlightened value maximization theory is that an organization cannot maximize its long-term market value if it ignores or mistreats any important constituency.

The theory argues that, organizations can maximize long term value by choosing among the competing demands of stakeholders or by making necessary trade-offs among the demands from stakeholders. Practically, shareholders want low risks and high returns, customers may also want low prices and high quality services.

Employees may also want benefits, safer and healthier working environments, medical benefits and pension. Although it is important that the organisation's purpose of making profit should consider the social welfare of employees and the society as a whole, managements of organizations must focus on issues where there is a direct link to business needs (Grayson and Hodges, 2001).

Therefore, being socially responsible includes making profit. Obviously, healthy employees can make huge profits; that is, by this theory, invest additional money in important

constituency and that investment means greater financial returns to the organisation. Since the theory of enlightened value maximization leaves the decision for the organisations to decide which constituent is relevant and worth investing in, it is worth arguing that the health and safety of employees is paramount.

According to this theory, there is a direct relationship or link between a firm's profitability, survival and growth and the management of its employees' health and safety.

Although there are methodological difficulties of accurately measuring costs and benefits of employee health and safety, few studies have provided some evidences to justify employee health and safety investment. For example, Miller and Haslam (2009) in their study found that most companies consider legal prosecution as the major drive for employee health and safety management. Fernandez-Muniz et al., (2009) argued that the need to gain competitive advantage and increase economic-financial returns must drive business firms to invest in employee health and safety practices.

Ashraf and Naseem (2003) and EEF (2007) also found that poor employee health and safety practices leads to high absenteeism and lost workdays which eventually results in low productivity. Research has also linked high rate of employee turnover to poor employee health and safety practices (Rolfe et al., 2006).

Likewise, business firms that invest in employee health and safety benefits reduced healthcare costs, workman compensation and insurance costs (Attridge, 2005; Loeppke et al., 2007; Wright and Marden, 2002).

There is a positive relationship between total quality management practices and employee health and safety practices. For example, Mossink (2000) found that quality service provision has a strong connection with healthy employees. Smallman and John (2001) indicated that the fear of losing corporate credibility and reputation underpins corporate action for employee health and safety.

Haefeli et al., (2005) argued that apart from the above benefits, firms maximize long term financial gains and improve their corporate performance when they invest in employee health and safety. CIPD (2007) confirmed the above findings by indicating that firms can

effectively create shareholder value when some of the profits are re-invested in employees' health and safety management.

2.3.2 Stimulus-Based Theory

Kahn (2006) defines stimulus-based stress as —external forces or conditions that are hypothesized or demonstrated to have negative (painfully damaging, incapacitating) effects on the organization of interest (P.42). Stimulus-based stress theorists believe that the factors in the environment exert an influence on an individual (Derogatis and Coons, 2003; Lazarus and Folkman, 2000, Meichenbaum, 2006). Essentially this model proposes that external stressors in the environment result in a stress reaction or strain (Cox, 2008). In addition, different categories of stimulus stressors have been identified in terms of their ability to induce stress such as: (a) acute, time-limited stressors; (b) Chronic intermittent stressors; (c) stressors sequences; and (d) chronic stressors; (Derogatis and Coons, 2003).

2.3.3 Role Theory

In order to fulfill expected service —over the last decade human service, agencies, in most western economies have undergone major organizational restructuring and redefinitions of professional roles (Biggs et al; 2005). One of the basic premises of the role theory is that various occupational roles that individuals engage in may be stressful regardless of their actual occupation, suggesting that stress found in various work roles may be stressful for all workers. Osipow and Spokane (2007) described six work roles that they felt were stressful regardless of an individual's actual vocational choice. These six roles are (a) role ambiguity (b) role insufficiency (c) role overload (d) role boundary (e) responsibility and (f) physical environment (Osipow and Spokane, 1987; Osipow, 2008).

2.4 Empirical Review

The history of the industrialized countries shows that social and economic development is closely interdependent. To this day no nation has achieved sustainable economic development by neglecting social programmes, nor has any achieved social well-being without standing on sound economic ground. The essential link between the social and

economic phase is the working population. All wealth is directly or indirectly obtained from the efforts of the working population. (Reich and Okubo, 2002).

A healthy employer is the key factor for sustainable social and economic development. They contribute seriously to the wealth of the industries. As workers became the back bone of industrialization, massive and indiscriminate employment of vulnerable groups, children and women became the order. Most of the employees were inexperienced and unskilled on the type of tasks involved in the occupation. Employees then became special risk group.

Poor and unsafe working conditions, rapid introduction of new industries, invention and application of new tools for mass production and other processes brought about serious danger not anticipated to the employees (Reich and Okubo, 1992). All these resulted in significant dangers to both employees and their families. They became exposed to various occupational diseases and serious accidents aggravated by endemic diseases like malnutrition, worm infestation, malaria and others. Death toll was much. Hence the origin of Occupational Health as means of protecting the health and welfare of employees.

Many people are at serious risk of ill-health and accidents because of the condition they encounter in their workplaces. Combating these dangers requires a multidisciplinary approach and special attention to the elimination of hazards from the work environment. This is a long-standing concern of WHO.

Worldwide, it is estimated that about 90,000 industrial accidents and about 400 lives are lost daily through occupational hazards (Seaton, 2004). The hazards could be physical, chemical and or biological. Occupational hazards are more and worse in developing countries like Nigeria where laws are not enforced even though in place. These hazards are under-studied and under-reported in developing countries as well.

The provisions were inadequate in the medium and small scale industries. In any country where the organisation and provision of occupational health and safety are not strongly enforced, workers health and safety especially in the medium and small scale

industries will depend on the owners' perception of risks, social costs of informing or addressing such issues.

