UNIVERSITY OF CAPE COAST

# EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICY AT THE CENTER OF AWARENESS IN GHANA

MATILDA ESI DUNCAN

2019

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## EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICY AT THE CENTER OF AWARENESS IN GHANA

BY

## MATILDA ESI DUNCAN

Dissertation submitted to the Department of Management of the School of Business, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Business Administration Degree in General Management

NOVEMBER 2019

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#### DECLARATION

#### **Candidate's Declaration**

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date:....

Name: Matilda Esi Duncan

### **Supervisors' Declaration**

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature:..... Date:....

Name: Dr. Alex Yaw Adom

#### ABSTRACT

Occupation Health and safety (OHS) is an essential component for the success of every organisation. As such, it is important for every organisation to protect its employees from work related ailment and injuries. The Center of Awareness (COA) as an organisation needs to know the importance of OHS and how to handle OHS issues that arises in the organisation. Currently, COA do not have any policy guiding such issues and it seems Management are not aware of most of the OHS issues in the organisation. The study therefore sought to explore the importance of OHS, find out the OHS issues at the COA and recommend possible policies that can help solve such issues. With this in mind, information was gathered from the population of COA in Ghana using observation, questionnaires and interview schedule. In analyzing the data, the Statistical Package for Social Scientists (SPSS) software was used. The study found out that COA does not have any OHS policy guiding its operations. Management did show a bit of concern for OHS issues in the organisation, nevertheless, there were some OHS issues that needed attention. Although one injury that led to permanent disability was recorded, it should not be the only or primary indicator of safety effectiveness. The researcher recommended that policies on salary, insurance, health, use of safety equipment, training and appointments must be developed by COA. The study further gives its users an insight to what OHS is and its importance. More so, users of the research information would be abreast with the OHS issues in COA which would also aid policy makers come up with a comprehensive policy that best fit COA.

## **KEY WORDS**

Accident

Center of Awareness

Hazards

Injuries

Occupational Health and Safety

Policies

#### ACKNOWLEDGEMENTS

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## **DEDICATION**

To my loving parents: Dr. Magnus Ebo Duncan and Mrs. Susana Effie Duncan for their selfless effort to push me higher.

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## LIST OF ACRONYMS

AHS	Alberta Health Service
COA	The Center of Awareness
DMI	Disaster Management Institute
EASH	European Agency for Safety and Health at Work
FCOS	Finnish Centre for Occupational Safety
FOS	Factory, Offices and Shops
GSS	Ghana Statistical Service
HaSPA	Health and Safety Professionals Alliance
HSE	Health and Safety Executive
ILO	International Labour Organisation
IOSH	Institution of Occupational safety and health
LFR	Labour force report
NIOSH	National Institute for Occupational Safety and Health
OSHA	Federal Occupational Safety and Health Administration
OHS	Occupational Health and Safety
WHO	World Health Organisation

#### CHAPTER 1

#### **INTRODUCTION**

Risk and other injuries as well as discomforts are part of our daily livelihood. One's health and safety can be easily compromised. Some are avoidable and others are unavoidable. While some can be controlled and others uncontrollable. This is so in the work place as well. This chapter introduced this study and elaborated the background to the study and how occupational health and safety (OHS) emanated. The chapter also sought to express the problem of the study, the objectives and the research questions asked. Furthermore, the significance of the study was articulated with its limitations and delimitations. In addition, how the study was organised is briefly discussed.

#### **Background to the study**

Workplace accidents take place without expectation and can result to some bodily injury and damage to plants and machineries or other properties (Appiah, 2014). Moreover, every employee, regardless of industry, has the right of OHS to discharge their daily work in a safe environment (Wakeling, 2017). Besides, the general aim of any health and safety programme is to establish a safe working environment and reduce risk of injuries, accidents and death toll while working (Mitchell, 2018). Mitchell added that, health and safety management in the work environment is a continuous process that should be part of a core management function. Article 24(1) of the 1992 Constitution of the Republic of Ghana also offers every individual the right to operate or work in safe and healthy conditions.

As quoted, "where social protection is weak or absent at the workplace, the ultimate cost is human life" (Zaney, 2019).

Alli (2008), expressed that OHS, being in conjunction with the total improvement in working conditions, symbolises an essential stratagem, to ensure both the welfare of workers and increase productivity. Zaney (2019), noted that when workers as well as their families are deprived of the needed upkeep and livelihood, the resultant is the development of occupational ailment which results in low productivity, poverty, destabilize entire societies as a result of losing their most industrious workers and an increment of the state's financial burden. Therefore, it is essential for organisations to have policies on OHS.

#### History of occupational health and safety

Average incomes and populations began to surge at extraordinary levels (Appiah, 2014). This was so because of an industrial revolution that occurred in the British economy from the Craft System to the Scientific System and the rise of Britain into a leading industrial nation (Health Management Ltd., 2017). The industrial revolution brought about innovations in production, transmission of knowledge and technology leading to the emergence of the capitalist economic structures of production. Also, the industrial development led to the creation of factories and urbanisation which used dangerous machinery and chemicals, potentially dangerous factory conditions, long working hours, child labour in order to meet demand, etc. (Appiah, 2014; Health Management Ltd., 2017).

Appiah (2014), acknowledged that in spite of the positive influences of the industrial revolution, there were problems such as, masses forced off their lands;

overcrowding in the cities; filth and unemployment, were associated. He added that, the new commercial class profited greatly while the labouring majority worked long hours for low wages and under awful conditions. Harry McShane at the age of 15 in 1908 at Cincinnati was dragged into a machine in his workplace left him with an amputated arm and broken leg and with no recompense from his employer who viewed injuries to children working in factories as part of doing business (Galloway, 2015). The first Factory Act came into force in 1833, which formed the basis for subsequent updates and revisions and highlighted the need for employee safety.

#### **Statement of the Problem**

In Ghana, there are government regulations and laws on OHS. Such regulations and laws include the Labour Act, 2003 (Act 651) XV, Labour Regulations, 2007 (L.I. 1833), Ghana National Fire Service Act, Radiation Protection Instrument, 1993 (Act 1559) The Workmen's Compensation Act 1987 PNDC Law 187 and Factories, Offices and Shops 1970, Act 328. The Official Gazette (2003) of the Labour Act in Ghana has in its Part XV issues OHS. Section 118 to 121 spells out the OHS issues at the work place and the specific measures to be taken by the employers, and employers. Section 121 of the Labour Act states that, "The Minister may by legislative instrument make Regulations providing for specific measures to be taken by employers to safeguard the health and safety of workers employed by them".

The 2015 Labour Force Report (LFR) by the Ghana Statistical Service (GSS) indicated that there was an employment of 9,269,889 people who were 15

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years and above, out of which 1,341,890, representing 14.5% have encountered workplace accident before. Also, 19.4% representing males which was almost twice as the percentage of females (10.3%) have experienced an accident. The 2016 statistical report from the Ministry of Employment and Labour Relations also indicated that, a total of 1,096 work accidents were reported. These statistics indicate the need and urgency for all organisations to have OHS policies.

In addition, there have been some individual researches on OHS in Ghana including Appiah's (2014), study on Workplace Safety and Accidents among Artisans at Kokompe – Accra; Assumeng, Asamani, Afful, and Agyemang, (2015), work on "Occupational Safety and Health Issues in Ghana: Strategies for Improving Employee Safety and Health at Workplace"; and Nana-Otoo (2016), research on "OHS Issues in the Informal Manufacturing Sector of Cape Coast Metropolis". Nonetheless, these researches seem not to address the work environment, work activities and other OHS issues in The Center of Awareness (COA).

As Wakeling (2017, p.2), stated, "it is basic moral human right to be safe in the workplace and not at risk of injury or death", an organisation such as COA needs to protect its employees from harm such as burns from steam boiler, needles and general working environment and other health care issues. Due to the nature of the business, workplace health and safety can be easily compromised. On the 29<sup>th</sup> of January, 2019, the grinding machine at the factory pulled in the right hand of one factory floor worker of which he lost his five right fingers. Although the organisation supported in his recovery, there were no policies used as guidance and whether he had a fair treatment or not cannot be justified.

As a result, the management of COA has the obligation to obtain a health and safety policy for its workers. COA as an organisation cannot work without its human resources. The health and safety of personnel are very important and any lapses in OHS that results in injury can send signals which will affect the performance of the staff. Currently, the Center of Awareness does not have any OHS policies for its human resources in the organisation.

#### **Purpose of the Study**

The main objective of this study is to know how the space of work, people and activities relate and how they can be improved to optimise OHS.

The specific objectives are to:

- 1. Determine the OHS issues at COA;
- Examine the knowledge of the employer and employees on the importance of OHS policies;
- 3. Come up with policies that will help address such OHS issues.

#### **Research Questions**

- 1. What are the OHS issues in COA?
- 2. What is the knowledge of the employer and employees on the importance of OHS policies?
- 3. What are the policies that will help address such OHS issues?

#### Significance of the study

The study would help the users of research information such as the Management of COA, policy makers, and researchers amongst others to know the

OHS issues in the organisation. Furthermore the study would communicate to all users the need for policies on OHS in all organisations. Moreover, at the end of the study, Management and policy makers would be able to come up with policies that best fit the organisation.

#### **Delimitations to the study**

The study was proposed to be restricted only to one organisation which was The Center of Awareness in Ghana. Therefore only the employees or workers of COA were eligible to answer any of the data collection tools such as questionnaires and interview schedule. Employees here represent all levels of employment including Management. Also, due to the number of employees, the whole population was used for the study.

#### Limitations to the study

All the operational areas of the Center were to be visited, but due to financial constraint, not all the Centers were visited and observed. The soft copy of the questionnaires were then sent to these centers via WhatsApp and email. Some respondents filled and sent their response through the same medium. Others printed out, filled and sent the completed forms for evaluation. Some respondents felt reluctant to give information and therefore cannot be ascertained whether their information was accurate or not.

#### Organisation of the study

The study was ordered into five main chapters of which a synopsis of the remaining chapters, that is, from chapter two through to chapter five is expressed

as follows. Chapter two reviewed the concept of the study. Two main theories underpinned the study. The theories were the Hienrich Iceberg theory (theory of cost of accident) and the Domino Theory (theory of accidents causation). Bird and Germain's modified the domino theory into the the Loss Causation Model. The view of WHO and ILO on OHS would also be looked at. Also, the legislations in Ghana on OHS as well as the roles to be placed by both employer and employee would be discussed.

Chapter three focused on the Methodology. A mixed approach was used in the research design: field interview and observation. Workers were categorised according to the area of activity (such as drivers, clinical staff etc.) since each activity has its own occupational risks. Different questionnaires were designed based on the type of activity to solicit information from the employer and employees. The tools for collecting data were interview schedule, observation and questionnaire. Information collected using the questionnaire were captured and analysed using the Statistical Package for Social Scientists (SPSS) software and the output exported to Microsoft-EXCEL for the design of tables.

In chapter four, results of data collected and findings of the study were analysed and discussed to reflect the main objectives of the research. Tables were used in analysing the results and the main indicators used in the analysis are percentages. Finally, a summary of the study and key findings stemming from the data analysis as well as conclusions drawn and recommendations made grounded on the outcomes of the study was presented in chapter five.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

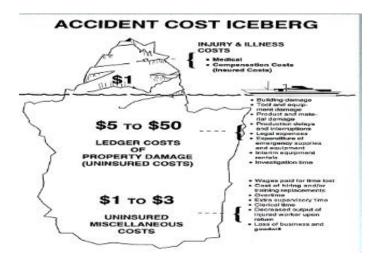
#### Introduction

The scope of OHS has gradually evolved and incessantly reacting to changes in the societies, politics, technologies and economies (Alli, 2008). However, the continuous happenings of mishaps makes safety at the workplace an imperative concern for all wage earners, employers, management, the society and state as a whole (Appiah, 2014). Zaney (2019), expressed that the promotion of OHS has enhanced over the years, but the degree of workplace death tolls, injuries and diseases continuously remain inadmissibly high with both societal and economic repercussions for both male and female alike and nation as a whole.

This chapter provides a review of related literature on the importance of OHS policies in an organisation. It commences by reviewing the theoretical framework of this study. The main theories reviewed are the Heinrich's Iceberg theory (Theory of Cost of Accidents) and the Domino Theory (Causation of Accident theory). This chapter also defines the concepts of this study. Explanation to the concept have been done using what the World Health Organisation (WHO) and International Labour Organisation (ILO) say about OHS. In addition, the country's own laws and policies on OHS, namely, the Ghana Labour Act 2003, Factories, Offices and Shops Act of 1970 and the Workmen's Compensation Law 1987 (PNDCL 187) have been looked at. The types of hazards are also discussed as well as the benefits of OHS practices.

#### **Iceberg Theory**

According to Davis (1997), the Iceberg theory considers the full cost of accidents including the hidden cost "under the water line". Harleysville Insurance (2010), is of the view that, iceberg analogy is often used by safety experts to demonstrate the voluminous cost that can emerge as a result of workplace accident. They proceed to categorize the full cost of work accidents into three aspects which include: Direct cost, indirect cost and additional indirect cost. Kamar and Ahmad (2016), demonstrated the iceberg theory in the Figure 1 below. Herbert William Heinrich in 1931 propounded the iceberg theory which states that, "for every single incident that causes a major injury, there are 29 incidents that cause minor injuries, and 300 that cause no injuries, which include property damage incidents and near escape incidents" (Basford, 2017).



**Figure 1: The Iceberg Theory** 

Source: Kamar & Ahmad (2016)

Financial compensation (direct cost) given to injured workers are normally considered cost but few organisations do identify and quantify or recognize the

implications of health and safety catastrophes and the extent of loss from those accidents that are injurious and deadly (Davis, 1997; IOSH [Institution of Occupational Saftey and Health], 2003). These accidents are hidden in interruption of work processes, sick pay and among others. In relation, the European Agency for Safety and Health at Work [EASH] (2007), published that 60% of some companies that are interrupted for longer than nine days go out of business. Interruption of work therefore seems to be a very crucial cost that organisations do incur. Kamar & Ahmad (2016), are of the view that accidents and the conforming damage they cause to productivity, property, equipment and morale can have damaging effects on a company's financial statement.

In addition, Burton (2010), explained that workplace hazard contributes to rise in social costs of law implementation, services and basic health care. However, most studies on OHS do not analytically address the economic costs associated with work hazards and therefore, the probability of workers' to observe a significant impact on such injuries and diseases on their economic wellbeing and successively, the national economy at large (Nana-Otoo, 2016). Statistics shows that, Ghana keeps on to losing her workforce to injuries, long-lasting diseases and mortalities due to employers' failure and organisations to indorse and sustain OHS principles (Zaney, 2019).

Alli (2008), suggested that sufficient financial resources be apportioned to departments to be part of their total day to day costs to manage safety and health efficiently. In the year 2012, Ghana lost about GHC1.8 million on work related injuries and diseases aside the lives lost and basis of livelihoods with the Labour

Department paying a total of GHC956,326 to 121 sufferers of job-related misfortunes in the public sector as Workmen's Compensation (Zaney, 2019). Zaney added that about US\$1.25 trillion representing 4% of the annual global Gross Domestic Product (GDP) is drained by direct and indirect occupational costs diseases such as minimised working hours, workers' recompense, health expenses and the interruptions in production.

