

Occupational Health and Safety: An Assessment of the Situation at University of Education, Winneba (UEW)

Mr. Augustus K. Brew*¹, Mrs. Dorothy Oppong Frimpong²

¹Division of Human Resource, University of Education, Winneba, Ghana

²Office for Institutional Advancement, University of Education, Winneba, Ghana

***Corresponding Author:**

Mr. Augustus K. Brew

Email: kwawbrew@yahoo.com

Abstract: The writers took a look at occupational health and safety at University of Education, Winneba (UEW). The Wikipedia's categorisation of hazards at the workplace was adopted in the discussions. Common occupational hazards and associated risks in the work environment in UEW as well as the categories of staff who are prone to the identified hazards were discussed. It was observed that the University had instituted measures to safeguard the health and safety of its employees. The health and safety measures the University had instituted to manage occupational health were also evaluated. But how adequate and/or appropriate were those measures? Did those measures compare favourably with accepted standards like the World Health Organisation's (WHO) objectives for occupational health and safety for example? In the opinion of the writers, the University was mindful of the wellbeing of its staff but a lot more remained to be done, if the working environment of the University was to be judged as safe and meeting enviable international standards.

Keywords: Occupational Health, Safety, Hazards, Risks, Workplace

INTRODUCTION

Work provides many economic and other benefits. However, a wide array of workplace hazards also present risks to the health and safety of people at work. These include but not limited to, chemicals, biological agents, physical factors, adverse ergonomic conditions, allergens, a complex network of safety risks, and a broad range of psychosocial risk factors.

Workplace hazards arise as a result of the activities performed, equipment used and the physical and environmental conditions of the workplace. Hazards at workplaces also differ depending on the type of industry an organisation belongs. Although some hazards are less likely to happen in some work spaces than others, it is important to assess which hazards are most damaging to one's business and employees. Some may disrupt the continuity more than others, some may pose more serious threats to employee welfare, and still others will result in the most time lost or be the most costly. What all these setbacks have in common is that thorough planning can forestall many of them [1]. The factors that create hazards can best be controlled by managers and employees at the workplace. Managers and employees must be equipped with adequate knowledge, skills and an understanding of the application of simple hazard management techniques in relation to their own work environment[2].

Managing hazard is a fundamental element of an effective workplace occupational health and safety management. An essential step in the management of occupational health and safety is ensuring that all hazards are identified, the risks assessed, and effective control measures are developed and implemented. Controlling hazard at the source, according to the Workplace Health and Safety Handbook [3], is much more effective in the prevention of injury, illness or disease. A business' human resources department can do a lot to reduce workplace accidents simply by educating employees; making sure employees are "current" on what the local and seasonal threats are; and passing out information monthly via e-mail, says Berman, cited in Spiro[1].

Different countries take different approaches to ensure occupational health and safety (OHS); areas of need and focus also vary between countries and regions. In Ghana, an Act (Act 651) [4] to amend and consolidate the laws relating to labour, employers, trade unions and industrial relations; to establish the National Labour Commission and to provide for matters related to these was enacted by Parliament on October 8, 2003. Part XV of the Act deals with Occupational Health, Safety and Environment with Section 118 concentrating on general health and safety conditions[5].

In the manufacturing and extractive industries, a high premium is placed on occupational health and safety, perhaps because of the high risks in these environments. However, in education and other service delivery establishments where the risk associated with work is minimal, not much emphasis is placed on occupational health and safety though there are health and occupational hazards in these places too. The tendency is that issues of occupational health and safety are taken for granted at workplaces where the risks and hazards associated with work and the environment are minimal.

According to the International Labour Organisation (ILO) and the World Health Organisation, health and safety at work is aimed at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations. It is also the prevention among workers of leaving work due to health problems caused by their working conditions. Both ILO and WHO say again that it is the protection of workers in their employment from risks resulting from factors adverse to health; it is the placing and maintenance of the worker in an occupational environment adapted to his or her physiological and psychological capabilities[6]. According to Mensah-Pah[6], an unscientific survey conducted by him revealed that in Ghana occupational health and safety problems account for more loss of production time than industrial disputes. This is largely because whereas elsewhere in the developed countries like Australia, employers are under pressure from governments, investors and professional groups and unions to accept increased responsibility for employees' health and safety but same cannot be said of Ghana.

A host of workplace hazards may not be prevalent in the University of Education, Winneba (UEW) environment or setting. However, it is still important to identify which occupational hazards are likely to occur or exist at UEW so that measures could be adopted to control or manage them, should they occur. These considerations informed the writing of this paper.

OBJECTIVES OF THE PAPER

The paper seeks to:

1. Identify health and safety hazards associated with work at University of Education, Winneba.
2. Determine if the risks associated with hazards at UEW have been adequately or appropriately assessed.
3. Examine if UEW has adequate and appropriate control measures in place.
4. Make appropriate recommendations to improve the health and safety of staff of the University

WHAT IS OCCUPATIONAL HEALTH AND SAFETY?