Sir Thomas Legg (1863-1932) advocated that all workers should be adequately informed about the hazards of their work. Eakin (2002), in a study of management of health and safety in small work place found that some industrial owners tend to discount or normalize health hazards and to believe that management intervention in employee health behaviour was inconsistent with prevailing patterns of labour relations and norms respecting individual autonomy.

Inability by any country or organisation to provide occupational health and safety services to all categories of workers is in contravention to the international labour organization (ILO) convention 161 and recommendation 171 of 1985, which requires that occupational health and safety (OHS) services should be developed for workers in all branches of economic activities and all undertaking. The availability of occupational health and services will protect workers from the effects of occupational hazards prevalent in almost all occupations.

The first conference on occupational safety in Nigeria, which took place in 1962, and the subsequent conference on occupational health in Africa held in 1968 both in Lagos, Nigeria, appeared to be genuine efforts at occupational health and safety based on egalitarian and humanitarian ideals rather than on nationalism.

In both developing and developed countries, there may be sectors of companies where 80-90% of workers are heavily exposed to traditional, physical or chemical factors or to accident risks. As modern production techniques were adopted, the number of occupational hazards and personnel injury became larger as business enterprises and mechanical production increased.

The workplace has always been associated with hazards. These health hazards mutually affect every part of the body depending on the nature of work and the type of materials that the worker is exposed to. No one knows the amount of ill health attributable to occupation. It is however well known that workers have been injured or killed in the course

of employment (Mecunrey, 2006). It was reported that overzealous investment promotions may have a tendency to expose workers to hazardous process and operations especially where labour and occupational health standards are compromised as it is found in most developing countries including Nigeria (Bruce, 2008).

Nowacki (2007) confirmed the existence of occupational hazards in Nigeria. It is therefore necessary to protect workers against the effects of occupational hazards by the application of effective safety practices. The key to avoiding accidents in work places is to raise the level of awareness of occupational hazards among employers and employees.

Precautionary measures will minimize the effect of the hazards on the workers. Workers who are uninformed about hazards to which they may be exposed find it difficult to identify or recognize a disease as occupational. Thus the risk imposed on individuals by occupational hazards is dependent upon the individual's perception of the risk and action taken to avoid it.

In spite of the progress so far made in occupational health and safety in Nigeria, it is reported that the level of workers knowledge of occupational hazards or the existing legislation which should contribute to improving occupational health and services is still low especially in medium and small scale industries.

Equally of concern to the safety of workers is the number of occupational accidents workers are exposed to. In the United States, work accidents destroy more than 14,000 lives annually and 11.5 million disabling injuries (Karujica, 2002).

There are virtually no hazards or operation which cannot be overcome by practical safety measures. Asogwa (2007), in support maintains that safety training should be given to workers as part of their initial training and that it should be integrated into actual work situation so as to constantly remind workers of the need to practice safety measures.

Waldron (2009), also collaborated with him that individual workers must be aware of their duties for their safety and that of their colleagues at work. Thomas Legg in 1888 also advocated that all workers should be educated on hazards of their work and workplace.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the procedures, methods and techniques the researcher adopted in the research work. Research work most often than not is appraised based on the quality and accurateness of the analysis and information it provides at the end. However, this is dependent on the nature of data collected during the research. As a result, this chapter looked at how data were gathered for the research. The methodology enlightened on the tools or techniques for research design, data collection, the population and sampling techniques, data sources, data collection instruments, and data analysis plan.

3.2 Research Design

Survey and descriptive research designs were used in this study not only because of the type of data the study aims to collect but also because it allows for the cross section study of a clearly defined population. This is concerned with the entire research plan that was used in carrying out this study. It represents a comprehensive data plan whose purpose is to answer research questions and analyze the outcome not only in statistical way but also in a descriptive way.

3.3 Population of the Study

The target population for this research is the staff in the departments and units in UITH, Ilorin serves as the sample frame for the study.

3.4 Sample Size And Sampling Technique

This study adopts a simple random sampling technique in selecting its sample respondents were selected accidentally because of the tight schedule of all employees; the available respondent is approached at sight. At the second stage, One hundred and fifty respondents were targeted constituting a little above Seventy Five Percent (75%) of the employees working on the plant.

3.5 Methods of Data Collection

In order to produce a comprehensive result and to achieve the stated objective on the proposal for this research work, the following line of action have been adopted for the collection of data and other useful information for the study. They are primary and secondary sources of information which knowledge on the project topic as a support.

- i. **Primary data:** collection techniques used was the questionnaire, and observation.
- ii. **Secondary data:** these were collected from textbooks, journal, and publication including records of UITH.

3.6 Instruments of Data Collection

The instrument used for this study is the questionnaire. The questionnaire is structured in accordance with the stated research question and hypothesis. The questionnaire is divided into two parts. Section A comprises of lecture relating to the bio-data of the respondents, while section B comprises of section relating to employees training and development in an organization.

3.7 Methods of Data Analysis

The analysis will be carried out using both descriptive and inferential statistics. The frequency distribution/simple percentage method will be used to present the data collected through the questionnaire. The Pearson's product moment correlation coefficient (r) method will be used to determine the degree of relationship or strength of association between dependent and independent variables i.e. productivity and the job hazards.

The significance of the relationship will be tested at 95% and 99% confidence level or 0.05 and 0.01 significant levels respectively using the student 't' test.

The decision rule is to reject the null hypothesis (H_0) if the obtained or calculated 't' value is greater than the critical or tabulated value. It is however accepted, if the obtained or calculated 't' is less than the critical or tabulated value.

Simple correlation method measures the degree of association between two variables. The formula for finding percentage score is presented below;

$$\text{Percentage score} = \frac{\text{number of respondent}}{\text{Sample size}} \times 100$$

The formula for calculating Pearson's product moment correlation coefficient (r) is given as:

$$r = \frac{n\sum xy - n\sum x \sum y}{[n\sum x^2 - (\sum x)^2 - [n\sum y^2 - (\sum y)^2]}$$

$$t = r \sqrt{\frac{n-2}{(1-r^2)}}$$

Where x = value of variable x
 Y = value of variable y
 n = number of sample
 r = correlation coefficient
 t= t-value (calculated)

The degree of freedom (df) = n-2

Definition of Variable

From the research topic “effect of job hazards on productivity”.