Furthermore, GSS in its 2015 Labour Force report (LFR) indicated that, the incidence rate recorded for Ghana was "63 injuries per one thousand workers". Moreover, 418 days are being lost out of every million hours worked resulting from injuries at the workplace. Also, averagely, 16 days are lost per the occurrence of every injury in all employments in Ghana. Furthermore, the Ministry of Employment and Labour Relations in their 2016 statistical report also stated that "the total number of work accidents reported to the Labour Department was 1,096 for that year".

The iceberg theory shows its relevance to the study by elaborating the potential cost to be incurred when an organisation fails to inculcate OHS activities and policies into its dealings. It therefore draws the organisations attention to how OHS issues affect not only the organisation or the workers but also the entire society and nation. Knowing these impacts would aid the organisation realise the importance of OHS policies. In addition, budget allocated for unforeseen injuries and accidents as well as OHS activities would be planned well since the cost of accident would not encompass around what is only seen.

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In this light, the iceberg theory seems to adequately address the cost of accidents. This is because the articles and publications discussed above all seem to bring out different costs that emerges when there is an OHS injury or accident. These costs are not mostly considered or are not seen directly by most organisations. Also, there seem to be no or little research, study or theories that are in contrary to the iceberg theory. Therefore, cannot be argued that the iceberg theory is inadequate. Nevertheless, proving the definite figures attached to the minor injuries and no injuries is not assured.

#### **Causes of OHS Issues**

According to Sabet, Jamshidi, Aadal & Rad (2013), the development of the Domino theory was by Herbert William Heinrich in 1929 of which has been expanded many times in several years. Kustono (2018), expressed that, based on the domino theory, 88% of work accident is instigated by the unsafe behaviour, while 12% is due to the other factors. The Domino Theory states that "accidents result from a chain of sequential events, metaphorically like a line of dominoes falling over and when one of the dominoes falls, it triggers the next one, and the next, but, removing a key factor (such as an unsafe condition or an unsafe act) prevents the start of the chain reaction" (Disaster Management Institute [DMI], 2019).

Accid l or physi Injury

**Figure 2: Domino Model** 

Source: (Health and Safety Professionals Alliance [HaSPA], 2012)

Heinrich, Petersen & Roos (1980), in their book "Industrial Accident Prevention" came up with five step model to describe the domino theory. This theory exhibits the need for organisations to put in place some policies and strategies that will help remove one cause of accident which would have led to another. Figure 2 above indicates the five step model describing the Domino theory. Heinrich explained that the first and second causes are based on the worker's personality (Nana-Otoo, 2016). In relation to figure 2, the first step to accident causation is the social environment and ancestry causes. Heinrich's explanation of the social environment and ancestry is that disagreeable character traits such as stubbornness, greed, and recklessness "passed along through inheritance" or developed from one's community (nature and nurture).

The second domino is the faults of worker, that is, some unpleasant manners or traits and the third domino (which is the most important) is unsafe acts, mechanical and physical hazards (Sabet *et al.*, 2013; Health and Safety Professionals Alliance [HaSPA], 2012). According to Heinrich, unsafe acts are responsible for 88% of preventable accidents and fatalities (HaSPA, 2012). Heinrich defined unsafe acts, mechanical and physical hazards as "starting

machinery without warning and absence of rail guards". Kustono (2018), is of the view that an unsafe act is caused by the lack of awareness for the priority of work safety therefore resulting from human activities such as the attitudes of a person bring to each situation. It includes that natural or developed personality weaknesses such as bad temper, tactlessness, ignorance and among others (DMI, 2019).

This can be complimented by DMI's (2019), article which gave Heinrich's four major causes of the occurrence of unsafe acts. These unsafe acts occur due to unsuitable attitude, knowledge or skill deficiency, physical incompatibility and improper work environment. The combination of the first three dominos causes accidents. Nevertheless, Heinrich expressed that unsafe acts and unsafe conditions being the vital incident preventive factors are also the easiest causative factor to remedy. The fourth and the fifth dominos are accident and injury respectively and are the resultants of the first three dominoes. Heinrich proposed that, "an injury is invariably caused by an accident and the accident in turn is always the result of the factor that immediately precedes it".

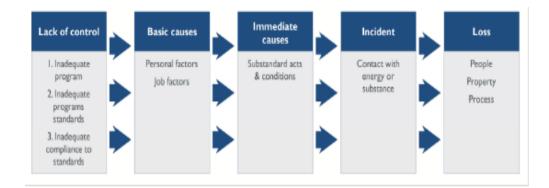
Heinrich defined accidents to be "the occurrence of a preventable injury and includes events such as falls of persons and striking of persons by flying objects. He further explained that 2% of accidents are inevitable, 50% are practically preventable while 96% are of a preventable type". Injuries are the outcomes of accidents or mishaps and Heinrich specifies it as cuts and broken bones. Sabet *et al.* (2013), also defines injury as the "consequences suffering damage to someone's body". Heinrich insisted accident causation is remedied firstly by the reponsibilities of the employer through stern direction, discipline, and counteractive training.

Moreover, Heinrich specified that, a rightly safety-minded managers would ensure their workers comply through exercising their authority, obtaining compliance and ensure that unsafe conditions are eradicated. Sabet *et al.* (2013), recognises this theory as the most comprehensible and clearest theory explaining accident causation processes. This is due to the simplicity of the theory, that is, the phases to injuries or accidents are rationally explained in simple terms making it understandable to all in safety issues. Furthermore, almost every business has experienced the processes of domino theory. Also, the person who creates harm can be easily identified by the employer based on the structures of the theory.

The domino theory however seems to suffer some weaknesses affecting its application. In Katz (1990), Quine argued using his "Two Dogma Empiricism" which is in the form of "proof by case" to point out some weaknesses in the domino theory. While the domino theory asserts a reliance relationship between the factors, Quine argues that no logic could be attached to these notions associated with the theory, hence, the factors "stand or fall". Indeed, Quine's disagreement seems to hold. A mechanical fault may arise not dependent on the fault of a person and this may cause an accident. Furthermore, the Multiple Causation Theory is also "an outgrowth of the domino theory" as stated by Raouf (2011),. This theory assumes that, "for every accident there may be m discipline any related factors, causes and sub-causes, and that certain combinations of these give rise to accidents". With respect to this theory, the influential factors were categorised into Behavourial and Environmental (Saari *et al.*, 2011).

Bird and Germain (1985), although recognised that the Heinrich's Domino Theory had supported safety thinking for over 30 years, also saw some weaknesses in the theory (HaSPA, 2012). They realised the need for management to prevent and control accidents in fast growing complex situations due to technological advancement. Bird and Germain as noted by HaSPA (2012), and Sabet *et al.* (2013), updated the Domino model. The updated model was known as The Loss Causation Model. The model according to Bird and Germain, reflected the direct management correlation between the causes and effects of accident loss and incorporated projectiles to show the multi-linear interactions of the cause and effect structure.

As per the Bird and Germain's Loss Causation Model, the model entails entails: (i) Lack of control/management such as inadequate programe, standards and compliance to standards; (ii) Basic causes/origins comprising personnel factors and job factors; (iii) Immediate causes/Symptoms such as substandard or unsafe act and condition; (iv) Incident, that is, the events which could cause harm to either people or properties; (v) Loss of properties, people and processes. (Sabet *et al.*,2013; HaSPA, 2012). Figure 3 below demonstrates the loss causation model as presented by Bird and Germain.



#### Figure 3: The Bird and Germain's Loss Causation Model

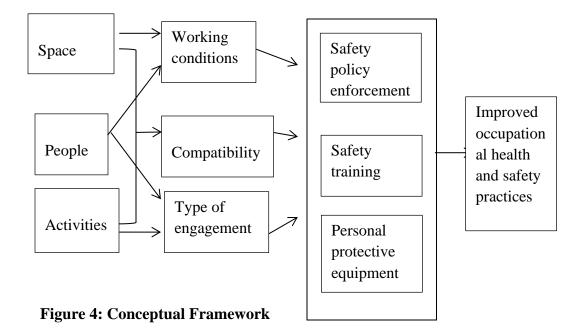
Source: (Health and Safety Professionals Alliance [HaSPA], 2012)

Both the Heinrich Domino theory and the Loss Causation Model by Bird and Germain's displays its relevance to the study by pointing out that, some factors leading to accidents and injuries in an organisation can be prevented and avoided. The theory seems to elaborate on some factors that can cause accidents of which when an organisation access them well can minimise or prevent OHS injuries and accidents. This would then help organisations come up with policies that will help reduce or eliminate these causative factors. Additionally, the theory substantially informs that, some factors when removed can prevent OHS issues which seems to be agreeable.

#### **Defining the Concepts of the Study**

The concept of this study with reference to Figure 4 below is to know how the space of work, people and activities relate and how they can be improved to optimise OHS. In doing so, factors such as working conditions, compatibility and the type of engagement at work is needed to be considered. These may help the organisation come up with good enforceable safety policies, train workers on safety

as well as provision of the required equipment. When such conditions are met, the organisation can experience improved OHS and reap the benefits thereof. The concept of this study is illustrated by Fig 4 below and explained using the definition of OHS by the WHO as well as the ILO view on OHS. Furthermore, what Ghana laws and regulations say about OHS is discussed.



#### The World Health Organisation (WHO) definition of OHS

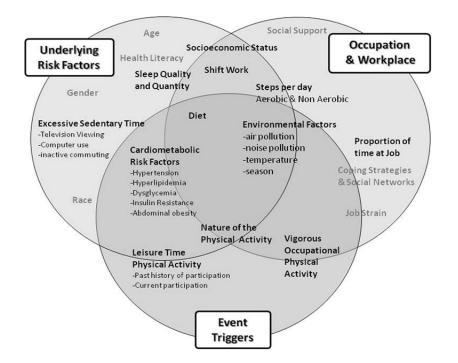
The WHO (1994, p.1), in its second meeting at Beijing stated that, "dangerous exposures and loads are often greater in the workplace than in any other environment with adverse consequences on health". They also noted that conditions surrounding an occupation can have either positive or adverse effect on employees' well-being. According to the WHO manual (2001), work linked with health hazards are the ones that: (i) may be the source of occupational disease; (ii) can be a basis for numerous causes of further illnesses or; (iii) may intensify an already prevailing illness contracted not based on the occupation. It is therefore "unethical and short-

sighted business practice to compromise the health of workers for the wealth of enterprises" as quoted by Evelyn Kortun, (Burton, 2010, p.1).

WHO (1994), in defining OHS as a multidisciplinary activity, categorised the definition into four parts. The first part talked about protecting and promoting the workers' health by removing factors and conditions that are dangerous or harmful to their well-being relating to work, thus, the worker and the workplace. In Lowe's (2003), writing, he explained that a healthy and well fitted workplace puts emphasis on both physical and psychological wellbeing of its workers. Nevertheless, he marked that, the health organisation's viewpoint is more geared towards the connection between the work context and the organisation rather than individual outcome. Burton (2010), is of the view that employee health and a healthy workplace are intertwined.

The Collaborating Centres in Occupational Safety for WHO (1994), in their second meeting explained that workers' health can be affected positively and adversely by their work. The report on WHO Collaborating Centres for Occupational Health's seventh meeting in 2006 indicated that new materials and trends, technological changes and enhanced communication mediums have contributed to improved working conditions. However, current employment trends and conditions surrounding work pose a threat to the defense and advancement of workers' health and safety. It is suggested that occupational factors that cause stress, tension and anxiety can be contributory factor to accidents and failures (Ward, Haslam & Hslam, 2008).

Burr, Goodman, Thomas, Jamnik, and Gledhill, (2012) came up with a diagram describing the interactions of workers and the workplace and environment. They illustrated that excessive use of computer, sleep quality and age of worker is underlying risk factors to OHS issues. Also, factors such as proportion of time on the job, pollution and temperature and other occupation and workplace conditions bring up OHS issues. Event triggers such as the nature activities the worker is engaged in can also trigger OHS issues. This is shown in Figure 5 below. This can be related to the statement in the 2016 to 2020 OHS Policy Document by the Albanian Council of Ministers (2016). The document stated that, "Work activities can be hazardous to the health of employees and workplaces can also affect the safety and health of customers, volunteers, bystanders and local residents".



**Figure 5: Interaction of Workers and the Work Place** 

Source: Burr, J. F., Goodman, J. M., Thomas, S. G., Jamnik, V. K., & Gledhill, N. (2012)

The second part of the WHO definition is about developing and promoting healthy and safer work and its environments as well as its organisations. Deducing from Figure 5 above, a lot of factors in the work environment do affect health and safety. According Wakeling (2017), occupational hazards happen in several forms. This can be industrial based either psychological or physical. For example, manufacturing industries safety issues are associated with impact collisions and entanglement. It can also be generated from contacts with chemicals, bacteria and viruses, whilst those in the office setting have health issues associated with electrocution, musculoskeletal conditions.

Tadesse and Admassu (2006), attribute reasons to work related health and safety issues to unsafe structure, timeworn machineries, insufficient air circulation, noise and inaccessibility to reviews. Weekes (2017), expressed that, it is important to intermittently pause and observe the structures laid down for handling OHS in the organisation and to consider their improvement in creating a more conducive and productive environment for employees. This is because every organisation, despite their engagement, has the obligation to espouse health and safety principles in the workplace (Mitchell, 2018).

The third aspect of the WHO definition is the "enhancement of physical, mental and social well-being of workers and support for the development and maintenance of their working capacity, as well as professional and social development at work". According to WHO (2006), half of the census of the globe is populated by workers and therefore contribute massively to both the economic and societal values of the modern humanity. In addition, a greater aspect of general

fatalities concerning working populace is work related. This suggests that the enhancement of the workers well-being will eventually improve the workers', the organisation's and the economic output.

The last aspect of the WHO definition of OHS is the "development and promotion of sustainable work environments and work organisations". WHO asserts that successful countries mostly have their office environment organised to reflect occupational health standards taking into consideration sustainable and productive safety and ergonomics. Furthermore, they explained that an economy that is healthy and of great worth as well as productive for a long period of time are hard to attain in poor occupational conditions in which workers are not secured against work hazards. In Ghana, the required standard for the developing and promoting a sustainable working environment as well as work organisations is guided by the Factories, Offices and Shops Act 1970 (Act 328).

## International Labour Organisation's (ILO) view on OHS

The ILO together with the WHO defined OHS as "The promotion and maintenance of the highest degree of physical, mental and social well- being of workers in all occupation". The ILO has a continuous objective to promote decent and well fitted work conditions and environment. Alli (2001), of ILO, is of the opinion that, successful OHS practices are as a result of good will and collaboration amongst parties involved as well as taking into consideration thoughts those involved. It must be noted that, every year on 28<sup>th</sup> of April the ILO- World Day for Work Safety is marked.

According to Alli (2001), the ILO has come up with a new Safe Work Programme which deals with safekeeping and efficiency using health and safety at the workplace of which producing global statistics on occupational injuries and mortalities are considered a task. The ILO (2005), gave estimates conveyed that accidents and illnesses take over two million lives yearly and seems to keep increasing. They attributed its rise to speedy industrial development ongoing in some countries. The ILO went further to adopt conclusions describing the core components of a worldwide approach bringing together quantifiable developments in health and safety at work places. Also they recommended developing new mechanism geared at establishing persuasive models for OHS. The ILO reported that around two million occupational injuries or fatalities occur every year across the world (Alli, 2008).

Al-Wreidat (2002); ILO (2015), explained that due to the ILO's core functions to come up with Conventions and Recommendations on OHS and societal guiding principle, over 70 standards have been employed by the ILO. These standards cover; Policy guidance for prevention and guidance for OHS; General protection measures such as ventilation and noise pollution in and around the work environment; Protection in given branches of economies such as construction; and protection against specific risks such as occupational cancers, radiations and among others.