The World Health Organisation (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"[8]. Occupational health deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards. It is considered a multidisciplinary field of healthcare concerned with enabling an individual to undertake their occupation, in the way that causes least harm to their health.

According to the WHO, occupational health should aim at:

- The promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations;
- The protection of workers in their employment from risks resulting from factors adverse to health; and
- The placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities.

HEALTH AND SAFETY HAZARDS

A hazard is something that has the potential to harm the health, safety and welfare of people at work [3]. Examples of hazards that may be found in the workplace include noise, hazardous substances, unguarded power-driven machinery, working at heights and stressful working conditions like the threat of violence.

Types of Hazards in the Workplace

The Wikipedia categorises hazards at the workplace into three, namely: physical and mechanical hazards; biological and chemical hazards; and psychosocial hazards. On the other hand, Safe Jobs Now categorises workplace hazards into two: health hazards; and safety hazards. In this paper, the three categorisations by the Wikipedia have been used[7].

Physical and Mechanical Hazards

The most common physical and mechanical hazards at the workplace are as follows:

Slips, Trips and Falls: Bad housekeeping and poor drainage can make floors and other walking surfaces wet and slippery. Electrical wires along the floor can pose a tripping hazard. One can also fall if not provided with fall protection equipment, guardrails, and safe ladders.

Fire and Explosions: Improper labelling, handling or storage of certain materials can pose a risk of fire or explosion. Every workplace should therefore have an evacuation plan for getting people out of a building in

case of fire and an alarm or alert system to quickly inform employees of an emergency. Workers should also be trained on what to do in case of an emergency.

Transportation and Vehicle-Related Accidents: Operators of vehicles and equipment can be injured or cause injury to pedestrians if equipment is unsafe or if inadequate training has been provided. The transportation sector bears many risks for the health of drivers, for example from vibration, long periods of sitting, work stress and exhaustion. More drivers die in accidents due to security defects in vehicles.

Caught in or Struck by Moving Machinery/Objects: Machinery can cause injuries in different ways; one can get parts of body caught in or struck by exposed moving parts if machines are not properly guarded, or not locked out when being repaired. One can also be struck by flying objects from machines without protective guards.

Ergonomics or Repetitive Strain Injuries: Ergonomic problems (musculoskeletal disorders) and overexertion affect people in manufacturing, service and office settings. These injuries give rise to chronic conditions and result in higher rates of lost of work time. Brown cited in Spiro [1] advises that employees sit at a height that allows their legs to reach the ground. Also, there should be lumbar support that provides extra lower back support. She noted that ergonomic injuries don't only take place when there is older office equipment with fewer adjustable parts; they can also happen simply from sitting at your desk for too long. Spiro [1] refers to these kinds of hazards as non-fatal injuries. Lifting heavy objects such as boxes of files can also cause strain injuries. Good lifting techniques such as pushing, pulling or sliding should be used rather than lifting, lowering or carrying.

Confined Spaces: A confined space is an area with small openings for a worker to enter and exit and is not designed for regular work. Examples of confined spaces include manholes, sewers, storage tanks, pipelines and silos. Confined spaces can also pose physical hazards; they can be very hot or cold, very loud, or slippery and wet.

Violence: workplace violence includes physical assault as well as near misses, verbal abuse and sexual harassment.

Other forms of physical and mechanical hazards include noise, excessive heat, poor lighting, radiation and vibrating machinery.

Biological and Chemical Hazards

Biological and chemical hazards occur through bacteria, virus or fungi infections. It can also be through heavy metals, solvents, petroleum, fumes,

explosion, fire, deflagration and conflagration. Biological hazards include tuberculosis, HIV, hepatitis, etc. These hazards enter one's body through breathing through the lungs (inhalation), swallowing through the mouth (ingestion), skin or eye (absorption) or cuts (injection). The effect on the individual could be acute (effect showing up right away), chronic (problems showing up after a long period), local (only exposed part of the body being affected) or systemic (an agent entering the body and affecting other parts of the body). Sensitisation can also develop over time when one becomes allergic or sensitive to some agents he/she works with. For instance, a health care worker may develop a serious allergic reaction to latex used in gloves.

Psychosocial Hazards

Psychosocial hazards are related to the way work is designed, organised and managed, as well as the economic and social contexts of work and are associated with psychiatric, psychological and/or physical injury or illness; with work organisation including hours of work, work loads and the nature of the tasks. Linked to psychosocial risks are issues such as occupational stress and workplace violence which are recognized internationally as major challenges to occupational health and safety. According to a survey by the European Agency for Safety and Health at Work, the most important emerging psychosocial risks are precarious work contracts; increased worker vulnerability due to globalization; new forms of employment contracts; feeling of job insecurity; aging workforce; long working hours; work intensification; high emotional demands; poor work-life balance.