Two variables are measured

- i. Job hazards = x
- ii. Productivity = y

Where: X is the independent variable

Y is the dependent variable

3.8 Historical Background of the Case Study

The University of Teaching Hospital was established by decree No 74 of 1979 under the last military administration of General Olusegun Obasanjo (RTD) with the objectives of saving as a multipurpose hospital, that is as a training institute for medical students of the university and also to serve the specialist medical needs of the entire inhabitants of the state.

The old Ilorin central Hospital was converted to the teaching hospital temporarily after an agreement between the federal government and the kwara state government. It was supposed to be five years but the contract had been reviewed because the permanent site of the hospital is yet to be completed.

The hospital consist of the various departments

They are follow.

Administration	Department
Anathesia	Department
Behavioural	Department

Chemical pathology and immunology	Department
Catering	Department
Epideminology and community Health	Department
Finance/account	Department
Internal Audit	Department
Harematology and paltiology	Department
Laundary and tailoring	Department
Medical social service	Department
Medical Records	Department
Medicine	Department
Nursing service	Department
Obstetrics and Gyneacology	Department
Parediatrics and child health	Department
Pharmacy	Department
Radiology	Department
Physioltieraphy	Department
Security	Department
Stores and supply	Department
Surger	Department
Works	Department

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter covers the presentation of responses, analysis and findings of data collected from the respondents through diverse sources, i.e. questionnaire, interview, personal observation and evidence. The study in an attempt to collect data relevant to the study distributed copies of questionnaire that covers 50% of the total study area for the two selected companies using simple random sampling technique. With this number the total copies of questionnaire administered were two hundred and ninety (290).

However, it is important to state that only two hundred and fifty nine (259) copies of questionnaire in all were filled, completed and returned. As a result, presentation, analysis and conclusion of the study were base on the two hundred and fifty nine (259) returned copies of questionnaire as shown in the subsequent tables.

4.2 Demographic Characteristics of Respondents

Below is the tabular summary of responses to personal information on the questionnaires distributed to respondents.

Table 4.1.1 Demographic Profiles of Respondents

Variable	Frequency	Percentage
Gender		
Male	164	63.3%
Female	95	36.7%
Total	259	100.0%
Age		
18 – 29 years	133	51.4%
30 – 39 years	79	30.5%
40 – 49 years	36	13.9%
50 years above	11	4.2%
Total	259	100.0%
Marital Status		
Single	128	49.4%
Married	111	42.9%
Divorce	13	5.0%
Widow/er	7	2.7%
Total	259	100.0%

Academic Qualification		
WASSCE/SSCE/GCE	22	8.5%
OND/NCE	122	47.2%
HND/BCE	113	43.6%
MSC/MBA	2	0.7%
Total	259	100.0%
Working Experience		
Below 1 years	78	30.1%
2 – 5 years	131	50.6%
6 – 10 years	44	17.0%
Above 11 years	6	2.3%
Total	259	100.0%
Nature of Employment		
Casual	71	27.4%
Full Time	188	72.6%
Total	259	100.0%
Working Hour Per Day		
1 – 6 Hrs	66	25.5%
7 – 14 Hrs	189	73.0%
15 Hrs and above	4	1.5%
Total	259	100.0%

Author's Computation, 2025

From table 4.1.1, the percentage of male to female in both sampled companies were 63.3% to 36.7%, showing that majority of the respondents were male. The large difference in margin between the two genders may be due to the nature of work in the organizations. The result further indicates the age brackets of the respondents which; 51.4% of the respondents are between the age bracket of (18 – 29 years), 30.5% are between the age bracket of (30 – 39 years), 13.9% are between the age bracket of (40 – 49 years), while only 4.2% are 50 years and above. This result justifies the fact that production oriented organizations are majorly occupied with young and capable workforce.

Analysis of the result further indicates that 8.5% are WASSCE/SSCE/GCE holder, 47.2% are OND/HND holder, 43.6% are HND/BSC, while only 0.7% are MSC/MBA holder. This implies that the sampled organizations were having a significant number of more educated workers in their domain which will invariably promote core task performance by providing individuals with more declarative and procedural knowledge with which they can complete their tasks successfully. Table 4.1.1 also reveals that majority of the respondents has 2 – 5 years working experience (50.6%), followed by below one years working experience (30.1%), then 6 – 10 years working experience with (17.0%), and lastly 11 years

and above with (2.3%) working experience. This implies that the bulk (67.6%) of the respondents have 2 – 10 years working experience; this will enable them to develop intra-personal and interpersonal skills, knowledge and values, self-confidence, administrative/management knowledge and prospective about the organizations. Table 4.1.1 also reveals that most of the respondents (72.6%) are full time staff, with (73.0%) working for about 7 to 14 hours.

Table 4.1.2: Awareness of hazard in the working place

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	259	100.0	100.0	100.0

Author's Computation, 2025

Table 4.1.2 reveals that 100% of the respondents were aware of the problems they are likely to face in the organization. This result indicates that workers are aware of hazard in the working place and they are enlightened on how to avoid all these hazards.

Table 4.1.3: provision of protective device

	Frequency	Percentage
Company	92	35.5
Personal	67	25.9
Both	100	38.6
Total	259	100

Author's Computation, 2025

Table 4.1.3 reveals that 35.5% of the respondents were of the opinion that company provides protective devices for them in case of any hazard, 25.9% indicated that they provided their protective devices by themselves, while 38.6% indicated that protective devices were provided by both personal and the company. This means that provisions of protective devices are not left to the company alone, the workers also provide protective for themselves if it is not available in the organization.