In 2015 ILO came up with a compilation of worldwide labour conventions and recommendations of which all the articles and stipulations employed can be found. OHS Convention, 1981 (No.155) was adopted from proposals regarding

health and safety as well as working environment. The No. 155 has 22 conventional articles (C155) and twelve protocols (P155). The Convention No.155 which is mostly accompanied by Recommendation No. 164 stipulates the basic principles for all branches of economic activities, stipulations and strategies for implementing OHS preventive and protective measures (ILO-World Day for Safety at Work, 2015). C155, Act 4 Sub 2 gives the purpose of the stipulation as "to prevent accidents and injury to health arising out of, linked with or occurring in the course of work, by minimising, so far as is reasonably practicable, the causes of hazards inherent in the working environment".

The P155 defines OHS issues such as "occupational accident, occupational disease, dangerous occurrence and commuting accident". According to the P155 Article 1(a) occupational accidents are the occurrence that arises out of, or during work leading to fatalities or non-fatal injury. Occupational diseases by the P155 are any illnesses contracted due to exposure to danger or risk factors arising from work undertakings. Furthermore, any "readily identifiable event as defined under national laws and regulations, with potential to cause an injury or disease to persons at work or to the public" is referred to as dangerous occurrence by the same article. This explains that, OHS issues do not only cover the workers but also all and sundry who are affected by the organisations operations.

More so, OHS issues do not only cover occurrence that affect workers at the work place alone. Article 1(d) of protocol 155 addresses commuting accident as part of OHS. It defined commuting accident as "an accident resulting in death or personal injury occurring on the direct way between the place of work and: (i) the

worker's principal or secondary residence; or (ii) the place where the worker usually takes a meal; or (iii) the place where the worker usually receives his or her remuneration". This rightly informs that OHS issues go beyond organisational premises depending on the issue at hand. Article 21 of the C155 removes any involvement of expenditure for the worker in relation to OHS. This seems to imply that, all cost or expenses on OHS should be borne by the employer or the organisation.

#### What Ghana laws and regulations say about OHS

It is realised that OHS is recognised worldwide. In Ghana, there are also several laws and code of practices on OHS as well as institutions and unions regulating these stipulations. Such regulations and laws include the Labour Act, 2003 (Act 651) XV, Labour Regulations, 2007 (L.I. 1833), Ghana National Fire Service Act, Radiation Protection Instrument, 1993 (Act 1559), Factories, Offices and Shops [FOS] 1970 Act 328 and the Workmen's Compensation Act 1987 PNDC Law 187. In 2010, the Ghana Health Service (GHS) came up with a policy and guidelines on OHS for the health sector.

Part XV of the Labour Act, Sections 118 to 121, discusses the General OHS conditions, hazards, responsibilities and measures to be taken in an event (Labour Act, 2003 PART XVIII – NATIONAL LABOUR COMMISSION, 2003). This section stipulates that the employer is to ensure that employees work under conducive working conditions. Also, the employer must prevent contamination of the work place, provide adequate clean water, reduce the sources of hazards imminent in the work place and even suitable toilet and washing facilities (Section

118 sub 2). Employers who fail to provide such healthy environment are liable to be fined or imprisoned. The Minister by law is given the power to make regulations concerning employee safety using legislative instruments Labour Act and the FOS.

The FOS 1970 Act 328 (Official Gazette, 1983) elaborate in details the satisfactory, safe and healthy conditions an employer must put in place in the workplace. Section 13 of this Act addresses the issue of cleanliness. All equipment including furniture and fittings in the workplace are to be kept neat. Furthermore, there should be removal of dirt or accumulation of refuse daily from the working environment. Also, all walls including partitions of the factory, all ceilings, areas of paths and staircases are to be washed at least once a year. Moreover, on areas varnished with oil paint, re-varnishing and repainting is to be done at least once every five years or be washed at least once a year.

No factories, offices and shops, during work, should be overcrowded in a way that poses threat and injury to the safety and health of workers executing their duty in that space (FOS 1970 Act 328, Section 14). Overcrowding here does not only cover the number of workers working in that space but also space occupied by appliances, machineries and equipment. The standard floor area for each worker provided by this regulation is 40 square feet and the workroom should not be less than nine feet in height. More so, adequate provisions should be put in place to provide and conserve circulation of natural air in each office. This calls for sufficient ventilation (Section 15).

Section 17 of the FOS Act employs that, appropriate lighting is made available and maintained in every part of the working environment or workplace.

The lighting can be both by natural or artificial sources. All devices fitted to generate artificial lighting should be well maintained. Subsection 3 of this act states that, "All glazed windows and skylights used for the lighting of any part of a factory, office or shop shall, so far as practicable, be kept clean on both the inner and outer surfaces and free from obstruction; but this subsection shall not affect the whitewashing or shading of windows or skylights to mitigate heat or glare". The Ghana Health Service in 2005 had a study on factors such as the room space or area, levels of lighting, humidity and temperature was undertaken in some health facilities in Accra.

It was found that 73% of the rooms were ineffectually lightened using natural sources. Also, 76% were ineffectually illuminated by manmade lighting sources. The study further showed that the lightening was not helped by the materials the curtain was made of and the way they were used as well as the shade of walls. Moreover, insufficient lighting conditions can cause strained eye, headaches and makes it difficult to swiftly identify quick movements hence the probability of accidents. In addition to the findings, interior temperatures as well as humidity internally were measured higher than required. Staff particularly in overcrowded office areas and sit very close behind their computers for prolonged hours end up with exhaustion, strained eye, sore and stiffened neck, pains at the back, shoulder, hand injury and wrist and so on.

Workers are also prohibited to lift weight likely to inflict injury on them. The employer must also ensure that the organisation has and can provide standard first aid to workers (FOS Section 27, 28). First aid should be displayed in the

workplace where it can be easily identified and readily used. Other facilities such as washing facilities, drainage of floors, sanitary convenience, drinking water, sitting facilities, rooms for taking meals should be adequately provided and neatly sustained by the employer (FOS 1970 Act 328, Sections 16, 18, 18, 19, 20, 22, 24).

Washing facilities should be readily accessible to all workers. Nonetheless, any process in the workplace that can cause a floor liable to become wet to a certain level where water is possible to be removed using drainage, a prudent system should be put in place and preserved. Also, appropriate lighting and ventilations should be provided for sanitary convenience and the place of convenience should be kept clean at all times. With the exception of workers being from the same family or employment less than five persons, separate conveniences are to be provided for both sexes.

The employer is by the labour law section 118 to provide adequate clean water at the workplace. FOS Act Section 20 seems to highlight this provision by adding that, drinking water should be accessible to all workers and where not piped, be contained in a suitable and neat container. Section 22 of the FOS stipulates that reasonable opportunities for sitting in the course of work should be without detriment to the work. Furthermore, the seat provided should be suitable for the worker and the work. With regards to taking meals, Section 24 of FOS Act provides that where "any poisonous or injurious substance is so used as to give rise to dust or fumes, no person shall be allowed to take food or drink in that room". However, workers are to be provided a suitable room or place for this purpose in the workplace.

Section 119 of the Labour Law gives workers the opportunity to report to their immediate supervisor and remove themselves from situations where there is realistic reason to prove that the worker is exposed to hazard dangerous to the life or the worker. Safe means to access every place in the workplace should be provided including stairways and fencing (FOS Act Section 34). It is clearly expressed in Section 48 of the FOS that "no person shall enter or remain in any chamber, tank, vat, pit, pipe, flue or in any confined space in which dangerous fumes are likely to be present or the oxygen in the air is likely to have been significantly reduced for any purpose unless he has been authorised to enter by a responsible person, or is wearing a suitable breathing apparatus, is ensured of a supply of air sufficient for respiration and to render harmless any fumes".

Section 23 of the FOS instructs the protection of workers against inhaling hazardous impurities and also prevents their accumulation in the workplace. This seems to support workers who remove themselves from their duty due to imminent hazards. Another good example of removing oneself from work can be identified in Section 50 of the FOS. Section 50 Sub Section 3 prohibits work to be done in or on any steam boiler until adequately cooled using proper aeriation or made safe for the worker. The Labour Act (Section 119) provides that the employer cannot take any disciplinary action against a worker who removes himself from work when there is an exposure to imminent hazards. In addition, the employer ought not to expect the employee to be back to workplace if the imminent hazard is not removed.

Occupational diseases which occur in the work place should be reported by the employer where practicable not later than seven days of its occurrence (Act 651

Section 120, 2003). Sections 10, 11 and 12 of the FOS Act requires employers to notify the Chief Inspector of any incident or diseases. The Ministry for Employment and Labour relations statistical report for 2016 made known that, "out of the 84 reported accidents, 70 were males and 14 were females". The GSS 2016 LFR showed that reported injuries to management recorded 7.5% out of workers who had experienced occupational accident. The LFR also showed that, workers were not given any compensation after suffering occupational injuries were 55.2% and 16.7% did receive monetary compensation whiles as 17.3% had varied compensations. Also, both financial and varied compensations were enjoyed by about 10.7% of workers.

Notification of accident should be done where the accident takes the life of the worker or inactivates him/her for more than three days. Dangerous occurrences in this context applies to "(i) all cases of explosion, fire and collapse of buildings; (ii) accidents to machinery or plant likely to cause risk of serious bodily injury to workers; (iii) collapse, overturning or failure of a crane, derrick, winch, hoist or other appliance used in raising or lowering persons or goods; (iv) bursting of a revolving vessel, wheel, grindstone or grinding wheel moved by mechanical power". Industrial diseases here cover, "lead, phosphorus, manganese, arsenical and mercurial poisoning, toxic anaemia, toxic jaundice, anthrax, ulceration and any other prescribed illness or disease".

As much as employers must provide a conducive environment for the workers, Labour Act, section 118 (3), obligates the workers to utilise these safety appliances provided by the employer based on the organisation's guidelines.

Although C155 Act 21 removes any association of costs for the worker in relation to OHS, the Labour Act section 118 (4) however explains that, the employer would not be held accountable for injuries that befalls a worker who violates the obligations stipulated in section 118 (3) when it is as a result of the workers' noncompliance. Also, the Workmen's Compensation Act section 2 (5) removes any liability from the employer where a worker is injured or involved in an accident drunk or under drugs when the accident occurred. In addition, the employer is not liable to compensate worker where injury or death of a worker results from a deliberate self-injury.

# **Types of Occupational Hazard**

Accidents and fatalities experienced by workers are in most cases resultants of some hazards they are exposed to at the workplace (Appiah, 2014). Assuming *et. al* (2015) defined hazards as those the physical or psychosocial or a blend of the two, that are probable to bring harm or undesirable defects. Wakeling (2017), is of the view that hazards arise in different forms and these forms can be industrial based. For example, manufacturing industry risks and hazards will differ from those in the office. This seems to agree with Fit for Work Team (2017) from Scotland on their assertion that hazards differ from workplace to workplaces based on the work activities undertaken, making some hazards less pertinent or more to businesses.

The type of hazards can be categorized into six namely: Safety hazard, Physical hazard, Biological hazard, ergonomic hazard, psychological hazard and chemical hazard (Assumeng *et. al*, 2015). Safety hazards as termed by Assumeng et al. (2015); Fit for Work Team (2017), are the commonest type of hazard and

mostly present in almost all offices at a point time. They defined Safety hazards as those dangerous circumstances that can give rise to immediate injury, sicknesses and bereavement. Such hazards include hot surfaces, sharp edges, spills on floors or "slip and falls", moving equipment parts, electrical hazards and among others.

Another type of hazard is the Biological Hazard. ILO (2002), explained this type of hazard as those "infectious and biological agents such as bacteria, viruses, fungi, or parasites that may be transmitted through contact with contaminated material or with bodily fluids or secretions". They added that infectious or biological agents can be contracted from medical cases, asymptomatic carriers and other sources such as rodents and insects. Basic and tertiary institutions, nursing homes and other health facilities etc. are mostly at risk of exposing people to biological hazards (Assumeng et al., 2015). Fit for Work Team (2017), asserted that, exposure to biological hazards can be through contact with used needles, sick children, animals etc. This is due to their exposure to microorganisms, body fluids, plants, and other creatures. Furthermore around 15% of the workers in developed countries may be at risk of microbe infection, cardiac illnesses and allergies (Tadesse & Admassu, 2006).

WHO (2001), highlighted that paying attention to small cuts and grazes effectively especially around the arms reduces risks of workers. ILO (2002), suggested that, biological hazards can be managed through (i) vaccination and counseling; (ii) monitoring; (iii) doing suitable check-ups including the investigation on occupational illness; (iv) educating and training; (v) implementation of adequate controls and among others. Tadesse & Admassu

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(2006), hinted that a worker can be susceptibility to a biological hazard depends on the combination of microorganisms in the environment, the amount of the microorganisms, the individuals' liability and the associated element traumata around.

The third type of hazard is the Physical Hazard. ILO (2002); HaSPA (2012), defined physical hazard as hazards that includes means in the working environment like radiations, electrical power, very high temperatures, heights, vibration and sounds that can damage the tissues and other injury. Assumeng et al., (2015) elaborates that variables in the atmosphere or surroundings that can pose harm to the body even without bodily contact or touch are physical hazards. Alberta Health Services (AHS) associates physical hazards to unrestrained energy source such as hydraulic, electrical, kinetic, pneumatic, etc. Jose Andre (2019), added that, physical hazards are in a way inevitable in some businesses and are also the commonest cause of injuries in several businesses. Nonetheless, over a period, employers have come up with safety procedures to frail the dangers associated with physical hazard in the work environment.

The Australian Government in 2014 addressed that ergonomic hazards are often caused by repeating the same motions over and over. The government added that, the strain resulting from monotonous motion may develop or accumulate over time affecting the muscles, bones, tendons, nerves, and tissues. Similarly, Assumeng et al. (2015), described ergonomic hazard as those that evolve based on the nature of work, positions of the body and the conditions attached to the work and therefore stresses the body of the worker. They further explained that,

ergonomic hazards are not easily identified since noticing the strain it poses on the worker may not be readily observed.

The aim for the workplaces design is to benefit of all workers and to understand the values of ergonomic since it plays a vital part providing a safer, healthier and conducive working environment (Health and Safety Authority, n.d.). Tadesse & Admassu (2006), explained that the design is determined by what the job entails, the required tools or equipment the worker would use and the worker's natural characteristic. This can be done by changing the design of the job, equipment, or the work space to eliminate hazard out rightly (Australian Government, 2014). Since ergonomic hazards differ industry- wise and also on job in the same industry, recognizing the ergonomic hazards exposed to workers is a crucial major step for extenuating such hazards (Cantley et al., 2014).

Another type of hazard is the chemical hazard. These are several toxic substances that are irritable to the human body system, and includes drugs and other prescriptions, diluents, and gaseous substances (ILO, 2002). As Amponsah-Tawiah & Dartey-Baah (2011) indicated, a lot of chemical elements are now being presented in businesses of which an example is the introduction of carbon-based diluents in the foot-wear industry and the use of pesticide in agriculture. Other examples of these chemical substances are example cleaning products, pesticides, ethylene oxide, anesthetic gas wastes, glutaraldehyde (ILO, 2001; Fit for Work Team, 2017).

It is interesting to note that global, domestic and other establishments have issued lists of permissible or lawful limits of exposure of numerous types of

chemical exposures (Burton, 2010). Burton evaluated that worker can be exposed to these levels of exposure to a chemical without serious injury. Burr et al. (2012), asserts that, most physical demanding jobs are done in in air polluted environments particularly substances emitted through flaring of gas, burning fossil, petroleum, occupational chemical elements or agronomic dust.