In considering the types of hazards in the workplace, hazardous physical/chemical exposures in the service sector seem to be lower than the other sectors. On the other hand, potentially harmful work organisation characteristics and psychosocial workplace exposures were relatively common in this sector [5].

RESPONSIBILITIES OF EMPLOYERS AND EMPLOYEES IN ENSURING HEALTH AND SAFETY OF WORKERS

The factors that create hazards can best be controlled by managers and employees at the workplace. Therefore managers and employees must be equipped with adequate knowledge, skills and an understanding of the application of simple hazard management techniques in relation to their own work environment. In accordance with Section 118 of the Ghana Labour Act 651, 2003[4], the employer and employee have the following obligations in ensuring occupational health and safety:

1. It is the duty of an employer to ensure that every worker employed by him or her works under satisfactory, safe and healthy conditions.

-
2. Without limiting the scope of subsection (1), an employer shall
 - i. provide and maintain at the workplace, plant and system of work that are safe and without risk to health;
 - ii. ensure the safety and absence of risks to health in connection with use, handling, storage and transportation of articles and substances;
 - iii. provide the necessary information, instructions, training and supervision having regard to the age, literacy level and other circumstances of the worker to ensure, so far as is reasonably practicable, the health and safety at work of those other workers engaged on a particular work;
 - iv. take steps to prevent contamination of the workplaces by, and protect the workers from, toxic gases, noxious substances, vapours, dust, fumes, mists and other substances or materials likely to cause risk to safety or health;
 - v. supply and maintain at no cost to the worker, adequate safety appliances, suitable fire-fighting equipment, personal protective equipment, and instruct the workers in the use of the appliances or equipment;
 - vi. provide separate, sufficient and suitable toilet and washing facilities and adequate facilities for the storage, changing, drying and cleansing from contamination of clothing for male and female workers;
 - vii. provide adequate supply of clean drinking water at the work-place; and
 - viii. prevent accidents and injury to health arising out of or connected with, or occurring in the course of, work by minimizing the causes of hazards inherent in the working environment.
 3. It is the obligation of every worker to use the safety appliances, fire-fighting equipment and personal protective equipment provided by the employer in compliance with the employer's instructions.
 4. An employer shall not be liable for injury suffered by a worker who contravenes subsection (3) where the injury is caused solely by non-compliance by the worker.
 5. An employer who, without reasonable excuse, fails to discharge any of the obligations under subsection (1) or (2) commits an offence and is liable on summary conviction to a fine not exceeding 1000 penalty units or to imprisonment for a term not exceeding three (3) years or to both.

WORKPLACE HAZARD MANAGEMENT

According to the Workplace Health and Safety Handbook [3] an essential step in the management of OHS is ensuring that all hazards are identified, the risks assessed, and effective control measures are developed and implemented.

Hazard Identification

To identify hazards to health, safety and welfare, a number of quite simple methods outlined by the Valuation Exchange [2] and the Workplace Health and Safety Handbook [3] can be used. These include the following:

- Referring to records of injuries and incidents (including near misses) that have occurred in the workplace or in other similar workplaces.
- Conduct walk-through inspections of the workplace using a formal checklist to spot checks to identify potential hazards.
- Consult with employees to find out what problems they have in their jobs.
- Observe work areas, work tasks, work processes or work methods.
- Reviewing information supplied by the HR Manager or General Manager, Operations.

Risk Assessment

When a workplace hazard is identified there is a need to assess its risk of causing injury or damage. Risk assessment means the process of evaluating the probability and consequences of injury, illness or disease arising from exposure to an identified hazard or hazards. Assessing the risk associated with the hazard will assist in determining its:

- Probability or likelihood of causing injury or damage
- Exposure levels of employee(s); that is the number of employees exposed, time exposed, frequency of exposure
- Consequence(s) or severity of outcome

The Valuation Exchange [2] has developed a table for assessing risks associated with identified hazards. The table is used to determine an action priority for the hazard that has been identified. The allocated number determines the priority and therefore the required level of urgency to take action. According to the Valuation Exchange [2] the hazard assessment tool should be used in conjunction with:

- The outcome of a workplace inspection and or audit;
- An Accident/incident investigation report; or
- Any general observations by employees

Hazard Assessment Tool

| Severity of the Outcome | → | Result in a disability, ill health or a fatal accident | Result in time off from work due to injury | Result in the individual requiring First Aid |
|-------------------------------------|--------------------------------------|--|--|--|
| How Probable is an occurrence? ↓ | Very Likely – could happen regularly | 1 | 2 | 3 |
| | Likely – could happen occasionally | 2 | 3 | 4 |
| | Unlikely – rarely | 3 | 4 | 5 |
| | Very Unlikely | 4 | 5 | 6 |

1) } signifies that the hazard should be dealt with urgently
2) }
3) }
4) } signifies that the hazard does not require immediate attention
5) }

Source: Valuation Exchange [2].