Table 4.1.4: Are you satisfied with your work?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	204	78.8	78.8	78.8
No	25	9.7	9.7	88.4
Undecided	30	11.6	11.6	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.4 shows that majority (78.8%) of the respondents were satisfied with their work, (9.7%) responded negatively and (11.6) were undecided. This implies that though many of the respondents were satisfied, some employees are unsatisfied with the level of work done in the organization.

Table 4.1.5: Have you in one way or the other sustained any injury during the process of executing your job?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	135	52.1	52.1	52.1
No	75	29.0	29.0	81.1
Und.	49	18.9	18.9	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.5 shows that (52.1%) of the respondents had, one way or the other sustained injury in the process of executing their duty, (29.0%) responded negatively and (18.9%) were undecided. This means that higher than average injuries are found in the workplace and many of the respondents appear to have suffered injury in the workplace.

Table 4.1.6: Level of illumination in the various section

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	178	68.7	68.7	68.7
No	47	18.1	18.1	86.9
Und.	34	13.1	13.1	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.6 shows that (68.7%) of the respondents indicated a positive response in term of level of illumination in the organizations, (18.1%) were unsatisfactory with the level of illumination in the work place, while and (13.1%) were undecided. This implies that occupational hazard like slips and trips, collision, fall from height, struck by objects, etc. will be limited in the organizations.

Table 4.1.7: maintenance of premises (environment)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	132	51.0	51.0	51.0
No	71	27.4	27.4	78.4
Und.	56	21.6	21.6	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

In cognizance of how the premises is well-maintained, table 4.1.7 reveals that majority (51%) of the respondents confirmed that the environment is well maintained. Though (27.4%) were not satisfied with how the environment is maintained and (21.6%) were undecided, the margin in the responses justify how the companies should improve on the maintenance of their environment to reduce the level of health hazard like, for example, harmful pollutants from exhaust of internal combustion and diesel engines.

Table 4.1.8: Protective clothing, rubber, gloves, aprons, boots and face shields or goggles are encouraged to avoid direct contact of skin with harmful chemical compounds

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	144	55.6	55.6	55.6
No	65	25.1	25.1	80.7
Und.	50	19.3	19.3	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.8 shows that (55.6%) of the respondents indicated positive responses to this statement, (25.1%) indicated negative responses, while (19.3%) were undecided. This means that most organizations are careless about the safety of their employees. Hence, in order to avoid occupational health hazard in the form of harmful chemical compounds, be it liquids, gasses, mists, dusts, fumes, etc, protective devices are encouraged to be taken.

Table 4.1.9: Awareness of safety measure to protect workers from occupational health hazard in the organization

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	165	63.7	63.7	63.7
No	55	21.2	21.2	84.9
Und.	39	15.1	15.1	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.9 shows that (63.7%) of the respondents indicated to be aware of safety measures to protect workers from possible occupational health hazard, (21.2%) indicated negative responses, while and (15.1%) were undecided. This implies that proper and effective control measures are in place to reduce the level of occupational hazard, which can lead to bad publicity for the organization and can also dent the organization.

Table 4.1.10: Adequate training is given on safety measures

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	178	68.7	68.7	68.7
No	47	18.1	18.1	86.9
Und.	34	13.1	13.1	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.10 shows that (68.7%) of the respondents indicated a positive response, (18.1%) were unsatisfactory with the level of training given in the work place, while (13.1%) were undecided. This implies that more than average of the respondents confirmed that adequate training are given to them on safety measures. Workers who are uninformed about hazards to which they may be exposed find it difficult to identify or recognize a disease as occupational.

Table 4.1.11: On-the-job training on occupational health hazards and safety measures to protect workers from these hazards

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	135	52.1	52.1	52.1
No	75	29.0	29.0	81.1
Und.	49	18.9	18.9	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.11 shows that (52.1%) of the respondents indicated that on-the-job training on occupational health hazards and safety measure to protect worker from these hazards are offered to them, (29.0%) responded negatively and (18.9%) were undecided. This implies that awareness on safety measures are given to workers as part of their pre-employment industrial training and are integrated into the actual situation so as to remind workers of the need for safety measures.

Table 4.1.12: Does your exposure to safety training/instruction encourage your use of safety devices?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	182	70.3	70.3	70.3
No	46	17.8	17.8	88.0
Und.	31	12.0	12.0	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.12 shows that (70.3%) of the respondents indicated a positive response that exposure to safety training/instruction encourage the use of safety devices, (17.8%) indicated negative responses, while and (12.0%) were undecided. This implies that training of employees on safety measures have positive impact on the use of training devices in the organization.

Table 4.1.13: There is first aid for controlling industrial injuries and work related diseases

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	141	54.4	54.4	54.4
No	62	23.9	23.9	78.4
Und.	56	21.6	21.6	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.13 shows that (54.4%) of the respondents indicated a positive response in term of provision of first aid by the organizations, (23.9%) were unsatisfactory with the level of first aid available in the work place, while and (21.6%) were undecided. This implies that provision of first aid for controlling industrial injuries and work related diseases have positive effect on employee work performance.

Table 4.1.14: There is consistency in management intervention to employee health behaviours

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	126	48.6	48.6	48.6
No	84	32.4	32.4	81.1
Und.	49	18.9	18.9	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.14 shows that the level of consistency in management intervention to employee health behaviour is not impressive. (48.6%) of the respondents indicated a positive responses to the statement, (32.4%) were unsatisfactory with the consistency of management, while and (18.9%) were undecided. This implies that workers in the sampled organizations confirmed that management attach more importance to achieving high standards of safety as they do to other key areas or aspect of their business activities

Table 4.1.15: There is improvement in productivity as a result of safety measures put in place

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	204	78.8	78.8	78.8

No	25	9.7	9.7	88.4
Und.	30	11.6	11.6	100.0
Total	259	100.0	100.0	

Author's Computation, 2025

Table 4.1.15 shows (78.8%) of the respondents were indicated that there is improvement in productivity as a result of safety measures in place in the organizations, (9.7%) responded negatively and (11.6) were undecided. This implies that whenever adequate safety measures are in place, productivity tends to improve, and if otherwise, there will be slower production.