The final type of hazard to be looked at is the psychological hazard. Gyawali (2014), is of the view that lack of education on psychosocial hazards has caused increase in such hazards and brought about heightened consequences at workplace of which there are inadequate resources to deal with those hazards. Assumeng et al. (2015), defined psychological hazard as "the relations among job content, work organisation and management, and other environmental and organisational conditions, on the one hand, and the employees' competencies and needs on the other". Jose Andre (2019), linked psychological hazard to concerns such as occupational stressors that are internationally recognized as main trials to OHS. Therefore, "the burden of many psychosocial hazards can largely be reduced by prevention and management".

### **Benefits of OHS Practices**

With reference to the British Safety Council (2014), benefits derived from OHS practices can be illustrated by table 1 below.

# Table 1: List of possible supplementary gains from preventive undertakings

# at an organisation level

VARIABLES	DESCRIPTION				
Increase in productivity and other operational effects	Reduced costs for facilities, energy, materials, increased productivity; reduced personnel costs				
Improved quality of products and services	Changes in product or service quality; reliability of deliveries				
Improved wellbeing, job satisfaction and working climate					
Reduced Compensations	Supportforpreventiononly,compensationsreceived for sickleave ordisabilityare to be excluded				
Maintaining a 'positive' organisation image	Attractiveness to customers, attractiveness on labour market, attractiveness to contractors, ability to recruit personnel				
Impact on 'non-economic' organisation values	To be derived from mission statements and the like, typically strategic considerations				
Improved innovative capacity	Ability to innovate in products and production processes				

Source: EU-OSHA, 2002

The first variable is increase in output and other operating effects. Alli's (2008), report for ILO wrote that the well-being of workers are requirements for improving quality and efficiency and are very significant to sustainable socioeconomic growth. He added that by minimizing what causes hazards at work, the policies would decrease the outlays of occupational injuries and diseases, help to improve working conditions and environment, and increase output. According to

British Safety Council (2014), researches and reports such as Greenstreet Berman report for HSE (2004), and The Report on the fifth Aviva Health of the Workplace (2011), had a similar conclusion that improved OHS structures in an organisation, will increase productivity of employees' substantially.

Another benefit is the improvement of wellbeing, job satisfaction and working climate of the working environment. IOSH (2003), conducted a research and found out that (i) good health relates to better job satisfaction; (ii) higher levels of mental health, lesser probability of staff turnover, positivity is as a result of reassuring working environment and; (iii) strong vitality were connected with developed job satisfaction and a more conducive physical work environment. Alli (2008), also expressed that fit workers are usually well motivated, revel in greater job satisfaction and more productive, thereby improving the quality of life of one's self and the society. Therefore "workers' wellbeing and work climate are often cited as two of the most crucial factors that contribute to the success of an organisation" (British Safety Council, 2014). The first two discussed benefits seem to relate and explain the variables which are "improved quality of products and services" and "improved innovative capacity".

Another benefit is the reduced compensation benefit. It is advocated that enhanced workers attitudes due to OHS can indirectly reduce cost aiding in economic benefits (Ward *et al.*, 2008). With reference to the description in table 1 above on reduced compensations, the idea that prevention of workplace accidents reduces the compensation cost of an organisation is been shared. Also, a lot of countries have fitted "workers' compensation" schemes to financial compensation

of workers injured as they recover, until they are able to go back to work (Burton, 2010). She added that when such schemes are absent, workers who have the capacity often resort to litigation against their employers to recuperate compensation.

Maintaining a 'positive' organisational image and Impact on 'noneconomic' organisational values can be identified in Joanna Weekes benefits of OHS. Weekes (2017), is of the view that, organisations benefit from OHS by showing that they: address their health and safety responsibilities; committed to health and safety standards; ensure safe structures of work are documented. In addition, by communicating health and safety issues to employees and implementing them in a constant way guides the impending activities and behaviours of workers in a formal way. Furthermore, staff are efficiently managed when suitable and undesirable behaviours are defined to them. This saves time by permitting health and safety issues to be managed steadily using establish procedures.

Conclusively, in looking at the importance of OHS policies in an organization, Greepherson (2013), embarked on a study into the "Impacts of the Health and Safety Programmes on the Organization Performance: a Case Study of Arusha Airport Authority". His study was positioned on: i) managerial practices showing commitment on OHS programmes; ii) Managerial health and safety systems based on organisational perspective; iii) influences OHS programmes have on performance; iv) health and safety programmes challenges at the workplace. With a sample size of 31, the researcher used both open- ended and close-ended

questionnaire and interview. In addition, the data collected analysis was done with Microsoft excel thereby showing the results in frequency tables, charts and description. The study however discovered that, there was a significant effect of OHS programme on the business. Also, recommendations on staff participation following budget, motivation and training were made by the researcher.

Another study which highlighted the benefits of OHS was by Cudjoe (2011), on the "Assessment of OHS Practices on Job Performance at the Tetteh Quarshie Memorial Hospital, Mampong-Akuapem". The study sought to determine the effect of OHS on job performance. The population gathered included medical practitioners, administrative workers, technical staff, caterers and among others of which a sample size of 80 was selected through stratification and simple random sampling techniques. Furthermore, the researcher used interviews, questionnaire and literature review to gather data for analysis. The data was then analysed with SPSS and Microsoft excel to come up with tables, percentages, graphs, charts and descriptive. The study discovered that, the current OHS practices in the health facility were poor and Staff weren't commitment to OHS rules. Recommendation such as constituting an OHS committee, engaging in consistent supervision as well as assessments and conducting reviews for improvement was suggested by the researcher.

Although the above discussed studies give credit to the importance of OHS activities in an organisation, they seem to focus more on the impact OHS has on the performance of staff. There are other benefits that an organisation can derive from inculcating OHS policies and activities in the organisation. Therefore, this

study is undertaken to bring to light the importance of OHS not only to COA but also to all organisations although COA staff are the study population. It is anticipated at the end of the study, that management commitment would not only be accessed but would also come out with OHS issues in COA and aid management in getting solutions to these issues. Additionally, to make the analysis simple and understandable to all users including the lower level staff in COA, the analysed results would be expressed in tables and percentages.

### Summary

The reviewed literature established that OHS is accepted internationally and it is linked to every organisation. Also, the cost of accidents is far greater than its preventive costs. Therefore, there is the need to know the causes of these accidents and the type of hazards likely to be faced by a particular organisation. This will aid the organisation to put in measures that will best suit it. Furthermore, the laws of Ghana and other regulations educates on the roles to be played by both the employer and employee. However, there are limited literature on the benefit and essence of occupation health and safety. Moreover, there seem to be no adequate literature critiquing the iceberg theory. The next chapter will look at the methodology of this study.

### **CHAPTER THREE**

#### **RESEARCH METHODS**

### Introduction

This chapter concentrates on the selection of the research design, study area, the population, the sampling techniques used the data collection methods and an introduction to the data analysis. Furthermore, this chapter describes the research instrument and how they were applied.

### **Research design**

A mixed research design was applied. Mixed research design was used because it gives more complete understanding to research problems than quantitative or qualitative designs alone. According to Creswell (2007), "a mixed research design is a methodology in research that involves collecting, analysing and integrating both quantitative and qualitative research in a single study". He added that, the combination of the quantitative and qualitative research design gives a better understanding than each design alone. For the purpose of this study, this design was used to give an enhanced understanding of the OHS concerns in COA that could aid management to make profound policies that would best suit the organisation.

### Study area

The study area is the Center of Awareness, Ghana. COA according to its records at its Administration is an organisation duly registered by the Registrar General.

# **Profile of COA**

COA currently has three operational areas namely; the Secretariat, the Health and Diagnostic Centers and the Factory. These operational areas have different roles and diverse risks they take in undertaking their duties. Also, these areas need to work together to achieve the organisational goals.

The Secretariat, which is the Head Office situated in Cape Coast, coordinates and supervises the other two operational entities and ensure that the Center achieves its objectives and goals. Also, the Secretariat houses the stocks and finished products of the Center before distributing it to their respective destinations giving rise to lots of movement and lifting. A slip little or spark of fire can cause a huge loss to the organisation and injuries to the staff. The ergonomics of the offices is very important. Moreover, due to its supervisory role, there are movements to the other operational areas and a lot of organising to be done. Furthermore, the Center has two sales points in Koforidua and Tarkwa which is managed by the Secretariat.

The Health and Diagnostic Centers are currently four in number located in Kumasi, Accra, Takoradi and Cape Coast. The Health Centers, aside selling the organisation's COA FS, attend to client through health consultations and laboratory services. Retro Viral Infections, Chronic diseases and other blood related diseases are attended to. Some of these diseases can be easily transferred through body fluids and body contacts and staff can easily pick up bacterium and other infections. The Ministry of Health in June 2010 came up with Policy and guidelines on OHS for health care workers and employs all health workers to follow suit and formulate policies that best suit the organisation.

The factory is where the production of COA FS (dietary supplement), and COA Balm (for inflammatory diseases and skin rashes) is done. Steam boilers, water, other heavy equipment are used. Harvesting the herbs which is the main raw material for the drugs is done in the bush and the use of sharp equipment and encounter with poisonous animals such as snakes is inevitable. Furthermore, organisational health illness may set in due to the frequent bending, lifting and staying close to high temperature steam boilers. Accidents leading to loss of body parts can also occur due to the grinding machine used.

# **Population**

A population is the collection of all items of interest to the study. The total staff strength during the study was 72. The decision to use the entire population was based on the following factors:

- i. the population is well defined and small
- ii. to eliminate any potential bias occurring through sampling, that is, achieve a sampling error of zero
- iii. that, the outcome of the data analysis is not highly influenced by one or two cases

### **Sampling Procedure**

There was no sampling as the target population was the total number of staff of COA. The respondents were then classified into groups based on their work engagement, since each of the work categories has its own occupational risks. Table 2 below shows the categories and the population in each of these categories.

Category	Number of People
Management	9
Secretariat	20
Drivers	6
Clinical	9
Factory floor Total	<u>28</u> 72

# Table 2: Categorisation of Staff

Source: The Center of Awareness (2019)

The Management includes all staff in Managerial positions. Factory floor entails all those who work at the factory from harvesting of raw materials to processing into the finished product, with the exception of factory Managers and factory Secretarial staff. The clinical staffs are those who work directly with the clients or patients. The drivers include all those employed as drivers for the organisation. The Secretariat therefore includes all staff members who do not fall under any of the afore-mentioned categories.

# **Data Collection Instruments**

# **Questionnaire design**

One questionnaire was designed by the researcher for each of the work categories. It was sent for proof reading and approval before its distribution. Also, the questions asked where based on the requirement of the FOS ACT and the Guidelines given by the Ghana Health Service. The questionnaire was grouped into two main sections, namely, socio-demographic part and OHS issues part.

Format of the questions: The questionnaire used for the study contain different types of questions.

- 1. Single select multiple choice question: here, respondents have to select one response from a given list of options.
- Dichotomous question: This is mostly a "yes/no" close ended question. This
  is usually used where validation is needed.
- 3. Likert scale question: This is relevant in assessing respondents' view or attitude around a noted concern. For the purpose of this study, a five-point agreement scale was adopted.
- 4. Open-ended question: This is used to collect information that may be lengthy. The use of this question type in the study is to solicit information on complete knowledge, feelings, understanding, explanation to a preceding question and also where respondents needs to give substantial feedback.

In addition, a checklist of directives and signs was designed to aid in the observation part of the data collection. The observation guide (checklist) included directions for emergency exit, warning signs posted on risky equipment such as steam boilers, first aid box, among others.

# **Data Collection Procedures**

Self-administered questionnaires were given to all staff except the drivers. A face-to-face interview was used to collect data from drivers using the

questionnaire designed for that group. This is because of their low educational level. Other staff who also found it difficult to respond to the questionnaire on their own were helped to do so through face-to-face interviews.

Observation was done at factory with the using an observation guide. The factory floor workers were observed while doing their relevant work activities in order to better understand and know the hazards as well as the unsafe and harmful working conditions exposed to them. The safe practices were also observed and workers were being informed of the observation. The observation guide (checklist) was adopted using the basic requirement of the Factory, Office and Shop Act. A day was used for the observation.

The data collection was done over a three-week period. Seventy (70) questionnaires were distributed out of which 57, that is, 81% were retrieved. At the time of administering the questionnaires, two staffs; one clinical staff in Accra and the other from the Secretariat had already resigned from the Center. The remaining 13 staff whose questionnaires were not retrieved included staff on their annual leave, and those who felt reluctant in answering the questionnaires and always postponing the time to fill the questionnaires.

# **Data Processing and analysis**

The data were collated and sorted into their appropriate categories. Responses to all questions were coded. After coding, the SPSS software was used for data entry and also generate descriptive statistics in table form for analysis. Qualitative data obtained from the observation of the factory was interpreted in a narrative form. Moreover, results were displayed in tables and percentages were

used to explain the results. Percentages was used to aid all user get basic understanding of the results.

## Summary

A number of experiences were encountered during the field work. Management gave room for staff to cooperate. The major experience was the reluctance of some staffs in filling the questionnaires. Some kept postponing and setting new dates and time for the collection of the questionnaires. Some even misplaced their questionnaires and had to be replaced. Reminders were sent to these staff and calls and follow ups were also made. These staff did not submit the questionnaires. Nevertheless, the responses by the other staffs were very encouraging as they readily accepted the questionnaires and answered them. Even though not all were retrieved that same day, the scheduled time for the collection of the questionnaires was adhered to.

In addition, with the interactions with the factory floor staffs when administering the questionnaires, most of them had issues with their safety during work and therefore were happy such a research work was being conducted. Also, although some of them had not personally encountered any work hazard or accident yet, they made reference to a work place accident that lead to a permanent disability of a colleague of theirs. Unfortunately, the injured staff was unavailable during the time the questionnaires were administered and therefore could not get his input.

Another aspect of this chapter was about ethical issues. To expect ethical issues and other deliberations for this study, an oral discussion on the use of COA in this study was discussed with the Management of the organisation of which they

agreed. This was followed up with a formal letter to that effect. Also, the protection of respondents relating to the interview and questionnaire discretion was adhered to. There were no pejorative gestures or extra probing into responses where respondents felt averse to give information. Additionally, all respondents were assured that their identity remained confidential. The researcher ensured that no respondent was under any force or uneasiness before, during, and/or after participating in this study. The aim and reason for the study was well explained to them as well.

## **CHAPTER FOUR**

## **RESULTS AND DISCUSSION**

# Introduction

The results of the analysis are discussed to reflect the main purposes of the research in accordance to the literature review and the concepts. The chapter begins with the distribution and response rate of respondent the socio-demographic characteristics of all respondents, followed by management's context of OHS. Discussions on health and safety conditions of each identified work category is also be done. It then continues with the need for OHS and staff knowledge of this need. Some suggestions and comments on policies that can help address OHS issues in COA by staff is also discussed.

## Number of Questionnaires Distributed and Response Rate

As stated in the previous chapter, seventy questionnaires were distributed and fifty-seven of which amounts to 81% were retrieved. Table 3 gives the summary.