When a hazard has been identified, 2 main questions need to be asked:

- How dangerous is the hazard (Severity of the outcome)?
- How likely is it to cause injury, harm or damage (How probable is an occurrence)?

Note: The answers to these two questions are identified on the table and the number allocated at where they intersect on the table is used to determine action to be taken.

Risk Control

The rated value of a risk (high, medium or low) determines the most suitable and practicable method of risk control. The most suitable method of risk control must be selected in relation to the work environment following the hierarchy of control process. The risk control measure should aim at eliminating or minimising the risk. There are many ways to control risks to health, safety or welfare in the workplace. As far as possible, a hazard should be controlled at its source rather than trying to make the employee 'work safely' in a dangerous environment or having the employee wear protective clothing and equipment.

Table: The Hierarchy of Control Measures

| | |
|---|---|
| 1. ELIMINATE THE HAZARD | E.g. remove noisy equipment, purchase pre-cut items. |
| If this is not practicable, then | ▽ |
| 2. SUBSTITUTE THE HAZARD WITH SOMETHING OF A LESSER RISK | E.g. use smaller packages, use a less toxic chemical, electric forklift in place of petrol-driven forklift, vacuum rather than sweep. |
| If this is not practicable, then | ▽ |
| 3. ISOLATE THE HAZARD | E.g. place barriers around a spill until cleaned up, locate photocopier in separate, well-ventilated room. |
| If this is not practicable, then | ▽ |
| 4. USE ENGINEERING CONTROLS | E.g. provide a trolley to move heavy loads, place guards on moving parts of machinery. |
| If this is not practicable, then | ▽ |
| 5. USE ADMINISTRATIVE CONTROLS | E.g. introduce job rotation, shorter task shifts, ensure equipment is maintained regularly, safe work procedures, instruction and training. |
| If this is not practicable, then | ▽ |
| 6. USE PERSONAL PROTECTIVE CLOTHING OR EQUIPMENT | E.g. provide hearing and eye protection, hard hats, gloves, masks. |
| Until you have a better method of control. | |

Source: Workplace Health and Safety Handbook [3].

Control measures from the top of the list give better results. Measures from the bottom of the list are more difficult to maintain and usually less effective. They should therefore be regarded as interim measures until preferred ones can be implemented. Therefore, action needs to be taken to control risks in the order listed in the ‘hierarchy of controls’ [3].

As technology, resources, social expectation or regulatory requirements change, hazard analysis focuses controls more closely toward the source of the hazard. Thus, hazard control is a dynamic programme of prevention.

MANAGING HEALTH AND SAFETY IN THE WORKPLACE

To avoid overlooking important health and safety issues, employers need to adopt a systematic approach to managing health and safety. This can be done by establishing a programme in which health and safety is an integral part of management – from top level managers to supervisors. To achieve this, the following have been recommended in the Workplace Health and Safety Handbook [3].

- Top level management must be involved and committed. Managers need to understand their responsibilities under health and safety legislations and be aware of the hazards specific to their organisation. Management must be committed to and be held accountable for providing a healthy and safe workplace.
- Supervisors should be assigned responsibilities and authority for ensuring the health and safety of employees under their supervision. The responsibility for the health and safety of employees under their supervision should be promoted as an integral part of a supervisor’s job.
- Supervisors must be given the needed authority to take action to protect health and safety. Managers will need to ensure supervisors are accountable.
- Ensure that health and safety policies and procedures are prepared. A policy should detail the arrangements for protecting employees’ health and safety and outline the responsibilities of management and employees. It must be supported by written procedures so that everyone in the organisation is aware of their responsibilities. Procedures need to be in plain English/language, easy to follow and all employees should understand them. Policies and procedures must be reviewed and updated to reflect any changes in legislation, plant and equipment, substances used in the workplace, systems of work or the work environment.
- Effective mechanisms for employee consultation should be established. Consultation between employers, employees and their elected representatives on all aspects of health and safety in

the workplace such as identifying, assessing and controlling hazards, injury and incident investigation, and the development of health and safety policies and procedures, is essential. Consultation encourages employees to participate, contribute ideas and assist with solving problems.