4.2 Analysis of Research Hypotheses

4.2.1 Analysis of Research Hypothesis I

H₀: There is no significant relationship between occupational health hazard and productivity of workers.

This research hypothesis is analyzed thus:

Table 4.2.1.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.763 ^a	.581	.576	.03844

a. Predictors: (Constant), equipment related injuries, harmful chemical compounds, air pollution

Author's Computation, 2025

From the regression analysis result shown in table 4.2.1.1, it was found that in the model summary table, the R value is (0.763), R square (0.581) adjusted R square (0.576) and the standard error of estimate is (0.03844). The large value of R indicates a stronger relationship between the observed and predicted values of the variables. In other words, the R value depicts that occupational health hazard accounted for (76.3%) reduction in workers' productivity. This implies that the proportion of variation in the dependent variable is explained by the regression model. Hence, the value of R-square (58.1%) indicated that the model properly fits the data. More so, the value of adjusted R (57.6%) showed that the value of R square closely reflected the goodness of fit of the model in the population.

Table 4.2.1.2: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	68.086	3	22.695	118.066	.000 ^b
	Residual	49.018	255	.192		
	Total	117.104	258			

a. Dependent Variable: reduction in workers' productivity

b. Predictors: (Constant), equipment related injuries, harmful chemical compounds, air pollution

Sources: Author's Computation, 2025

Furthermore, the analysis of variance table (Anova) showed regression sum of square value of (68.086) which is higher than the residual sum of square value of (49.081). This implies that the model accounted for most of the variations in the dependent variable. More so, the F calculated value of (118.066) is greater than the tabulated value of (3.90) indicating a significant relationship. In addition, the significant value of P (0.000) is smaller than (0.05) which means that the independent variable (occupational health hazard) to a high extent accounted for the variations in the dependent variable (reduction in workers' productivity). Hence, we posited that there is significant relationship between occupational health hazard and productivity of workers

Table 4.2.1.3: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.233	.066		3.555	.000
	ERI	.585	.020	.597	6.702	.000
	HCC	.421	.075	.447	5.611	.000
	AP	.207	.119	.249	1.746	.082

a. Dependent Variable: reduction in workers' productivity
equipment related injuries, harmful chemical compounds, air pollution
Sources: Author's Computation, 2025

Table 4.2.1.3: shows the model coefficients (that is, the intercept and the slope). From the table, the results show that equipment related injuries is significant at the 5% level, harmful chemical compound is significant at the 5% level, air pollution shows positive correlation but not significant at 5% level. This implies that each of the variables has contributed to reduction in workers' productivity. Hence, there is significant relationship between occupational health hazard and productivity of workers. Exposing employees to these entire hazards may lead to employee injury and injured employee may not be able to contribute meaningfully to productive effectiveness, thereby leading to time loss, production loss and financial loss, resulting in less profit. Organization must put proper and effective control measures in place to minimize the level of occupational health hazard.

4.2.2 Analysis of Research Hypothesis II

H₀: There is no significant relationship between safety measures and occupational hazards.

This research hypothesis is analyzed thus:

Table 4.2.2.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.974 ^a	.949	.948	.01852

a. Predictors: (Constant), awareness, training, first aid

Sources: Author's Computation, 2025

From the regression analysis result shown in table 4.2.2.1, it was found that in the model summary table, the R value is (0.974), R square (0.949) adjusted R square (0.948) and the standard error of estimate is (0.01852). The large value of R indicates a stronger relationship between the observed and predicted values of the variables. In other words, the R value depicts that safety measures accounted for (97.4%) reduction in occupational hazards. This implies that the proportion of variation in the dependent variable is explained by the regression model. Hence, the value of R-square (94.9%) indicated that the model properly fits the data. More so, the value of adjusted R (94.8%) showed that the value of R square closely reflected the goodness of fit of the model in the population.

Table 4.2.2.2: ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	118.557	3	39.519	1572.640	.000 ^b
Residual	6.408	255	.025		
Total	124.965	258			

a. Dependent Variable: reduction in occupational hazard

b. Predictors: (Constant), awareness, training, first aid

Sources: Author's Computation, 2025

Furthermore, the analysis of variance table (Anova) showed regression sum of square value of (118.557) which is higher than the residual sum of square value of (6.408). This implies that the model accounted for most of the variations in the dependent variable. More so, the F calculated value of (1572.640) is greater than the tabulated value of (3.90) indicating a significant relationship. In addition, the significant value of P (0.000) is smaller than (0.05)

which means that the independent variable (safety measures) to a high extent accounted for the variations in the dependent variable (reduction in occupational hazard). Hence, we posited that there is significant relationship between safety measures and occupational hazard.

Table 4.2.2.3: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.241	.024		2.741	.03
1 Awareness	.210	.044	.211	2.221	.025
Training	.920	.027	.945	33.886	.000
First Aid	.538	.033	.444	4.891	.004

a. Dependent Variable: reduction in occupational hazards

Sources: Author's Computation, 2025

Table 4.2.2.3: shows the model coefficient (that is, the intercept and the slope). From the table, the results show that creating awareness is significant at the 5% level, giving employees training is significant at 5% level, giving first aid to injured employees is significant at 5% level. This implies that each of the variables has contributed to reduction in occupational hazards. Hence, there is significant relationship between safety measure and occupational hazards; that is, providing health and safety policies and programs, creating awareness of these hazards, training employees on how to safe guard themselves from hazards, providing first aid for injured employees in order to protect their workers. These safety programmes could also cover areas such as: cleanliness, overcrowding, ventilation, lighting, drainage of floors, and sanitary convenience.