Category	Number Distributed	Number Retrieved
Management	9	8
Secretariat	19	17
Drivers	6	5
Clinical	8	6
Factory floor	28	21
Total	70	57

## Table 3: Response Rate

Source: field work, July, 2019

# **Socio-Demographic Characteristics of Staff Interviewed**

A total of 57 responses were retrieved and consisted of 37 males and 20 females. The age range of the respondents was from 18 years to 60 years and above. 84% of respondents were in the age bracket of 18 and 39 years. In general, the Center has a young and active working population. Also, the qualification of the respondents ranges from Basic and Secondary education to Doctoral Degree. Fifty-eight percent of the respondents had basic and secondary education out of which 75% were factory floor workers and drivers. Table 4 gives a summary of the socio-demographic characteristics of staff interviewed.

	Gender				Age (years)				Qualification				
Category	Male		Female	18 - 29	30 - 39	40 - 49	50 <b>-</b> 59	60 & above	Diploma	Graduate	Postgraduate	Doctoral	Basic- Secondary
Managerial staff	8	}	0	0	2	0	3	3	3	2	1	1	1
Secretariat staff	8	}	9	7	7	2	1	0	5	6	0	0	6
Clinical staff	1		5	2	4	0	0	0	4	1	0	0	1
Factory	1.	5	6	15	3	1	0	2	0	0	0	0	20
Drivers	5	5	0	1	2	0	2	0	0	0	0	0	5
Total	3	7	20	25	18	3	6	5	12	9	1	1	33

**Table 4: Socio-Demographic Characteristics of Respondents** 

Source: Field work, July, 2019

### **Management's Context of OHS**

Bird and Germain (1985), realised the essence for management to safeguuard against accidents in steady growing composite circumstances due to technological advancement. They saw one the causes of organisational accident and injury to be the lack of control by management. Mitchell (2018), stated that every organisation, despite the job they undertake, is accountability to espouse OHS

principles in the workplace. In Ghana, Part XV of the labour law stipulates that the employer is to ensure that employees work under conducive. The Factories, Offices and Shops 1970 Act 328 (Official Gazette, 1983) also elaborate in details the satisfactory, safe and healthy conditions an employer must put in place in the workplace. Therefore, Management involvements in OHS at COA were sought for.

Table 5 gives the summary of opinions on Management involvement in OHS by the Managerial staff. A total of eight managerial staff responded to the questionnaire. Averagely, 77.2% of Management found management involvement in OHS in COA positive whilst 22.8% are not satisfied with Management involvement involvement in OHS. However, about two-thirds (62.5%) acknowledged that, COA do not have an OHS policy. The Factory, Offices and Shops Directorate do go for inspection at the Center as confirmed by 85.7% of Management.

 Table 5: Percentage Distribution of Managerial Staff Opinions of their

 Involvement in OHS

Yes	No	Total
37.5	62.5	100.0
57.1	42.9	100.0
87.5	12.5	100.0
100.0	0.0	100.0
50.0	50.0	100.0
100.0	0.0	100.0
	37.5 57.1 87.5 100.0 50.0	37.5     62.5       57.1     42.9       87.5     12.5       100.0     0.0       50.0     50.0

Source: field work, July, 2019

# **Table 5 continue**

Management embark of regular inspection of work environment and work processes?	100.0	0.0	100.0
Factory, Shops and Offices Directorate ever inspected the Centre?	85.7	14.3	100.0
Average	77.2	22.8	100.0

Source: field work, July, 2019

In general, Management views OHS policies as necessary and show commitment to such issues. Management embarks on regular inspection of work environment and processes and are aware of complaints of hazards and workrelated accidents from the other staff. Some comments on what was done about the complaints of staff concerning occupational hazards was that, management put in place adequate measures and safety equipment to minimise and prevent occupational hazards and also provides the factory with items upon requisition.

### Table 6: Occupational Accidents Known to Management in The Center of

#### Awareness

Nature of Accidents	Number of Accidents	Percentage response
Nature of Accident- Motor accident	1	12.5
Nature of Accident- Factory accident	1	100.0
Nature of Accident- Clinical accident	4	50.0
Nature of Accident- Office related accident	0	100.0
Average		65.6

Source: field work, July, 2019

Table 6 above gives the summary of Occupational accidents known to Management in COA. On the Average, 65.6% of the respondents admitted to the occurrence of work-related accidents in COA. Out of the four nature of accidents

asked, a total of six cases were known to the managerial staff. These cases include one Motor accident, one Factory accident and four Clinical accidents. Out of these known cases, one case led to both injuries and permanent disability of staff. This was indicated by all eight managerial staff. Table 7 indicates the statistics.

 Table 7: Resultant of Work Accident

Resultant of Accident	Number of	Frequency	Percent	Valid
	Cases			Percent
How many led to injuries	1	8	100.0	100.0
How many led to permanent disabilities?	1	8	100.0	100.0

Source: field work, July, 2019

Management commented that, they assisted in the hospital bills and recovery of the staffs involved in the work place accident. Also, after the injury, Management took care of the injured staff and picked up all the bills pertaining to the injuries. Prosthesis was procured for the permanently disabled staff and the staff was compensated. The position of the machine that caused the injury was changed to prevent future accidents. Furthermore, the affected staff receives full salary at the end of every month.

Some general comment by some managerial staff was that, COA is doing well so far in that, if not for the recent accident at the factory, there would not have been any record on occupational accidents. This indicates that, not all managerial staff were aware of the other workplace accident that took place at in COA. Other managerial staffs were of the view that, the Organisation needs a complete reform. Some commented that, the request for materials for the factory and production must be supplied promptly. Moreover, workers need to be insured against accidents and health bills must be supported by management. These responses from managerial staffs depict that, majority of management is aware of the OHS issues in COA and the need for the organisation to work well towards it. Also, management has shown some level of commitment in addressing OHS issues in COA.

# **OHS Issues at The Center of Awareness**

In exploring the importance of OHS policies in COA, it would be prudent to know the OHS issues in COA. G.S Lowe's (2003), explained that a fit workplace emphasizes mostly on both physical and mental-wellbeing of workers. Also, Section 118 sub 2 stipulates that the employer is to ensure that employees work under conducive conditions. More so the employer must prevent contamination of the work place, provide adequate clean water, minimize the causes of hazards imminent in the work place and even suitable toilet and washing facilities. Therefore, to come up with OHS issues in COA, staffs' view on their office environment, training, insurance and exposure to hazards as well as issues concerning their work activity were sought for.

# **OHS** issues with the office environment

Burton J. (2010), said that employee health and a healthy workplace are intertwined. So, opinions of staff were sought on how they view their office environment. The questions covered lighting, office space for staff and equipment, safety equipment including first aid boxes, availability of clean drinking water and cleanliness of the office environment including waste disposal facilities. Three categories of workers responded to the questionnaires, namely, the secretariat staff (both senior and junior), clinical staff and factory floor workers.

Table 8 gives the summary of opinions on office environment issues by the secretariat staff. In all, 17 secretariat staff from all the Centers responded to the questionnaire. On average, 57.3% strongly agreed or agreed to the adequacy of the condition of the office environment with respect to OHS issues. About a third (32.9%) was not satisfied with the office environment while 9.9% remained neutral. Out of the twelve office environment requirements, majority of the respondents did not find as adequate four of them, namely, spacious offices for machines and equipment, provision of safety equipment, readily availability of first aid and well-equipped first aid box for emergencies. First aid facility was the worst among the requirements for OHS for office environment as more than 80% of the staff disagreed with its availability and it being well-equipped for emergencies.

Generally, the offices are spacious, clean and well ventilated as well as the availability of adequate toilet and other waste disposal facilities. This is indicated by over 75% of respondents.

# Table 8: Percentage Distribution of Staff (Senior and Junior Secretariat Staff)

Office Environment Requirments	Strongly	Agree	Neutral	Disagree	Strongly	Total
Office Environment Requirments	Agree				Disagree	
Adequate lighting system	29.4	52.9	0.0	5.9	11.8	100.0
Spacious Offices for staff	17.6	64.7	5.9	5.9	5.9	100.0
Spacious office for machines & equipment	11.8	11.8	29.4	47.1	0.0	100.0
Offices are well ventilated	18.8	56.3	6.3	12.5	6.3	100.0
Safety equipment provided	0.0	29.4	11.8	41.2	17.6	100.0
First aid box readily available	0.0	6.3	6.3	43.8	43.8	100.0
First aid box equipped for emergencies	0.0	11.8	5.9	41.2	41.2	100.0
Adequate supply of clean drinking water	29.4	41.2	11.8	11.8	5.9	100.0
Adequate toilet facilities	47.1	29.4	5.9	11.8	5.9	100.0
Well cleaned offices	35.3	47.1	11.8	0.0	5.9	100.0
Well cleaned toilet facilities	29.4	35.3	23.5	5.9	5.9	100.0
Adequate waste disposal available	23.5	58.8	0.0	17.6	0.0	100.0
Average	20.2	37.1	9.9	20.4	12.5	100.0

## **Opinions of their Office Environment**

Source: field work, July, 2019

Few general comments were given by respondents concerning the office environment. One of the comments is the fact that there is no health insurance to cover staff and family. Another comment is that due to lack of photocopying machine at the Kumasi Center, an individual's confidential report is photocopied outside the office, which the staff deems inappropriate.

Table 9 gives the summary of opinions on office environment issues by the clinical staff. Six clinical staff in the four Health Centers responded to the questionnaire. Averagely, 65.3% strongly agreed or agreed to have an adequate working environment based on the variables provided, 31% were not satisfied whilst 2.8% remained neutral. Out of the twelve office environment conditions, majority (83.4%) disagreed with the readily available first aid box and first aid box being equipped for emergencies conditions.

# Table 9: Percentage Distribution of Clinical Staff Opinions of their Clinic

Office Environment Requirments	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
	Agice					
Adequate lighting system	16.7	50.0	0.0	33.3	0.0	100.0
Spacious Offices for staff	33.3	50.0	0.0	16.7	0.0	100.0
Spacious office for machines & equipment	33.3	33.3	0.0	33.3	0.0	100.0
Offices are well ventilated	66.7	33.3	0.0	0.0	0.0	100.0
Safety equipment provided	16.7	33.3	16.7	16.7	16.7	100.0
First aid box readily available	0.0	16.7	0.0	66.7	16.7	100.0
First aid box equipped for emergencies	0.0	16.7	0.0	50.0	33.3	100.0
Adequate supply of clean drinking water	33.3	33.3	0.0	16.7	16.7	100.0
Adequate toilet facilities	16.7	33.3	16.7	33.3	0.0	100.0
Well cleaned offices	50.0	33.3	0.0	16.7	0.0	100.0
Well cleaned toilet facilities	50.0	50.0	0.0	0.0	0.0	100.0
Adequate waste disposal available	33.3	50.0	0.0	0.0	16.7	100.0
Average	29.2	36.1	2.8	23.6	8.3	100.0

### Environment

Source: field work, July, 2019

The last category that answered questions based on the work environment are the factory floor workers. Table 10 gives the summary of their opinions on office environment issues. In all, 21 staff from the factory answered the questionnaire out of which 50% of the staff found their working environment to be inadequate. Thirty- three percent strongly agreed or agreed to the adequacy of the office environment whilst 16.8% remained neutral. Out of the 13 office standard requirements, seven requirements were not found to be adequate by the respondents. These requirements are spacious office space for staff, spacious office space for machines and equipment, protective clothing and appliances, safety measures to reduce noise and vibration, readily availability of first aid and wellequipped first aid box for emergencies.

## Table 10: Percentage Distribution of Factory Staff (Junior Office Staff)

Office Environment Requirments	Strongly	Agree	Neutral	Disagree	Strongly	Total
	Agree				Disagree	
Adequate lighting system	45.0	25.0	10.0	5.0	15.0	100.0
Spacious Offices for staff	0.0	25.0	20.0	25.0	30.0	100.0
Spacious office for machines & equipment	0.0	4.8	9.5	52.4	33.3	100.0
Offices are well ventilated	23.8	14.3	19.0	23.8	19.0	100.0
Protective clothing and appliances provided	5.0	15.0	30.0	20.0	30.0	100.0
Safety measures to reduce noise and vibration provided	4.8	4.8	14.3	23.8	52.4	100.0
First aid box readily available	0.0	0.0	4.8	38.1	57.1	100.0
First aid box equipped for emergencies	0.0	0.0	9.5	28.6	61.9	100.0
Adequate supply of clean drinking water	4.8	28.6	33.3	19.0	14.3	100.0
Adequate toilet facilities	38.1	38.1	9.5	14.3	0.0	100.0
Well cleaned offices	42.9	33.3	19.0	0.0	4.8	100.0
Well cleaned toilet facilities	30.0	35.0	20.0	5.0	10.0	100.0
Adequate waste disposal available	9.5	4.8	19.0	33.3	33.3	100.0
Average	15.7	17.6	16.8	22.2	27.8	100.0

#### **Opinions of their Office Environment**

Source: field work, July, 2019

First aid facility was the worst among the requirements for OHS for office environment as more than 90% of the staff disagreed with its availability and it being well-equipped for emergencies. This was followed by adequate space for machines and equipment which had 85.7% of staff disagreeing to its adequacy. In general, lighting system is adequate, toilet facilities are adequate, and both offices and toilet facilities are well cleaned. This is indicated by over 70% of respondents.

Based on the findings from the working environment of the different work categories, first aid facilities recorded the worst amongst all the OHS requirements. According to FOS Section 27, 28, the employer must ensure that the organisation has and can provide standard first aid to workers. Also, first aid should be displayed in the workplace where it can be easily identified and readily used.

#### OHS issues with staff

## Staff training and insurance

DMI (2019), emphasised that, work place accidents occur due to unsuitable attitudes, poor skill, physical inappropriateness and inappropriate mechanisms or environment. Therefore, opinions of staff were sought on their training and insurance. The questions captured training on the usage of safety equipment, job engagement, preventing work related hazards and insurance against work hazards and diseases. Three categories of workers responded to the questionnaires, namely, the secretariat staff (both senior and junior), clinical staff and factory floor workers.

Table 11 gives the summary of opinions on staff training and insurance by the secretariat staff. Averagely, 65.5% of the respondent strongly disagreed or disagreed to provision of training and insurance to staff. Less than a quarter of the total respondents (20.9%) strongly agreed or agreed to the provision of training while 13.6% remained neutral. Out of the four questions asked, insurance had the worst results as 87.5% disagreed to its provision and none of the respondents agreed to it. Although 52.9% were of the opinion that they were well trained for their job engagement, 41.2% thought otherwise. Also, majority of the respondents were not well trained on the use of safety equipment and on preventing work-related injuries and illnesses as these variables recorded 64.7% and 68.8% respectively. Table 11: Percentage Distribution of Staff (Senior and Junior Secretariat

Staff Training and Insurance	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Staff well trained on use of safety equipment	5.9	5.9	23.5	41.2	23.5	100.0
Staff well trained for their job engagements	17.6	35.3	5.9	35.3	5.9	100.0
Staff insured against work hazards and diseases	0.0	0.0	12.5	37.5	50.0	100.0
Staff trained on preventing work-related injuries and illnesses	12.5	6.3	12.5	25.0	43.8	100.0
Average	9.0	11.9	13.6	34.7	30.8	100.0

#### Staff) Opinions of Staff Training and Insurance

Source: field work, July, 2019

The opinions of the clinical staff were also sought for on their training and insurance. Table 12 gives the summary of opinions on staff training and insurance by the clinical staff. On the Average, 50% were of the opinion that adequate training and insurance were provided, 36.7% thought otherwise and 13.3 % remained neutral. In general, staffs are well trained on the use of safety equipment, their job engagements and on preventing work related hazards as these variables recorded over 60% for each. Staff training on their job engagement was the best amongst the requirements as 83.4% agreed to its adequacy. Nevertheless, 50% each of the respondents do not find health promotion programs to be undertaken and insurance to be provided.