- Arrangements should be placed for the identification of hazards, and the assessment and control of risks to health and safety in the workplace. Regular workplace inspections must be conducted to identify problem areas and hazards. Injury, incident and disease records need to be examined and employees consulted to identify problems.
- Provide a safe system of work. A safe system of work is the total set of methods adopted for carrying out the operations required in a particular workplace. They cover all aspects of the employment situation including the organisation of work processes, the methods of using machinery, plant and equipment, the methods of hiring labour, job training, instruction and supervision about associated hazards and their management, and what to do when things go wrong.
- Training should be provided to enable management and employees to carry out their responsibilities. Managers, supervisors and employees need information and training to ensure that they are aware of their responsibilities and understand the arrangements in place to protect occupational health and safety.
- Records should be kept of actions taken to manage health and safety in the workplace. The health and safety legislation require that some records are kept. In general, it is good management to be able to show what action has been taken to protect health and safety.

CONSIDERATION OF THE OBJECTIVES OF THE PAPER

Identifying Health and Safety Hazards at University of Education, Winneba

There are various fields of work at the University of Education, Winneba with different associated hazards though there are some common hazards. The work undertaken in the University includes teaching, administration, conservancy and sanitation, driving, maintenance and health services and others. But which of the documented hazards at the workplace are prevalent at UEW?

From observation, the writers found and concluded that the most common physical and mechanical hazards associated with work at UEW are:

Slips, Trips and Falls

Significant portions of the working space within the University have very polished surfaces made

of tiles or terrazzo. Coupled with bad housekeeping, especially at the end rooms, and the absence of fall protection equipment, these floors and other walking surfaces could get wet and slippery. The tendency to slip and fall on such surfaces is very high and pose great risk to the health and safety of all staff. Ironically, there are no caution signals or messages to inform, remind and caution staff of the eminent dangers.

Among the University's staff are gardeners, electricians, carpenters and others whose work entails climbing and who stand the chance of falling down in the line of duty. The other thing which puts the health and safety of administrative staff in danger is the many electrical, telephone and internet cables which criss-cross the office floors. The danger here is that staff could be trapped to fall or be electrocuted if they came into contact with any exposed cables.

Our observation, however, revealed that floors in the offices are as much as possible, kept dry to avoid slips and falls. However, the many electrical cables which criss-cross the office floors can pose a tripping hazard to staff. The danger here again is that staff could be trapped to fall. Polished tiles are used in some buildings with no caution sign to users in the buildings. Staff and visitors can easily slip and fall on these tiles if care is not taken.

Fire and Explosions

Some precautions against fires have been taken in the University either to prevent fire outbreaks or to manage them. Not too long ago there was a circular cautioning staff against fires and directing that electrical appliances should be switched off after work, during weekends and public holidays. Fire alarms and fire extinguishers have been installed in many facilities in the University. The fire extinguishers are also refilled periodically.

However, fires and explosions can still be experienced at the laboratories, lecture halls, the Food Production Unit and other offices of UEW. Apart from overloaded sockets and power extension boards, new pieces of equipment and devices are added to the old stock every now and then. Invariably, there may not have been corresponding increase in the (power) voltage to the laboratories, lecture halls and offices. Faults and/or explosions of gas cylinders at the food production unit can also spark fires and endanger lives.

Administrative staff, technicians and even lecturers of UEW are also prone to electrical shocks and fire explosions from inferior or overloaded power extension boards and sockets. Hundreds of power extension boards are used in nearly all offices. However, the University stores do not supply any power extension boards. The question is where have the hundreds of extension boards come from or who

supplied them? It is obvious that users acquired these equipment on their own. In such a situation, standards could have been compromised. The various power points are often overloaded too thereby increasing the risk of fire explosions.

Improper labelling, handling or storage of certain materials as well as chemicals which have overstayed at the laboratories and stores can explode or spark fires and threaten the health and safety of laboratory technicians and store keepers.

A safe and healthy workplace should have an evacuation plan for getting people out of a building in case of fire and an alarm or alert system to quickly inform employees of an emergency. Workers should also be trained on what to do in case of an emergency. Fire alarms have been installed in some of the offices and lecture halls of UEW but there are other structures without these alarms. In the past, there have been some education on how to handle fires at the workplace but this should be part of the routine rather than a onetime activity. A number of offices and lecture halls consist of more than one storey. However, one cannot find an evacuation plan within these buildings; neither can one recount his or her lessons from any training in what to do in case of an emergency. This state of affairs no doubt puts the health and safety of nearly all staff of the University in danger.

Confined Spaces

A confined space is an area with small openings for a worker to enter and exit and is not designed for regular work. Examples of confined spaces include manholes, sewers, storage tanks, pipelines and silos. Confined spaces can also pose physical hazards; they can be very hot. Carpenters, plumbers and electricians at the Works and Physical Development Directorate as well as the Estate Section are staff of the University whose health and safety could be jeopardised from working in confined spaces.

Related to confined spaces are small office spaces which make some staff prone to injuries in their offices and so adversely affects their occupational health and safety. The dangers associated with operating from small offices are that staff could knock themselves against the furniture and other pieces of equipment in the office. It is also not easy to move about in such offices and so in the event of any danger or emergency like fire explosion, occupants of such offices could be trapped or be hurt in an attempt to escape from the danger.