4.4 Discussion of Findings

Table 4.1.1 shows that the majority of the respondents were male. The difference in the margin between the two genders may be due to the nature of works and skills as required by the management of the two organizations. The results indicates the age brackets of the respondents which 51.4% of the respondents are between the age brackets of (18-29 years), 30.5% are between the age bracket of (30-39 years), 13.9% are between the age bracket of (40-49 years) while 4.2% are 50 years and above. This result justifies the fact that the production oriented organizations like UITH are majorly occupied with young and capable

workforce. Increased productivity in the organizations may be due to the young and capable workforce under their control. The descriptive analysis further revealed that 8.5% are WASC/SSCE/GCE Holders, 47.2% are OND/HND Holders, 43.6% are HND/BSc Holders while only 0.7% are MSc/MBA Holders. This is necessary in order to understand and appreciate basic safety measures which invariably promote core task performance by producing individuals with more declarative and procedural knowledge with which they can complete their tasks successfully (Folawiyo, 1995; Miller, 1996). It was also obtained that majority of the respondents (67.6%) have basic working experience that will enable them develop intra-personal and inter-personal skills, knowledge and values, self confidence, administrative/management knowledge and prospective about the organizations. It was further drawn from the table that most of the respondents 72.6% are full-time staff with no fewer than 73% working for about 7 to 14 hours.

Table 4.1.2 revealed that 100% of the respondents were aware of the constant exposure to occupational hazards in their working places. Table 4.1.3 revealed the highest opinion that they were being attacked by chemical burn while the least claimed 5.0% injured by machine amputation (Bell, 2000). The preceded table claimed that 35.5% of the respondents were of the opinion that company provides protective devices for them in case of any hazard, 25.9% indicated that they provided their protective devices by themselves while 38.6% claimed that protective devices provided were both personal and company (Adeniyi, 2001). Table 4.1.5 shows that majority 78.8% of the respondents were satisfied with their work, 9.7% responded negatively and 11.6% were undecided. This implies that though many of the respondents were satisfied. It was also gathers from table 4.1.6 that 52.1% of the respondents had one way or the other sustained injuries in the process of executing their duty, 29% responded negatively and 18.9% were undecided. In cognizance of how the premises is well maintained, table 4.1.8 reveals that 51% of the respondents confirmed that the environment is well-maintained. Thus, 27.4% were not satisfied and 21.6% undecided. The margin in the responses justify how the companies should improve on the maintenance of their environment to reduce the level of health hazard like harmful pollutants from exhaust of

internal combustion and diesel engine(Parton,2008). More than 55% of the respondents indicated that they were been covered with protective clothing and this seem to have prevented the workers from occupational hazards in form of chemical compounds, no fewer than 68.7% claimed that adequate training is given on safety measures as shown in table 4.1.11.

On the job training on occupational hazards and safety measures to protect workers from these hazards, only 52.1% responded positively, 29% responded negatively and 18.9% were undecided as shown in table 4.1.12. This is in line with the statement made by Asogwa S.E (2000) who wrote that job experience through training can have hazards under control. A fact was drawn that training of employees on safety measures has positive impact on the use of safety devices (Sir Thomas Legg, 1863-1932) while 70.3% of the respondents signified a positive response as shown in table 4.1.13. This among others will check the ugly trend of inefficiency, poor performance, high labour turnover and financial loss to the companies. However the companies were been adequately equipped with the first aid in case of any injuries or works related diseases. This was shown in table 4.1.14 when no fewer than 54.4% of the respondents gave satisfactory remark, 23.9% were unsatisfactory and 21.6% undecided. The fact that the level of consistency in management intervention to employees' health behavior is not impressive although the table 4.1.16 further revealed that 78.8% indicated that there is improvement in productivity as a result of safety measures put in place.

It was obtained from the hypothesis table 4.2.1 that occupational health hazard accounted for 58.1% reduction in workers' productivity. Table 4.2.2 reveals that there is a significant relationship between occupational hazards and productivity of workers. To investigate which of the hazards poses more threats to workers' productivity; table 4.2.3 further revealed that equipment related injuries, harmful chemical compounds, air pollution each contributed to reduction in workers' productivity at 5% level of significance (Parton, 2008; Emeharole and Iwok, 1997). The correlation analysis through test-re-test also revealed that safety measures accounted for 97.4% reduction in occupational hazards. The ANOVA test for significant difference in table 4.2.4, support the idea that the safety measure to a high

extent accounted for reduction in occupational hazards. Hence it is posited that there is significant relationship between safety measures and occupational hazards. However, to check which of the safety measures contributed to a reduction in occupational hazards. A regression model is built in table 4.2.5 on three variables namely; awareness, training, first aid and each of the variables show a substantial influence to reduction in occupational hazards at 5% level of significance (Adeniyi, 2001). The Levene's test for least significance difference revealed the notion that there is sufficient evidence to reject the hypothesis that there are no types of hazards that pose more threats to the health of factory workers at U.I.T.H Ilorin. This findings is in line with the statements drawn from (Fine and Gordon, 2010; Weil, 2009).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The purpose of this chapter is to summarize the findings of this study, stating the broad aim of the study, the method of data collection and analysis. Conclusion based on the study is drawn and some valuable recommendations are made. Therefore, this chapter is divided into three major parts: Summary of findings, Conclusions and Recommendations.