## Table 12: Percentage Distribution of Clinical Staff Opinions of Staff Training

Staff Training and Insurance	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Staff well trained on use of safety equipment	16.7	50.0	0.0	33.3	0.0	100.0
Staff well trained for their job engagements	16.7	66.7	0.0	16.6	0.0	100.0
Staff trained on preventing work-related injuries and illnesses	16.7	33.3	16.7	16.7	16.7	100.0
Health promotion programs undertaken	16.7	0.0	33.3	50.0	0.0	100.0
Staff insured against work hazards and diseases	16.7	16.7	16.7	33.3	16.7	100.0
Average	16.7	33.3	13.3	30.0	6.7	100.0

#### and Insurance

Source: field work, July, 2019

The last category that answered questions based on training and insurance are the factory floor workers. Table 13 gives the summary of their opinions on training and insurance issues. Out of the factory staff who answered the questionnaire, 68.2% strongly disagreed or disagreed to provision of training and insurance to staff. One fifth (20.2%) agreed to its provision while 11.6% remained neutral. In general, the training and insurance issues in the factory are not encouraging as more than 52% of the respondents strongly disagree or disagree to all questions asked. Training on the use of safety equipment and insurance against work hazards and diseases were the worst amongst the requirements as each recorded 80.9% as not being provided. Table 13: Percentage Distribution of Factory Staff (Junior Office Staff)

Staff Training and Insurance	Strongly	Agree	Neutral	Disagree	Strongly	Total
Agree Agree		1 igree	rtourur	Disagree	Disagree	Total
Staff well trained on use of safety equipment	0.00	4.80	14.30	47.60	33.30	100.00
Staff well trained for their job engagements	14.30	19.10	0.00	33.30	33.30	100.00
Staff trained on preventing work-related injuries and	5.00	20.00	15.00	20.00	40.00	100.00
illnesses	5.00	20.00	15.00	20.00	40.00	100.00
Health promotion programs undertaken	19.00	0.00	28.60	19.10	33.30	100.00
Staff insured against work hazards and diseases	4.80	14.30	0.00	33.30	47.60	100.00
Average	8.60	11.60	11.60	30.70	37.50	100.00

## **Opinions of Staff Training and Insurance**

Source: field work, July, 2019

Based on the analysis, most of the staff were dissatisfied with training and insurance issues in COA, with insurance recording the worst followed by training on the use of safety equipment. Heinrich et al. (1980) gave the remedy to accident causation as firstly the reponsibility of the employer to provide intensive monitoring, discipline and educative training.

#### Staff exposure to hazard

The secretariat staff were questioned on their safety based on their exposure to occupational injury and hazards. Averagely, 71.9% of the secretarial staff had neither experienced or had been exposed to occupational injuries or hazards. About a quarter (28.1%) of the respondents had experienced occupational injuries or exposed to hazard. The hazards exposed to these staff are air pollution, bacterial, fungi and viruses, exposure to used needles due to waste disposal and lifting of equipment and boxes of drugs. As at the time of administering the questionnaire, nothing had been done about these exposures. Table 14 summarises the responses from the respondents.

Table 14: Percentage Distribution of Secretariat Staff (Senior and JuniorSecretariat Staff) Opinions of their Exposure to OccupationalHazards and Injuries

Exposure to Injury and Hazard	Yes	No	Total
Experienced occupational injury?	12.5	87.5	100.0
Exposed to occupational hazard	43.8	56.3	100.0
Average	28.1	71.9	100.0

Source: field work, July, 2019

Some general comments by staff elaborate the need for staff training periodically and education on some of these occupational hazards, injuries and related illnesses. Staff also needed insurance. The secretariat staff at the factory were particular about appropriate clothing as well as the other OHS procedures for the factory staff and suggested the Board of Directors pay much attention to the factory.

The clinical staff's view on their safety based on their exposure to occupational injury and hazards were also sought for. Table 15 gives a summary of the opinions of the clinical staff on their exposure to hazards and injuries. On the average 48.3% of the respondents had faced some occupational hazard and experienced injuries. Over 50% had been exposed to biological, mechanical and ergonomic hazards. Some of the injuries faced were needle pricks of an HIV-infected client during sample taking procedures and severe back pain due to the state of the chair and sitting for long hours keeping records. Medication was given to the staff who had the needle prick and infection was prevented. The staff with the ergonomic hazard issue did not report and therefore nothing was done about it.

Table 15: Percentage Distribution of Clinical Staff Opinions of their Exposure

Nature of Hazard	Yes	No	Total
Nature of hazard – biological	66.7	33.3	100.0
Nature of hazard – mechanical	66.7	33.3	100.0
Nature of hazard – ergonomic	50.0	50.0	100.0
Nature of hazard – chemical	33.3	66.7	100.0
Nature of hazard – psychological	33.3	66.7	100.0
Experienced occupational injury?	40.0	60.0	100.0
Average	48.3	51.7	100.0

#### to Occupational Hazards and Injuries

Source: field work, July, 2019

The factory staff were also questioned on their safety based on their exposure to occupational injury and hazards. Thirty-three percent had experienced occupational accident or injury and 42.9% had been exposed to occupational hazard (Table 16). All those affected did report to their supervisor. Some of the injuries were cuts and burns from heat and mild explosion of machine. Most of the staff also did refer to an accident that occurred at the factory and a staff had his right fingers chopped off. Some comments on what was done about the injury were that, the machine that had the minor explosion was repaired but worker was not treated. Also, staff was blamed for the injury caused and nothing was done to support treatment. Some staffs were also asked to take care of the injuries themselves.

Some hazards expose to staffs include exposure to sharp objects, climbing, snakes, fire and machine explosion, noise, lack of shelter provided, gas and heat. Staffs were asked to wait patiently after reporting the hazards. Nonetheless, nothing has been done about it. Table 16: Percentage Distribution of Factory Floor Staff Opinions of their

Exposure to Hazards and Injuries	Yes	No	Total
Experienced occupational accident or injury?	33.3	66.7	100.0
Exposed to occupational hazard?	42.9	57.1	100.0
Accident reported to the appropriate supervisor?	33.3	66.7	100.0
Hazard reported to the appropriate supervisor?	42.9	57.1	100.0
Average	38.10	61.90	100.00

Exposure to Occupational Hazards and Injuries

Source: field work, July, 2019

Although majority of the workers were not exposed to hazards or experienced an occupational injury as indicated in Table 16, the few occurrences should not be overlooked. This is because "for every single incident that causes a major injury, there are 29 incidents that cause minor injuries, and 300 that cause no injuries, which include property damage incidents and near escape incidents" (Basford, 2017). This implies that just one accident can be detrimental to the organisation.

## OHS issues with the work activity

The work activity of the secretarial, clinical and factory floor workers were probed into to find out how conducive they were for the workers. Table 17 summarises the opinions of the secretarial staff on their work activity. On the average, 53.1% was of the opinion that the work activities were conducive enough for them in their operations. About a fifth (21.9%) of them did not find the work activity conducive while a quarter (25%) remained neutral. Sitting facilities and user-friendly work design recorded the highest with 62.6% of the respondents

strongly agreeing or agreeing to their adequacy. However, 43.8% agreed to have their work operations, environment and process designed to reduce work hazards and risk. This shows a deficiency in the work activity with respect to procedures in the reduction of work hazard and risk.

Table 17: Percentage Distribution of Secretariat Staff of their Opinion on theirWork Activity

Conditions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Sitting facilities and work design are user friendly	18.8	43.8	25.0	6.3	6.3	100.0
Work operations etc. designed to reduce work hazards and risks	12.5	31.3	25.0	31.3	0.0	100.0
Average	15.6	37.5	25.0	18.8	3.1	100.0

Source: field work, July, 2019

The Secretarial staff did make some general comments that, Management should fix an automated machine for production from start to the finished product. Moreover, Management should provide spacious environment to avoid workers being exposed to hazards. Also, the sitting arrangements are okay but the work operations should be improved to check on vital things at the facility, example is bringing in a computerised system. Furthermore, there is poor ergonomics at the Secretariat-Head Office.

Table 18 summarises the opinions of the clinical staff on their work activity. Averagely, 58.3% were satisfied with the conditions of their work activities while 41.7% were dissatisfied. Majority (66.7%) were of the view that their work operations, environment and process were designed to reduce work hazards and risk. Nonetheless, there was a deficiency in the provision of appropriate facilities

for performing their work activities as 50% of the respondents both agreed and disagreed on its adequacy.

## Table 18: Percentage Distribution of Clinical Staff of their Opinion on their

Conditions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Work operations etc. designed to reduce work hazards and risks	16.7	50.0	0.0	33.3	0.0	100.0
Appropriate facilities provided for performing activities	16.7	33.3	0.0	50.0	0.0	100.0
Average	16.7	41.7	0.0	41.7	0.0	100.0

Work Activity

Source: field work, July, 2019

The factory staff also gave their opinion on their work activity. Table 19 gives a summary of the opinions of the factory floor staff on their work activity. Average wise, 60.3% do not find the conditions surrounding their work activity conducive. A fifth (20.2%) of them were satisfied with the condition of their work activities while 17.5% remained neutral. In general, the conditions to the work activities in the factory are poor. More than 52% respondents were dissatisfied with each of the conditions. Most of the respondents called for salary increment, spacious working environment to reduce exposure to hazard, attention to the factory, readily response to requisitions, management consideration of staff views as well as organising general forums which is supervised by management. Some of the staff were of the view that, management were not well organised.

## Table 19: Percentage Distribution of Factory Floor Staff of their Opinion on

Conditions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Work operations etc. designed to reduce work hazards and risks	4.8	9.5	19.0	28.6	38.1	100.0
Appropriate facilities provided for performing activities	19.0	9.5	19.0	19.0	33.3	100.0
Not permitted to work on steam boiler and barrels when hot	19.0	4.8	14.3	28.6	33.3	100.0
Average	14.3	7.9	17.5	25.4	34.9	100.0

## their Work Activity

Source: field work, July, 2019

Based on the analysis, there a lot more can be on the conduciveness of staff work activities. This can be supported by the 2016 to 2020 OHS Policy Document by the Albanian Council of Ministers (2016), which stated that, "Work activities can be hazardous to the health of employees and workplaces as well as affect the safety and health of customers, volunteers, bystanders and local residents". Although most of the staff were satisfied, the ratio to the dissatisfied staffs was minimal.

## OHS issues of the Center of Awareness drivers

OHS issues in COA do not only cover secretariat staff (both senior and junior), clinical staff and factory floor workers. The drivers in the Center are also affected by OHS issues. An interview schedule was administered to the drivers. In all five drivers responded to the interview schedule. The main questions asked in the interview schedule were based on: (a) the institutions response to Staff (Drivers) safety; (b) Exposure to hazard and; (c) Staffs (Drivers) response to keeping themselves safe.

On the average, 84% of the respondents did admit to the organisation responding to their safety in terms of regular maintenance on vehicles, fast response to vehicle repairs, precautions provided to elude or reduce accidents, insuring of vehicles on time and insuring drivers. Meanwhile, 16% thought otherwise. Precautions provided to elude or reduce accidents and insuring of vehicles on time recorded the best, that is, a 100% satisfaction. Generally, the organisations response to driver's safety is commendable. Nevertheless, 60% are not satisfied with the rate at which Management respond to repairs on vehicles. Table 20 gives the opinion of the institution's response to drivers' safety.

Table 20: Percentage Distribution of Drivers' Opinion on InstitutionalResponse to their Safety

Conditions	Yes	No	Total
Regular Maintenance on vehicles	80.0	20.0	100.0
Management response to repairs on vehicle is fast	40.0	60.0	100.0
Precautions are put in place to avoid or reduce accidents	100.0	0.0	100.0
Vehicles are insured on time	100.0	0.0	100.0
Driver is insured against accident	100.0	0.0	100.0
Average	84.0	16.0	100.0

Source: field work, July, 2019

Table 21 gives the opinion of drivers on their exposure to work hazard. Averagely, three-forth (75%) of the respondents were of the view that, drivers are not exposed to the conditions of their work hazard while 25% had the opinion that drivers are exposed to the conditions of their work hazard. Drivers not required to drive when tired was the best (100%) amongst the conditions for exposure to hazards, nonetheless, 60% of the drivers do drive for prolonged hours. In general, the drivers are not exposed to hazards.

Table 21: Percentage Distribution of Drivers' Opinion on their Exposure to

Conditions	Yes	No	Total
Drivers are examined before employed	80.0	20.0	100.0
Driver is not stressed mostly	80.0	20.0	100.0
Driver is not required to drive when tired	100.0	0.0	100.0
Driver does not drive for prolonged hours	40.0	60.0	100.0
Average	75.0	25.0	100.0

## **Occupational Hazard**

Source: field work, July, 2019

ILO (2002), explains that, all workers hold the responsibility for taking care of themselves and of their colleagues as well in the working environment. On drivers' response to their own safety, conditions such as not wearing slippers when driving, wearing seat belt when driving and involvement in accident while on duty were asked. Approximately, 91.3% on the average do take personal precautions to avoid work related accidents while 8.3% defaults in taking personal precaution. Generally, drivers do take precautions to keep themselves safe. Table 22 gives the summary of their response to keeping themselves safe. None of the drivers had been involved in an accident while on duty.

Table 22: Percentage Distribution of Drivers' Opinion on their Response to

Conditions	Yes	No	Total
Driver wears slippers when driving	25.0	75.0	100.0
Driver does not wear seat belt when driving	0.0	100.0	100.0
Driver has been involved in motor accident while on duty	0.0	100.0	100.0
Average	8.3	91.7	100.0

## Keeping themselves Safe

Source: field work, July, 2019

Few general comments were given by respondents concerning the maintenance of vehicles. One of the comments is the fact that there is poor maintenance of vehicles. Another comment is that there is no specific mechanic for the Organisation.

## The Employee Knowledge with Regards to OHS Policies

After ascertaining the OHS issues in COA, it is necessary to know how important OHS policies are to the staff as well as their knowledge on the need for OHS policies. In IOSH (2003), research, they found out that good health reaps satisfaction and productivity. Also, in Alli's (2008), minimising what causes hazards in the workplace, reduces cost, provide conducive work conditions and environment and improvement in productivity. Opinions on the need for OHS policies were sought from the staff. The questions covered included; OHS saving the organisation from unforeseen costs, OHS preventing unforeseen hazards and injuries, OHS increasing the mental well-being of staff as well as physical wellbeing of staff. Three categories of workers responded to the questionnaires, namely, the secretariat staff (both senior and junior), clinical staff and factory floor workers.

Importance	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total
OHS saves organisation from most unforeseen costs	68.8	12.5	0.0	18.8	0.0	100.0
OHS prevents most unforeseen hazards and injuries	50.0	25.0	6.3	18.8	0.0	100.0
OHS increases mental wellbeing of staff	50.0	18.8	18.8	12.5	0.0	100.0
OHS improves physical wellbeing of staff	50.0	25.0	6.3	18.8	0.0	100.0
Average	54.7	20.3	7.8	17.2	0.0	100.0

 Table 23: Percentage Distribution of Secretariat Staff of their Knowledge on

the Importance for Occupational Health and Safety Policies

Source: field work, July, 2019

Table 23 gives the summary of opinions on the need for OHS policies by the secretariat staff. On average, 75% strongly agreed or agreed to the need for OHS policies. Less than a fifth (17.2%) disagrees to the need for OHS policies while 7.8% remained neutral. Generally, OHS policies are needed because it saves the organisation from unforeseen costs, prevents unforeseen hazards and injuries, increases the mental well-being of staff as well as physical well-being of staff. This also shows that majority of staff do have some knowledge on the importance or the need for OHS policies. Only a few staffs represented by 18.8% and below do not have a full understanding of the importance or need for OHS policies.