Transportation and Vehicle-Related Accidents

Transportation and Vehicle-Related Accidents which could affect staff of UEW are long periods of sitting, work stress and exhaustion. The University's record of motor traffic accidents and its attendant deaths

is very good. The University also has a good maintenance and servicing culture in respect of its vehicles. Over used and aged vehicles are also disposed off in good time. But a Multi Campus University with Distance Education Centres all over the country cannot claim that its drivers cannot suffer from long periods of sitting, work stress and exhaustion. This is why measures should be instituted to safeguard the health and safety of drivers of the University and their passengers as well as other road users.

Ergonomics or Repetitive Strain Injuries

Ergonomic problems (musculoskeletal disorders) and overexertion affect people in manufacturing, service and office settings. The University is generally not a manufacturing institution. But as a service institution with a large number of Administrative Staff, it cannot be said that its staff do not suffer from ergonomic problems. These injuries give rise to chronic conditions and result in higher rates of lost of work time. Brown (cited in Spiro, May 2010) advises that there should be lumbar support that provides extra lower back support. She noted that ergonomic injuries don't only take place when there is older office equipment with fewer adjustable parts; they can also happen simply from sitting at your desk for too long. Here even drivers of the University could suffer from these conditions.

The other thing which could compromise the health and safety of administrative staff is the kind of furniture, especially chairs, in use. The design and materials used for the chairs in particular is a source of concern. The soft surface seats in particular could have such adverse effect on the health of staff during their working life and even beyond.

Estate and Stores staff are prone to ergonomic problems; lifting heavy objects such as furniture, boxes of files and other supplies can also cause strain injuries and adversely affect the health of Estate and Stores staff.

Violence

Workplace violence includes physical assault as well as near misses, verbal abuse and sexual harassment. There have not been many cases of violence in the University because such attitudes are not tolerated and the few cases are met with severe sanctions. This notwithstanding, staff in supervisory positions and those whose work entails enforcing sanctions and ensuring discipline stand the risk of being physically assaulted or verbally abused.

Biological and Chemical Hazards

Biological and chemical hazards occur through bacteria, virus or fungi infections. It can also be through heavy metals, solvents, petroleum, fumes, explosions, fire, deflagration and conflagration. There

are no records of any University staff suffering from any condition emanating from biological or chemical related hazard yet. However, the University has staff whose work entails dealing with chemical agents and so the health and safety of these staff could be jeopardised as a result of biological and chemical hazards.

In the University, staff working at the University Clinic, stores, laboratories, offices, transport yard, and conservancy labourers are at risk. Laboratory Technicians and Conservancy Labourers can inhale hazardous substances contained in chemicals into their system if the chemicals are not well handled. Absorption of chemicals through the skin or eye can also cause these staff to suffer from skin diseases. Bacteria, virus or fungi infections can be high at these places of work. Administrative staff are also at risk of inhaling hazardous substances from printers and photocopiers. These machines are positioned so close to the staff such that staff inhale the fumes coming out of the machines. The effect on the individual could be acute, chronic, local or systemic. It is therefore important for the University and the category of staff mentioned above to be mindful of the dangers associated with their work and guard themselves accordingly. Designated rooms should also be created for printers and photocopiers to prevent staff from inhaling fumes coming out of these machines.

Psychosocial Hazards

Psychosocial hazards are related to the way work is designed, organised and managed, as well as the economic and social contexts of work and are associated with psychiatric, psychological and/or physical injury or illness. Work organisation includes hours of work, work loads and the nature of the tasks. Linked to psychosocial risks are issues such as occupational stress and workplace violence. Academic staff in the University are more at risk of this hazard. The work of the academic staff is designed such that one goes on sabbatical leave after serving for a minimum of six years continuous. Hitherto, vacation periods tend to bring some relieve or rest to them since there was little to be done. However, at present, vacation periods are spent in teaching sandwich programmes and so academic staff now have little or no rest during inter-semester breaks. This can set in occupational stress and have a long term effect on the lives of academic staff. Added to this is the high volume of work done by some academic staff due to increase in student enrolment. These can result in poor work-life balance as the demands of the work will not allow them to have time for their families and their own personal lives. The University should consider restructuring the work of academic staff to enable them take some rest. This, we believe, will produce a healthy workforce who will be able to work as required and cut down staff hours spent at the hospital as well as the bills associated with such visits at the hospital.

Have Risks and Hazards associated with Work at UEW been Adequately and/or Appropriately Assessed?