5.1 Summary of Findings

The health and safety of every employee in an organization is important if the organization is to continuously operate to meet its stated goals and objectives. In Nigeria, industrialization and mechanization are increasing while occupational health problems are becoming prominent. These health problems are caused by exposure to harmful chemicals, biological agents, physical, mechanical and ergonomic hazards. Health problems resulting from such hazards may appear to occur less frequently than other major disabling diseases, due to lack of knowledge and pattern of illness of such hazardous diseases. This paper provided evidence through the content analysis of literature reviewed that, the illness from such hazards affect a considerable number of workers in the industrial sector in their job performance in Kwara State, specifically those emanated from Ilorin. It is therefore stamped in the light of this why the project examined the significance relationship between occupational hazards and productivity with special reference to U.I.T.H, Ilorin as the selected case study, and determines if the hospital comply and observe the safety rule. From this examination, one remarkable and general safety and health precaution that has been put in place by the management of the hospital used in this study and which cut across the production departments is the policy that every employee of the companies is to report to the appropriate authority if he/she suspect his/her health has been compromised in any way in the discharge of his/her duties for immediate action to be taken. Even though that it was believed that the occupational health and safety measures put in place at the companies are sufficient. Most of the factory workers (78.8%) were satisfied with the current occupational health and

safety measures at both companies. This was confirmed from the analysis in chapter four when the factory workers indicated that there is significant relationship between occupational health hazard and productivity with the F calculated value of (118.066) greater than the tabulated value of (3.90). For example, in most of the departments, more than half of the workers wear protective devices due to adequate provisions by both individual and management. The study therefore concluded that, a healthy worker is a productive worker. It recommended that health educational programmes should be carried out in various industries to create awareness about peculiar hazard. In such industries, safety measures should be provided for workers against health hazard, while injured, sick or diseased workers due to occupational hazards should be duly compensated.

5.2 Conclusion

From the study, there exist occupational health problems in University of Ilorin Teaching Hospital. The study focused on the effect of occupational hazard on worker's productivity in health industry in Nigeria. The findings show that increased productivity in the organizations may be due to the young, educated and capable workforce under their control. The predisposing factors associated with occupational health problems in U.I.T.H include low pay, and lack of formal education. However there is increased level of knowledge of occupational hazards among workers. The management of hospital has adequate safety policy as well as safety committee that organizes induction courses for new employees, educates workers on safety and monitors the workers to ensure strict compliance with safety rules. However, there are shortages of safety devices from the management for the protection of the workers and thereby workers had to provide by themselves.

5.3 Recommendations

Based on the findings of this research work, the following recommendations were made for both the management and workers:

- i. The management should; improve on the adequacy of protective devices otherwise it may affect the productivity of the organizations.

- ii. Usage of safety devices while in the industry should be enforced and all the workers should be trained and retrained periodically on how to use the protective devices provided by the management in the language familiar to them; regular supervision and monitoring to ensure compliance to the proper use of the devices; information on safety provisions and their importance should be displayed on the posters and notice boards and the sign posts mounted at strategic positions in the company. At times hand bills should be provided for personal keeps for constant consultation and reminder. Managers should show good example by using the devices always.
- iii. Adequate training should be given on safety measures because this will minimize the effect of the hazards on the workers. Safety policies and programmes should be directed to employees on health and safety hazards that may arise in the course of performing their work. Safety meetings should be held with the workers regularly where new trends in safety measures can be discussed.
- iv. Improved remunerations, starting with those workers who comply best with safety rules and regulations. This should also serve as incentive for workers to boost performance, productivity and commitment to their job.

REFERENCES

- Achalu, E.I. (2000). Occupational Health and Safety, Lagos.Simarch Nigeria Ltd. Splendid Publishers.
- Adeoti J.A. (2012). Guidelines on Preparation of Research Proposal and Structure of Thesis' Ilorin.Faculty of Business and Social Sciences.
- Aldana, S. (2001), Financial Impact of Health Promotion Programs: A Comprehensive Review of the Literature, American Journal of Health Promotion. pp. 296-320.
- Ashraf, A. S., &Naseem, M. S. (2003). Worker productivity and occupational health and safety issues in selected industries. Journal of Computers & Industrial Engineering, 45, 563–572.
- Asogwa S.E. (1978) 'Guides to Occupational Health Practice'. 1st edition, Enugu.Fourth dimension publishing company, page 20.
- Asogwa S.E. (2000). 'The occupational Health and Safety and Nigeria Industrial Development'. Nigeria medical journal, vol.30 (4): 155-160
- Asogwa, S.E. (2007). A guide to Occupational Health Practice in Developing Countries. Enugu. Snaap Press Ltd.
- Asuzu M. (2002). Occupational Health, a summary, introduction and outline of Principles'.Africa Link Books.
- Attridge, M. (2005). The Business Cases for the Integration of Employee Assistance, Work – Life and Wellness
- Bell A. (2000).Noise-An Occupational Hazard and Public Nuisance'.Public Health Paper, No.30, WHO, Geneva.
- Boyd, C. (2003). Human Resource Management and Occupational Health and Safety'.London routledge.
- British Standard, (1996).Occupational Health and Safety Management System' Edward Arnold publishing company.Bs 880, page 2.
- Bruce T.F (1998). Occupational Health Service' Africa newsletter on occupational health and safety.Vol.8, page 31.
- BurdineJ.N,&McLeroy K.R (1992). Practitioners use of theory: Example of safety education. Health Educ. Quart.19(3).
- Carl (1975). Code of practice on HIV/AIDS and the world of work. Geneva, International.
- CIPD.(2007). Absence Management. Directions in Psychological Science 13 (6), 238–241. CIPD, London
- Drucker F.P. (1999) 'Management Task, Responsibilities and Practices' Oxford: Butter Worth-Hamann.
- Duebenspeek A.W (1974). Occupational health Hazards. Hicksville New York exposition Press.
- Eakin J.M (1992) 'Sociological Perspective on the Management of Health and Safety in Small Workplace'.International journal of health services. 22(4) 689-704.
- EANPC, (2005).The High Road to Wealth. Accessed from <http://www.eanpc.eu/p/754A85126B4C1450C125758C00300F66>
- Effect of Occupational Hazards on Employees' productivity by Dr.Ofoegbu O.E., Olawepo G.T. and Ibojo B.O. lecturers, Business Administration Department, AjayiCrowther University, Uyo, Nigeria.
- EEF.(2007). Sickness Absence and Rehabilitation Survey. EEF, London.
- Emeharole, P.O. &Iwok F. E. (1997). Occupational Stress Induced Health Problems: The Scene Among Employees of EssienUdim LGA. AkwaIbom. Proceedings of NAHET Conference.