Table 24 gives the summary of opinions on the need for OHS policies by the clinical staff. Averagely, 87.5% strongly agreed or agreed to the need for OHS policies based on the variables provided, and 12.7% remained neutral. None of the respondents disagreed to the need for OHS policies. Generally, OHS policies are needed because it saves the organisation from unforeseen costs, prevents unforeseen hazards and injuries, increases the mental well-being of staff as well as

physical well-being of staff. This also relates to the fact that majority of staff do have some knowledge on the importance or the need for OHS policies.

# Table 24: Percentage Distribution of Clinical Staff of their Knowledge on the Importance for Occupational Health and Safety Policies

Importance	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Total
OHS saves organisation from most unforeseen costs	50.0	33.3	16.7	0.0	0.0	100.0
OHS prevents most unforeseen hazards and injuries	50.0	33.3	16.7	0.0	0.0	100.0
OHS increases mental wellbeing of staff	50.0	50.0	0.0	0.0	0.0	100.0
OHS improves physical wellbeing of staff	50.0	33.3	16.7	0.0	0.0	100.0
Average	50.0	37.5	12.5	0.0	0.0	100.0

Source: field work, July, 2019

Table 25 gives the summary of opinions on the need for OHS policies by the factory floor staff. Majority that is (71.2%) strongly agreed or agreed to the need for OHS policies based on the variables provided. About a fifth (19.3%) strongly disagreed or disagreed to the need for OHS policies whilst 9.6% remained neutral. This shows that majority of the staff do have some knowledge on the importance or the need for OHS policies. 
 Table 25: Percentage Distribution of Factory Staff of their Opinion on the

Importance	Strongly	Agree	Neutral	Disagree	Strongly	Total
	agree				Disagree	
OHS saves organisation from most unforseen costs	52.4	23.8	14.3	4.8	4.8	100.0
OHS prevents most unforseen hazards and injuries	47.6	28.6	0.0	9.5	14.3	100.0
OHS increases mental wellbeing of staff	45.0	30.0	5.0	5.0	15.0	100.0
OHS improves physical wellbeing of staff	38.1	19.0	19.0	9.5	14.3	100.0
Average	45.8	25.4	9.6	7.2	12.1	100.0

Importance for Occupational Health and Safety Policies

Source: field work, July, 2019

## **Suggestions on OHS Policies**

As staff have elaborated on the OHS issues in the Center and acknowledged the importance of such policies, it would be prudent to know their opinions on some policies in which they deem fit to aid the OHS issues in COA. Three categories of workers responded to the questionnaires, namely, the secretariat staff (both senior and junior), clinical staff and factory floor workers. The suggestions include:

- 1. Confirmation of appointment letters for the worker to work peacefully.
- Periodic open forums to seek for workers' opinions and submission at the workplace.
- 3. Every worker must receive some benefit at the end of the year.
- 4. Insurance to all staff.
- 5. Resource personnel should be invited to educate staff on their jobs, occupational hazard and safety issues.
- 6. Staff training on the Organisations product and services

- Regular health examination done for staff in order to know their status on related infections treated at the Center.
- 8. Safety measures and precautions should be put in place for a safe and sound working environment.
- 9. Provision of certain basic facilities.
- 10. Well-equipped first aid box must be provided, Clean water and adequate safety equipment must be provided
- 11. Establishing proper rules and regulations as well as conditions of service.

## Observations

The factory was visited and observations on its operations were made. These observations were made in line with the provisions of the FOS Act. The first line of observation was on cleanliness. The researcher observed that the internal factory environment as well as some external environment was well cleaned and very neat. Hand sanitizer was also provided. Nonetheless, at the back of the factory were beneath some orange waste from the chuff from the herbs after production. This was less than 40ft from the factory building. Another observation was on overcrowding. The researcher observed that the storage room was a bit spacious. The production room was not spacious and therefore can harbor heat and noise. Nevertheless, there is enough space in the factory surroundings for expansion.

Ventilation in the factory was quite good with the exception of the main factory floor where production takes place (production room). Because the room was not that spacious, plus the heat from the steam boiler, the production room seems to be less ventilated. Also, the physical structure of the production room and

its layout seems not to support natural ventilation meanwhile that is the only source of ventilation in the production room. The researcher also looked at the provision of washing facilities and sanitary convenience. There were three toilet facilities of which one was newly constructed and not yet opened for use. Bathroom facility was also available. The washrooms were well kept. There were plastic basins and tap water of which is used in washing the factory clothing.

The lighting system at the factory was commendable. The researcher observed a hanging ceiling light with wire in the bottling room and probed into why that light which was supposed to be fixed to the ceiling now hanging. The researcher was informed that, there was work done on the ceiling and after the work, the light was left hanging. The light was said to have hanged for more than three months. Although it may not seem dangerous since there were no leakages on the wire, it can one day fall, break and hurt someone. It also does not look attractive. Another observation was on drainage of floors. There was a drain that needed to be covered to prevent accident. Also due to the washing of the herbs after harvesting, there were spillages of water in the production room of which there was no mechanized way of draining the water on the floor. The floor was cleaned with mop by staffs after all the herbs are being washed. This can cause slip and falls.

Researcher did see a tap and no other source of drinking water. Sitting facilities were inadequate. Researcher observed some staff sitting on the floor in the bottling room. Few furniture was seen at the factory premises. Work clothing and slippers as well as hand gloves were provided in the bottling room and the production room. Observation also showed that, not all staff wore the work clothing

provided. This could be due to inadequate provision or workers' refusal to wear the clothing. There was a changing room provided for the workers as well. There were no dusts or fumes produced during production nevertheless, some amount of noise was produced and harbored in the production room due to its small space.

The researcher also observed that, gas was used during production. Also, the production machines (steam boiler, grinding machine and washing through) use both electricity and diesel. These sources of energy for powering machines and equipment for production can also be a major source of fire outbreak in the factory. Only three fire extinguishers were seen at the factory by the researcher and this seems to be inadequate for the factory considering the energy sources, space and the number of employees in the factory. Although a precaution measure sign was provided at the main entrance of the factory floor, there were no exit signs in case of an emergency.

A dangerous practice observed was that, workers use their hands in pushing the herbs into the grinding machine. A slip or an unfortunate mistake can lead to amputation of fingers or hands. This agrees to Heinrich emphasis on unsafe acts as being responsible for 88% of preventable accidents and fatalities (HaSPA, 2012). Notwithstanding, security cameras were set in the factory as a form of monitoring of operations. Resting room for staff was provided. The next chapter concludes and summarises the results and findings of this study. Recommendations are also given.

#### CHAPTER 5

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## Introduction

In light of the fact that COA does not have a policy guiding their OHS issues, this study was done to find out the OHS issues in COA, if OHS is necessary and come up with some suggestion on policies that best fit COA. An interview schedule, questionnaires and observation check list were developed using requirements by the FOS 1970 Act 328 to gather information and analysed using Excel and SPSS software. The information included the OHS issues based on the work environment, employee training and insurance, and the work activity. Also, staff knowledge on the importance of OHS policies was sought for and staffs were asked to give some suggestions of items that can be added to the policy.

Census was used and staffs were categorized purposively due to the type of information needed per category. Seventy questionnaires were distributed and 81% was retrieved. The use of the mixed method was used for analysis. This chapter further elaborates the synopsis of the key findings based on the analysis and results, conclusions made and some recommendations to the Management of COA.

## **Summary of Key Findings**

The summary of findings below is outlined in line with the objective of the study. On the OHS issues in COA it was found out that, according to Management they know of occupational accidents and hazards in COA and involve themselves in OHS, nevertheless, some staff commented that nothing was done about them

being exposed to hazards and injuries experienced. Also, Management did agree to the fact that there are no policies on OHS in COA. Other Management did comment that there is a need for a total reform in COA.

Another issue of OHS in COA has to do with the office environment. Generally, the conditions of office environments are adequate as shown by an average percentage of 57.6% of the three categories of staff who answered the questionnaire. A well-equipped first aid and its availability for use during emergencies were not provided in all the Centers as over 80% of the staff indicated. Furthermore, there is not enough office space for staff and machines and equipment. Safety equipment are not provided. OHS issues on staff training and insurance revealed that, staff training and insurance is inadequate as 61.2% of the staff disagrees to their provision. The results also showed that, majority (72.8%) of staff are not insured against work related hazards and illnesses. On the average, over 54% of staffs lacks training on the use of safety equipment as well as preventing work-related hazards.

With regards to staff exposure to occupational hazards and injury experience, majority (61.8%) of staff had not been exposed to hazards or injuries while 38.2% had been exposed or experienced work injuries. Although majority is not affected, over 50% of the clinical staffs are exposed to ergonomic, mechanical and biological hazards. Findings on the work activities of the Center revealed that, work conditions and activities are enough. Nonetheless, all the conditions provided were strongly disagreed or disagreed by over 51% of the factory staff. Also, the

clinical staff (50%) found provision of appropriate facilities for performing activities deficient.

The conditions of the secretarial staff were sufficient and commendable. With regards to drivers OHS issues, the organisations response to driver's safety is commendable (84%). Nevertheless, 60% are not satisfied with the rate at which Management respond to repairs on vehicles. The drivers are not exposed to hazards generally (75%) but, 60% do drive for prolonged hours. Also, 91.7 % on the average do take personal precautions to avoid work related accidents.

The second objective was to find the knowledge of staff on need for OHS policies. The researcher found out that approximately 80% of staffs do acknowledge the need for OHS in the organisation. Staffs do need OHS policies because it saves the organisation from unforeseen costs, prevents unforeseen hazards and injuries, and increases the mental well-being of staff as well as physical well-being of staff. The last objective was to seek for staff suggestions on policies they would like to have. The researcher found out that, staff basically needed policies on their salaries and other incentives, insurance, provision of basic working facilities as well as safety equipment and measures, training and periodic open forums.

#### Conclusion

Based on the research findings, some conclusions have been drawn. Generally, COA has is doing well in some aspects of OHS. Notwithstanding, there were some issues facing COA. First of all, although management is of the view that they are involved in OHS issues in COA, there is more to be done by the

management as there are much more prevailing OHS issues at the workplace than they are aware of. Some staffs do see management as not organized due to the response and inattentive view they have about management. This will reduce the level of trust and staff reliance on management. This wouldn't be good for management as staff would be reluctant in following their leadership. Also, it seems management did not report the accident that left a permanent disability of a staff to the Factory Inspectorate as required by the FOS regulations.

Also, the factory which is the engine room of COA had most of their OHS issues deficient. Factory staffs do need safety equipment as they work, clothing for their job engagement and other safety measures. Not forgetting the provision of well-equipped first aid facilities in all the Centers and must be displayed at where every staff will have access to. First aid facilities are very important and crucial as anything can happen at the workplace and first aid can reduce the magnitude of the impact. As these safety equipment and measures are being provided, management need to train all staff on the use of these equipment so that staff can use them appropriately. All issues under the work environment should be visited by management and addressed them on Center basis. Also, based on the observations at the factory, there is more work to be done at the factory.

Furthermore, training in general is needed at COA. The training can cover training on the job engagement of staff, training of the use of safety equipment, training on preventing work related injuries, health promotional training and training on other general knowledge. Moreover, workers need to be insured as there are some hazards they are exposed to. With the work activities, ergonomics in the

COA should be looked at as well as the design and layout of operations. General comments and the suggestions of staff should also be taken into consideration. Also, staffs are aware of the need for OHS policies and these policies will not only save the staffs but the organisation as well.

## Recommendations

In line with the research findings and the suggestions made by staff, the researcher recommends that the organisation come up with a well-structured condition of service. This will spell out some regulations on some issues such as salary increment, incentives and Health care bonuses. If staffs are aware of what warrants an increase in salary and receiving of incentives and when these are effected, much agitation would not be experience and they will work with a free mind. The conditions of service will also explain the roles of each department therefore training can be done according to the needs of departments. Also, management must decide on when workers' appointments should be confirmed and done accordingly. This removes some psychological stress from the staff.

Policies on staff training can also be developed. The organisation can choose to have quarterly or semi-annually training for staff where resource persons are invited to take over the training session. In service training can also be done weekly, bi-weekly or monthly for an hour or two by each Center and the factory. This can keep the staff up to date with the organisations programs and some issues can be solved before it even starts. The training sessions can also improve staff knowledge and skills on their job engagements, knowledge on accident preventive measures as well as the use of safety equipment. Open forums or suggestion boxes

can be used to solicit staff grievances. Furthermore, staff should be insured against work related hazards. Insuring workers may be expensive but will save the organisation from huge and unforeseen costs.

In addition, COA can also do a total reform as suggested by some of the managerial staff. Ergonomics as well as the organisations layout design must be looked at and restructured especially at the factory. Management can also put in place some sanctions on staffs' refusal to adhere to safety measure put in place or utilize safety equipment provided for work. This will keep staffs from endangering themselves at the expense of the organisation. This will be in accordance with the Labour Act, 2003 (Act 651) Section 118 (3) which obligates the workers to utilize these safety equipment given them by their employer per the employer's guidelines. Section 118 (4) explains that, the employers would not be held responsible for injuries agonized by a worker who violates the obligations stipulated in sub section (3) of section 118 when the injury is caused solely by non-compliance by the worker.

Section 50 Sub Section 3 prohibits work to be done in any steam boilerfurnace of boiler-flue until it has been adequately cooled by proper ventilation or made safe for the worker. Policies to that effect can be developed and implemented. Therefore, management should provide enough space and ventilation to aid steam boiler cool down at a faster rate than it is now. In as much as management commit to OHS by developing policies, staff involvement in the policy formulation would be important. After policy formation, Management has the responsibility to explain to the understanding of staffs each item in the policy. In so doing any staff that

falters can meet the stipulated disciplinary actions and not blame the employer for not explaining the policies clearly to the staff. If OHS issues and policies would be beneficial and fruitful, it needs the commitment of both the employer and employees.

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## APPENDICES

APPENDIX A

## **QUESTIONNAIRE**

## EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICIES AT THE CENTER OF AWARENESS

**Target respondents**: To be completed by Managerial Staff of The Center of Awareness.

**Purpose**: Information gathered from this questionnaire will be used as part of empirical evidence or research into the importance for The Center of Awareness to have an Occupational Health and Safety policy.

**Confidentiality**: Kindly note that your responses are completely confidential and anonymous. The final outcome as well as report will not include reference to any individuals. The compiler of this questionnaire has the sole ownership of completed questionnaires and these questionnaires will be destroyed upon completion of this research.

## Part 1: Demographic profile

1. Gender		
a. Male		b. Female
2. What is your age group?		
a. 18-29		d. 50-59
b. 30-39		e. 60 & above
c. 40-49		
3. What is your highest quali	ification?	
a. Diploma		d. Doctoral Degree
b. Graduate Degree		
Post graduate Degree		e. other
	02	

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# Management involvement in occupational health and safety at The Center of Awareness

1. Does The Center of Awareness have an Occupational Health and Safety policy?

U YES		NO
-------	--	----

2. Does The Center of Awareness have adequate knowledge on the provisions of the Factories, Offices and Shops 1970 Act 328 and other Occupational Health and Safety related stipulations?