The other objective of this paper was to determine if risks associated with hazards and the working environment at UEW have been adequately and/or appropriately assessed. This is because when a workplace hazard has been identified, there is the need to assess its risk of causing injury or damage. Risk assessment entails evaluating the probability and consequences of injury, illness or disease arising from exposure to identified hazard(s).

The Valuation Exchange [2] has developed a table *or tool* for assessing risk associated with identified hazards.

The question(s) is/are:

- Is there a risk assessment tool in UEW?
- Has there been any workplace inspection and/or audit in UEW and what was the outcome?
- Is there an accident/incident investigation report(s) and how did this/these report(s) contribute to ensuring OHS in UEW?
- Have the staff of the University made any general observations in respect of OHS and what came out of those observations in relation to managing OHS?

The writers have no idea if UEW has a risk assessment tool neither are they aware that there has been any workplace inspection and/or audit in relation to OHS in the University. There may have been some inspections or audits but perhaps on a few facilities and installations and on such a small scale that it/they had very insignificant impact or effect on the risks in the University as a whole. The University may have investigated the few and isolated accidents/incidents which have occurred and reports made on them accordingly. Again this/these report(s) may not have contributed much, if at all, to ensuring OHS in UEW. This is because isolated reports, if not carefully and consciously harnessed for the purpose of managing or mitigating hazards at the workplace will contribute very little to ensuring good OHS. Individual employees and some groups of employees may have made observations in relation to OHS but again if these observations have not been properly coordinated to achieve healthy work and working environments, not much will be realised in promoting remarkable OHS.

CONTROL MEASURES

Another objective was to ascertain if UEW had adequate and/or appropriate control measures in place. The observations were that UEW was mindful of the well being of its staff. The University had a clinic, at least, on all its campuses. General medical examinations were conducted from time to time. Medical bills of staff who sought medical care from other health facilities

with appropriate referrals were refunded. These notwithstanding, a number of the hazards and associated risks at the workplace in general were identified at UEW. The question is: has the University instituted the necessary and/or appropriate measures to address the identified hazards and risks? To answer the question, the identified hazards and risks within the University were examined again.

Physical and Mechanical Hazards

Slips, Trips and Falls: Guardrails have been provided on all stair cases and open corridors, however, there are no caution signals or messages to inform, remind and caution staff of the eminent dangers associated with polished surfaces. There are no fall protection equipment in the University. At the offices, laboratories, etc, there are no proper instructions to prevent the improper use of electrical, telephone and internet cables which have the potential to trap staff to fall.

Fires and Explosions: Some precautions against fires have been taken in the University either to prevent fire outbreaks or to manage them. Not too long ago there was a circular cautioning staff against fires and directing that electrical appliances should be switched off after work, during weekends and public holidays. Fire alarms and fire extinguishers have been installed in many facilities in the University. The fire extinguishers are also refilled periodically. Fire alarms have been installed in some of the offices and lecture halls of UEW.

However, either there are no standards for the acquisition and use of power extension boards and other electrical appliances or the standards, if they exist, have not been publicised or are disregarded and therefore hazards from electrical faults or causes are still possible at UEW.

A safe and healthy workplace should have an evacuation plan for getting people out of a building in case of fire and an alarm or alert system to quickly inform employees of an emergency. Workers should also be trained on what to do in case of an emergency. Fire alarms have been installed in some of the offices and lecture halls of UEW but there are other structures without these alarms. In the past, there have been some education on how to handle fires at the workplace but this should be part of the routine rather than a onetime activity. A number of offices and lecture halls consist of more than one storey. However, one cannot find an evacuation plan within the buildings; neither can one recall his or her lessons from any training in what to do in case of an emergency. This state of affairs no doubt puts the health and safety of nearly all staff of the University in danger.

Transportation and Vehicle-Related Accidents: The University also has a good maintenance and servicing culture in respect of its vehicles. Over used and aged vehicles are also disposed off in good time. But a Multi Campus University with Distance Education Centres all over the country cannot claim that its drivers cannot suffer from long periods of sitting, work stress and exhaustion. This is why measures should be instituted to safeguard the health and safety of drivers of the University and their passengers as well as other road users.

Ergonomics or Repetitive Strain Injuries: As in institution, we seem not to have identified the health challenges associated with ergonomic or repetitive injuries. Consequently, the University has done very little or nothing to address this type of health hazard. Our acquisition of office furniture may therefore not have been guided by health considerations.

Confined Spaces: The University seems not to have many confined spaces. But occasionally, workers work in septic tanks, water reservoirs and roof ceilings. Therefore, it would be expedient to educate the staff concerned on dangers associated with their work.

Violence: The University has an anti- sexual harassment policy to deal with people found guilty of the offence. There is also tougher measures in the conditions of work against workers who assault the other either physically or verbally.