- Entwistle I.R (1983). Adventures in industries and aviation, British Medical Journal. London.
- Erinne A.U. (2002) 'A Study of the Health Problems of Workers in an Asbestos cement industry in Lagos'. National Postgraduate Medical College of Nigeria, part II Dissertation.
- European Journal of Business and Management ISSN 2222-1905 (paper) ISSN 2222-2839 (ONLINE) vol.5, No.3, 2013.
- Fernandez-Muniz, B., Montes-Peon, J. M., & Vazquez-Ordas, C. J. (2009). Relation between occupational health and safety management and firm performance. *Safety Science*, 47, 980-991.
- Fine J, Gordon J (2010). Strengthening labor standards enforcement through partnerships with workers' organizations. *Politics and Society*; 38:552-85.
- Flin, R., Mearns, K., Gordon, R., & Fleming, M. (2000). Measuring safety climate on offshore installation. *Work & Stress*, 12, 238–254.
- Folawiyo A. F. A (1995). Safety and disaster education. Ikeja: John publication limited.
- Gray J.E (1990). Planning health promotion at the worksite Indianapolis: Benchmark press. Haytee Organization. 46(5).
- Haefeli, K., Haslam, C., & Haslam, R. (2005). Perceptions of the cost implications of health and safety failures. Research Report, 403, HSE Books, Sudbury.
- Hannagan T. (1995). Management Concepts and Practices. London Pitman publishing.
- ILO (2006), Occupational safety and health: synergies between security and productivity, Accessed from <http://www.ilo.org/public/english/standards/relm/gb/docs/gb295/pdf/esp-3.pdf>
- Jarvis, M. J., and Wardle, J. (2003). Social patterning of individual health behaviours: the case of cigarette smoking in M. G.
- Kalejaiye P.O. (2013). Occupational health and safety: Issues, challenges and compensation in Nigeria. *Peak Journal of Public Health and Management* Vol.1 (2), pp. 16-23.
- Karujica (1992). The Position and Role of Occupational Medicine and Specific Health Care of Workers in Yugoslavia. 43(2), 176.
- LaMontagne A.D, Sanderson K, Cocker F (2010). Estimating the Economic Benefits of Eliminating Job Strain as a Risk Factor for Depression. Melbourne: Victorian Health Promotion Foundation (VicHealth).
- Loeppke, R., Taitel, M., Richling, D., Parry, T., Kessler, R. C., Hymel, P., & Konicki, D. (2007). Health and productivity as a business strategy. *Journal of Occupational and Environmental Medicine*, 49, 712–721. doi: 10.1097/JOM.0b013e318133a4be
- Mecunrey R. (1986) 'Practical Approach to Occupational and Environmental Medicine'. 2nd edition, America. Little brown publisher, page 316.
- Miller, P., & Haslam, C. (2009). Why employers spend money on employee health: Interviews with occupational health professionals from British Industry. *Safety Science*, 47, 163-169. doi: [org/10.1016/j.ssci.2008.04.001](http://dx.doi.org/10.1016/j.ssci.2008.04.001)
- Mossink, J. C. M., & Nelson, D. I. (2002). Understanding and Performing Economic Assessments at the Company Level. Protecting Workers' Health Series, 2, Geneva, World Health Organization. doi: 10.1016/S0968-8080(02)00085-X
- Nwajei SD (1993). Health and safety education in manufacturing industries: issues and problems. *Nigerian Journal of health education*.
- Nichole D. (1987). Safety Practice in Construction Industry'. *Journal of occupational medicine* 29, 11, 863.
- Nwaochei B.N. (1997). Production and Technology for Competitiveness. Nigeria Institute of Management, vol.33.
- Osuala, E. (2005). Introduction to Research Methodology, Nigeria, Second edition. First publishers Ltd.

- Patel S (2010). From clean to clunker: the economics of emissions control. In: Coalition for Clean and Safe Ports.
- Paton, N. 2008. Senior Managers Fail to Show Competence in Health and Safety“ Occupational Health, Vol. 60, Iss. 3; pg. 6)
- Prokopenko, J., Productivity Management. A practical handbook. Geneva, International Labour Office, 1987
- Reich, M.R. & Okubo, T. (1992).Protecting Workers Health in the Third World Nation International Strategies. USA. Greenwood Publishing Group Inc.
- Robbens Lord (1972). Safety and Health at work’ report of the committee. Edward Arnold, publishing company, Britain.Page 5.
- Seaton A. (1994) ‘Practical Occupational Medicine’.1st edition, London.Edward Arnold publishing company, page 139.
- Schilling R. (1989) ‘Occupational Health Practice’ 3rd edition, Britain, Butterworth, Heinemann, page 650.
- Shilling R.S.F. (2001) ‘Occupation and Health: The Theory and Practice of Public Health’. 4th edition.
- Smallman, C., and John, G. (2001).British directors’ perspectives on the impact of health and safety on corporate performance. Journal of Safety Science, 38, 227–239. [doi: 10.1016/S0022-4375\(01\)00065-2](https://doi.org/10.1016/S0022-4375(01)00065-2)
- Tomlinson G. (1984). Safety in Workshop’ 1st edition.Industrial Workshop Practice. London Pitman Publishing Limited, page 13.
- Walton P. And Urdon D. (1990).Environmental Health.Africa newsletter on environmental health.
- Weil D (2009). Rethinking the regulation of vulnerable work in the USA: a sector-based approach. Journal of Industrial Relations;51:411-30.
- World Health Organisation and Joint International LabourOrganisation Committee. (1951). Technical Report Series. 135.