- 3. Is management committed to the Occupational Health and Safety issues at the Centre?
  - 🗖 YES 🛛 NO
- 4. Do Management find Occupational Health and Safety issues and policy necessary for the Centre?



- 5. Have there been complaints from staff on occupational hazards?
  - YES NO

If yes, what did management do about it?

.....

6. Have there been work related accidents known to management?

	YES		NO
--	-----	--	----

If yes kindly fill the table below

Nature Of Accident	Number Of Occurrences
Motor accident	
Factory accident	
Clinical accident	
Office related accidents	

- 7. With reference to 6 above, how many of the(se) accident(s) led to injuries
- 8. With reference to 6 above, how many of the(se) accident(s) led to permanent disabilities
- 9. With reference to 7 and 8 above, what did management do about these situations?

.....

10. Do Management embark of regular inspection of work environment and work processes?



11. Has the Factory, Shops and Offices Directorate ever inspected the Centre

YES		NO
-----	--	----

#### General comments if any

#### APPENDIX B

#### **QUESTIONNAIRE**

## EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICIES AT THE CENTER OF AWARENESS

**Target respondents**: To be completed by Senior and Junior Staff of The Center of Awareness Secretariat.

**Purpose**: Information gathered from this questionnaire will be used as part of empirical evidence or research into the importance for The Center of Awareness to have an Occupational Health and Safety policy.

**Confidentiality**: Kindly note that your responses are completely confidential and anonymous. The final outcome as well as report will not include reference to any individuals. The compiler of this questionnaire has the sole ownership of completed questionnaires and these questionnaires will be destroyed upon completion of this research.

#### Part 1: Demographic profile

1.	Gender a. Male	b. Female
2.	What is your age group?	
	a. 18-29	d. 50-59
	b. 30-39	e. 60 & above
	c. 40-49	
3.	What is your highest qualification?	
	a. Diploma	d. Doctoral Degree
	b. Graduate Degree	
	c. Post graduate Degree	e. other

# 1. WHAT ARE THE OCCUPATIONAL HEALTH AND SAFETY ISSUES IN THE CENTER OF AWARENESS?

A) Occupational Health and Safety issues with the office environment

	The office environment	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	The lighting system is adequate					
2.	The offices are spacious enough for staff					
3.	The offices are spacious enough for equipment and machinery					
4.	The offices are well ventilated					
5.	Safety equipment are provided					
6.	First aid box is provided and readily available					
7.	First aid box is well equipped for emergencies					
8.	There is adequate supply of clean drinking water					
9.	Adequate toilet facilities are provided					
10.	Offices are well cleaned					
11.	Toilet facilities are well cleaned					
12.	Adequate waste disposals are available					

### **General comment**

# **B)** Occupational Health and Safety issues with the staff

## i. Staff training and insurance

	The staff	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	Staff are well trained on the use of safety equipment					

2.	Staff are well trained for their job engagements			
3.	Staff are insured against work hazards and diseases			
4.	Staff are trained on preventing work related hazards			

### ii. Staff and exposure to hazards

1.	Staff has experienced an occupational injury. If yes, what was the nature of injury? What was done about it?
2.	Staff is exposed to occupational hazard. YES NO If yes, is the nature of hazard? What was done about it?

#### **General Comment**



## C) Occupational Health and Safety issues with the work activity

	The activity	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	Sitting facilities and work design are user friendly					
2.	Work operations, environment and processes are designed to reduce work hazard and risk.					

#### **General Comment**

# 2. WHAT IS THE NEED FOR OCCUPATIONAL HEALTH AND SAFETY POLICIES?

	Need	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	Occupational Health and					
	Safety saves the organisation					
	from most unforeseen costs					
2.	Occupational Health and					
	Safety prevents most					
	unforeseen hazards and					
	injuries					
3.	Occupational Health and					
	Safety increases the mental					
	wellbeing of staff					
4.	Occupational Health and					
	Safety improves the physical					
	wellbeing of staff					

# 3. ANY SUGGESTION ON POLICIES THAT CAN HELP ADDRESS OCCUPATIONAL HEALTH AND SAFETY ISSUES IN THE CENTER OF AWARENESS

APPENDIX C

#### **QUESTIONNAIRE**

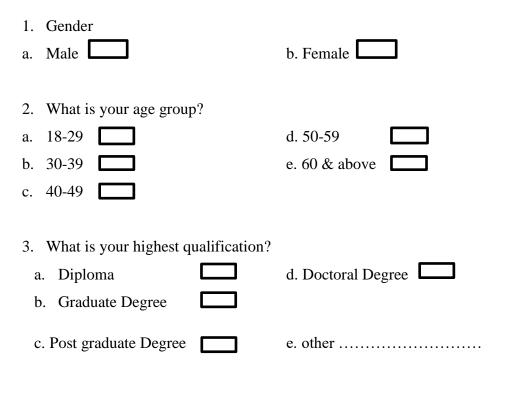
## EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICIES AT THE CENTER OF AWARENESS

**Target respondents**: To be completed by Clinical Staff of The Center of Awareness.

**Purpose**: Information gathered from this questionnaire will be used as part of empirical evidence or research into the importance for The Center of Awareness to have an Occupational Health and Safety policy.

**Confidentiality**: Kindly note that your responses are completely confidential and anonymous. The final outcome as well as report will not include reference to any individuals. The compiler of this questionnaire has the sole ownership of completed questionnaires and these questionnaires will be destroyed upon completion of this research.

#### Part 1: Demographic profile



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# 1. WHAT ARE THE OCCUPATIONAL HEALTH AND SAFETY ISSUES IN THE CENTER OF AWARENESS?

#### A) Occupational Health and Safety issues with the office space

	The office environment	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	The lighting system is adequate					
2.	The offices are spacious enough for staff					
3.	The offices are spacious enough for equipment and machinery					
4.	The offices are well ventilated					
5.	Safety equipment are provided					
6.	First aid box is provided and readily available					
7.	First aid box is well equipped for emergencies					
8.	There is adequate supply of clean drinking water					
9.	Adequate toilet facilities are provided					
10.	Offices are well cleaned					
11.	Toilet facilities are well cleaned					
12.	Adequate waste disposals are available					

### **General comment**

#### B. Occupational Health and Safety issues with the staff

## i. Staff training and insurance

	The staff	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	Staff are well trained on the use of safety equipment					

2.	Staff are well trained for their job engagements			
3.	Staff are trained on preventing work-related injuries and illnesses			
4.	Health promotion programs that contribute to productivity, health and wellbeing of staff are undertaken			
5	Staff are insured against work hazards and diseases			

## ii. Staff and exposure to hazards

## Kindly tick yes or no depending on the nature of hazard exposed to

	NATURE OF HAZARD	VEC	NO
	NATURE OF HAZARD	YES	NO
	EXPOSED TO STAFF		
1.	Biological – caused by viruses,		
	bacteria, parasites, fungus etc.		
2.	Mechanical- caused by slippery		
	floors, needles and other sharp		
	objects		
3.	Ergonomic- caused by lifting and		
	handling patients, work posture		
	and standing for long periods		
4.	Chemical-caused by usage of		
	detergents, reagents, anaesthetic		
	gases and drugs.		
5.	Psychological- caused by stress,		
	excessive workload, etc		

1. Have you experienced an occupational injury.	YES	🗆 NO
---	-----	------

If yes, what was the nature of injury? What was done about it?

.....

## **General Comment**

## iii. Occupational Health and Safety issues with the work activity

	The activity	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	The work operations, environment and process are designed to reduce work hazards and risk					
2.	Appropriate facilities as well as premises for performing activities are provided.					

#### **General Comment**

# 2. WHAT IS THE NEED FOR OCCUPATIONAL HEALTH AND SAFETY POLICIES?

	Need	Strongly	Agree	Neutral	Disagree	Strongly
		agree				disagree
1.	Occupational Health and Safety					
	saves the organisation from					
	most unforeseen costs					
2.	Occupational Health and Safety					
	prevents most unforeseen					
	hazards and injuries					

3.	Occupational Health and Safety increases the mental wellbeing of staff			
4.	Occupational Health and Safety improves the physical wellbeing of staff			

## 3. ANY SUGGESTION ON POLICIES THAT CAN HELP ADDRESS OCCUPATIONAL HEALTH AND SAFETY ISSUES IN THE CENTER OF AWARENESS

APPENDIX D

#### **QUESTIONNAIRE**

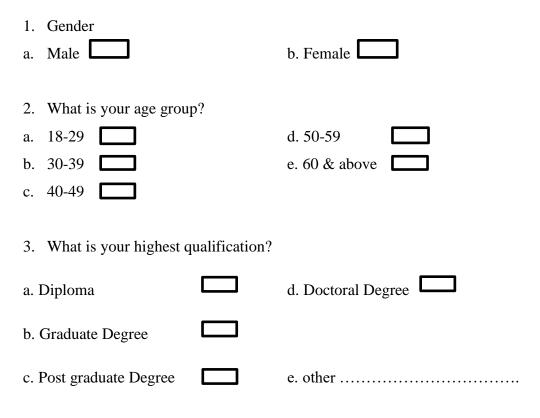
# EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICIES AT THE CENTER OF AWARENESS

**Target respondents**: To be completed by Junior Staff of The Center of Awareness Factory.

**Purpose**: Information gathered from this questionnaire will be used as part of empirical evidence or research into the importance for The Center of Awareness to have an Occupational Health and Safety policy.

**Confidentiality**: Kindly note that your responses are completely confidential and anonymous. The final outcome as well as report will not include reference to any individuals. The compiler of this questionnaire has the sole ownership of completed questionnaires and these questionnaires will be destroyed upon completion of this research.

#### Part 1: Demographic profile



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## 1 WHAT ARE THE OCCUPATIONAL HEALTH AND SAFETY ISSUES IN THE CENTER OF AWARENESS?

### A. Occupational Health and Safety issues with the work environment

	The office environment	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	The lighting system is adequate					
2.	The offices are spacious enough for staff					
3.	The offices are spacious enough for equipment and machinery					
4.	The offices are well ventilated					
5.	Protective clothing and appliances are provided					
6.	Safety measure to reduce noise and vibration are provided					
7.	First aid box is provided and readily available					
8.	First aid box is well equipped for emergencies					
9.	There is adequate supply of clean drinking water					
10.	Adequate toilet facilities are provided					
11.	Offices are well cleaned					
12.	Toilet facilities are well cleaned					
13.	Adequate waste disposals are available					

## B. Occupational Health and Safety issues with the staff

### i. Staff training and insurance

Ν	The staff	Strongly	Agree	Neutral	Disagree	Strongly
0		agree				disagree
1	Staff are well trained on the					
	use of safety equipment					
2	Staff are well trained for their					
	job engagements					
3	Staff are trained on preventing					
	work-related injuries and					
	illnesses					

4	Health promotion programs that contribute to productivity, health and wellbeing of staff are undertaken			
5	Staff are insured against work hazards and diseases			

# ii. Staff and exposure to hazards

	The activity	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	The work operations, environment and process are designed to reduce work hazards and risk					
2.	Appropriate facilities as well as premises for performing activities are provided.					
3.	Staff are not permitted to work on steam boilers and barrels when hot					

# iii. Occupational Health and Safety issues with the work activity

# **General Comment**

# 2. WHAT IS THE NEED FOR OCCUPATIONAL HEALTH AND SAFETY POLICIES?

	Need	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	Occupational Health and Safety saves the organisation from most unforeseen costs					
2.	Occupational Health and Safety prevents most unforeseen hazards and injuries					
3.	Occupational Health and Safety increases the mental wellbeing of staff					
4.	Occupational Health and Safety improves the physical wellbeing of staff					

3. ANY SUGGESTION ON POLICIES THAT CAN HELP ADDRESS OCCUPATIONAL HEALTH AND SAFETY ISSUES IN THE CENTER OF AWARENESS

#### APPENDIX E

#### **INTERVIEW SCHEDULE**

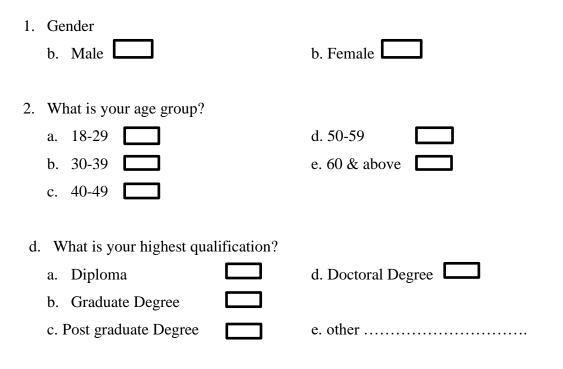
# EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICIES AT THE CENTER OF AWARENESS

**Target respondents**: To be completed by drivers employed by The Center of Awareness.

**Purpose**: Information gathered from this questionnaire will be used as part of empirical evidence or research into the importance for The Center of Awareness to have an Occupational Health and Safety policy.

**Confidentiality**: Kindly note that your responses are completely confidential and anonymous. The final outcome as well as report will not include reference to any individuals. The compiler of this questionnaire has the sole ownership of completed questionnaires and these questionnaires will be destroyed upon completion of this research.

#### Part 1: Demographic profile



## Kindly tick the box beside your chosen answer

## A. Institutional response to driver's safety

1. Regular maintenance on vehicles is done	<b>YES</b>	🗖 NO
2. Management response to repairs on vehicles is fast	YES	NO
3. Precautions are put in place to avoid or reduce accidents	YES	NO
4. Vehicles are insured on time	U YES	NO
5. Driver is insured against accidents	<b>YES</b>	<b>NO</b>
B. Exposure to occupational hazard		
1. Drivers are examined before employed	YES	<b>NO</b>
2. Driver is not stressed mostly	YES	<b>NO</b>
3. Driver is not required to drive when tired	YES	NO
4. Driver does not drive for prolonged hours	YES	NO
C. Driver's response to keeping themselves safe		
1. Driver wears slippers when driving	<b>YES</b>	NO
2. Driver wear seat belts when driving	YES	NO
3. Driver has been involved in motor accident while on dut	y <b>T</b> YES	NO
If C3 is yes, then, answer question 4, 5 and 6		
4. Did the accident cause an injury?	<b>YES</b>	NO
5. Did accident cause a permanent disability?	<b>YES</b>	NO

6. What was done about its impact on driver's health and safety by management?

.....

**General Comments if any** 

APPENDIX F

#### **OBSERVATION GUIDE**

# EXPLORATORY STUDY ON THE IMPORTANCE OF OCCUPATIONAL HEALTH AND SAFETY POLICIES AT THE CENTER OF AWARENESS-

## **FACTORY**

1.	Cleanlines
2.	Overcrowding
3.	Ventilation
4.	Washing facilities
5.	Lighting
6.	Drainage of floors
7.	Sanitary conveniences
8.	Drinking water
9.	Accommodation for clothing
10.	Sitting facilities
11.	Removal of Dust or Fumes
12.	Protective Clothing and Appliances
13.	Noise and Vibrations
14.	Prohibition of lifting Excessive Weights
15.	First Aid
16.	Health and Welfare Regulations
17.	Safety Provisions in Case of Fire
18.	Safe Means of Access and Safe Place of Employment

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19. Training and Supervision
20. Cleaning of Machinery
21. Fencing of Dangerous Machinery
22. Explosive or Inflammable Substances
23. Steam Boilers, Receivers and Containers, and Air Receivers
24. Dangerous Conditions and Practices