Biological and Chemical Hazards

There are no records of any University staff suffering from any condition emanating from biological or chemical related hazard yet. This may be as a result of measures such as the provision of protective clothing for sections of staff whose jobs have been identified as hazardous. However, there are other categories of staff whose work may not have been categorised as hazardous and so have not been adequately protected from the dangers associated with their jobs.

Psychosocial Hazards

All categories of staff within the University are vulnerable to psychosocial hazards. As a way of relieving staff from psychosocial hazards, the University encourages its fulltime staff to take their annual leave. Recently, the University has adopted an arrangement where for a period, almost the entire University is closed to give staff a break from their usual routine. But beyond granting short and annual leaves, can the University do a lot more to protect its staff from psychosocial hazards? The 28 days entitled to academic staff during inter-semester break had been taken over by sandwich programmes and for that matter these resting days are forfeited.

From the discussions above, it can be argued that the University has some measures in place to protect the health and safety of its staff but obviously a lot more remains to be done, if the working environment in the University is to be judged as safe and meeting enviable international standards.

CONCLUSION

The provision of a safe and healthy working environment is important to employers and employees. Accidents and illnesses result in physical and mental suffering and are a major cost for employers and the community because of the loss of experienced workers and citizens, increased premiums for workers' compensation insurance, decreased morale, lower productivity, reduced job satisfaction and increased labour turnover. From the discussions, it was realised that some form of hazards are associated with the work staff do at University of Education, Winneba. The University had also put in place some control measures to minimise the risks associated with work though more controls needed to be instituted.

RECOMMENDATIONS

This paper is also intended to make appropriate recommendations to improve the health and safety of the University's staff. To minimise or eliminate risks, a summary of recommendations are presented for consideration:

- i. Trolleys should be provided for staff at the Estate Section to enable them use good lifting techniques such as pushing, pulling or sliding rather than lifting, lowering or carrying to prevent repetitive strain injuries.
- ii. The University should re-engineer the layout in office spaces and fix sockets on desks in order to reduce the number of electrical and telephone cables on office floors.
- iii. Efforts should be made to fix screen protectors on office computers to reduce the impact of rays radiating from computers on the eyes of users.
- iv. As a measure to minimise stress, the University should have a second look at the organisation of sandwich programmes and its impact on the health of academic staff in particular and other staff in general. It is proposed that the December Sandwich Session should be cancelled to give staff some more rest to improve the quality of work life.
- v. The University should make use of video conferencing in organising meetings involving members from other campuses. This will help reduce the risk associated with travelling and also help cut down cost of fuel and time lost during travelling.
- vi. Adequate protective clothing and equipment should be made available to staff at all times; and supervisors must ensure that protective

-
- clothing and equipment are used. Recalcitrant staff should be sanctioned.
- vii. Printers and photocopiers should be kept in separate rooms to reduce the amount of fumes staff inhale.
 - viii. The promotion of the health and safety of employees should be an integral part of the responsibilities of supervisors.
 - ix. Training should be provided periodically to enable managers and employees know or reminded of their responsibilities in respect of occupational health and safety so they work at it.
 - x. The University's Health and Sanitation Guide should be upgraded into a Health and Safety Policy; detailing procedures to be followed to protect employees' health and safety and outlining the responsibilities of management and employees.
 - xi. There should be arrangements in place to identify hazards and assess their associated risks to health and safety of staff in the University.
 - xii. Regular workplace inspections must be conducted to inspect problem areas; and there must be control measures in place to ensure that they are not breached.
 - xiii. Records should be kept of actions taken to manage health and safety in the University. The health and safety legislation requires that some records are kept. In general, it is good management to be able to show what actions have been taken to protect health and safety.

REFERENCES

1. Spiro J; How to avoid 9 common workplace health and safety hazards. May, 2010. Retrieved in October 21, 2014 from <http://www.inc.com/articles>.
2. Valuation Exchange Pty Ltd., May 2009. Occupational Health & Safety Policy & Procedures: The Total Valuation and Risk Management Solution. Web Based... People Managed. Retrieved on October 21, 2014 from http://www.docstoc.com/docs/155883335/Occupational-Health_-Safety-Policy_-Procedures---Valuation--ag.
3. Workplace Health and Safety Handbook (November, 2012). Published by SafeWork SA.
4. Republic of Ghana; 2003. Labour Act, (Act 651). Accra: Ghana Publishing Corporation.
5. Wikipedia; Occupational Health and Safety. 2014. Available from http://en.wikipedia.org/wiki/Occupational_safety_and_health.
6. Mensah-Pah JD; Prioritising Public and Occupational Health and Safety. Accra: The Ghanaian Times. March 27, 2015.
7. Safe Jobs Now. <http://www.afscme.org/news/publications/workplace-health-and-safety/safe-jobs-now-a-guide-to-health-and-safety-in-the-workplace>.
8. World Health Organisation; Environment, health and safety, Geneva: WHO. 2002.