



## **Perceived Occupational Health Hazards Among Health Care Workers in Government Hospitals in Ondo State, Nigeria**

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### **ABSTRACT**

This study aimed to identify the perceived occupational health hazards among health care workers in government hospitals in Ondo state, Nigeria. The study explored the influence of such independent variables as age, level of education, job type, gender and location on health care workers perception of occupational health hazards specifically focused on job types. The used purposive, stratified and simple random sampling technique to select the participants using questionnaire to obtained data. Data were analyzed on an item-by-item basis using arithmetic mean, t-test statistics, and ANOVA for the hypotheses using SPSS 24 software. Finding showed that there is a significant difference between the categories of job types with respect to the health workers' perception of occupational hazards. The study concluded that job related pressures, and complacence in adhering to mitigation measures should be addressed. Interventions should be instituted to mitigate both the biological and non-biological hazards.

**Keywords:** Hazards, Health, Hospital, Occupational, Perception, Workers.

### **INTRODUCTION**

Occupational health been variously defined and it was only in 1950 that a joint World Health Organization/International Labour Organization Committee offered a definition of the aims of occupational health which was accepted by the world community: The promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention among workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological equipment and the adaptation of work to man and of each man to his job.

The ultimate objective of occupational health is a healthy and productive worker free from both occupational and non-occupational diseases. Occupational health also aims at the social and economic well-being of working people and promotes healthy, safe and motivating work and work environment (WHO,1953).To achieve such an objective requires continuous improvement of the conditions of work. Workers in various organizations were exposed to various occupational hazards in the course of discharging their duties. Although every occupation has its unique hazards, most workers do not appear to recognize these until the manifestation of one health impairment or the other (Egbe, 2004). Occupational hazard according to Robinson and

Omololu (1997) identified many hazards in Nigerian workplace to include excessive heat/cold, harmful dusts and spores, toxic chemical exposures, lighting radiation, humidity and physical workload. WHO, (1997) indicated that hazards could be either mechanical, ergonomics, biological, physical, and reproductive. It could also be classified according to allergic agents- precipitating and predisposing allergic occupational hazard. According to WHO (2000) says the practices of health care exposes health care workers to a variety of work related hazards. These include; working long hours at a high level of concentration, working in a sedentary state, non- ambulant patient, working with anxious patients,

exposure to microbial aerosols generated by high speed rotary hand pieces and exposure to various chemicals used in clinical practice.

According to Lucas and Gilles (2003), occupational health hazard can be classified as physical, biological, psychological, chemical and mechanical hazards. This classification of occupational health hazards shall be adopted for this study. This classification becomes necessary because in developing countries workers may be exposed to workplace hazards without adequate perception about unsafe working condition and the necessary precautionary measure to be adopted in order to avert hazards associated with their workplace (Asogwa, 2000).

Physical hazards are those hazards that produce adverse heat effects by transfer of physical energy like extreme temperature (heat and cold), noise, extreme light intensity and radiation, These dimensions of hazards may present further challenges to health profession and their levels of perception of those hazards may differ (Omololu, 1997). Perception is a process whereby sensory stimulation is translated into organized experience (Kanfman, 1973). In the context of present study, perception is the process in which sensory experiences are organized and made meaningful. Perception usually requires that one integrates information from several senses at the same time. Hospitals, in the context of the present study, are health institutions for diagnostic, preventive, curative and rehabilitative health services aimed at promoting the health of the community members. Any one working in a hospital may become a victim of hazards, nurses and aides who have the most direct contact with patients are at higher risk (Oji,1994).Other hospital personnel at increased risk of occupational health hazards include emergency response personnel, hospital safety officers, and all health care providers.

Maladjustment problems could lead to emotional instability and risky behaviour he affirmed. Hospitals use special care in disposing of wastes contaminated with blood and other body fluids, separating these hazardous wastes from ordinary waste. Hospital workers, doctors, nurses and other officers must be especially careful with needles, scalpels, and glassware, called sharps. Pharmacies discard outdated and unused drugs; testing laboratories dispose of chemical wastes and specimens collected from patients after prescribed test/investigation has been done. Health care professionals also make use of significant amounts of radioactive isotopes for diagnosis and treatment, and these substances must be tracked and disposed of carefully.

The radiology department is usually coated in black colour and their personnel uses meter to regulate the amount of radioactive substance absorbed on daily basis to prevent undue occupational health hazards. The surgeons, nurses and other para-medical staff wear apron, gloves, goggles and other protective devices at the theatre, labour room and outpatient department when carrying out procedures. Many dangerous substances can be used with special precautions that decrease their hazards. When discarded, these substances are no longer under the direct control of the user and may pose special hazards to people or other organisms that come in contact with them. As a result of such potential hazards, hazardous wastes are processed separately from ordinary wastes. The ability of the health care workers to have positive perception of those occupational hazards assists them to take precautionary measure in handling those hazardous substances and objects in the course of discharging their duties. The incessant occupational health hazard witnessed and encountered by health care workers are becoming alarming (WHO, 2006).

Occupational health hazard encountered by health workers include needle stick injuries, hepatitis infection, HIV/AIDS, (SARS) severe acute respiratory syndrome, cancer of occupational origin due to chemical, physical and biological exposure to hazards in work place. It is sadden that most of the health workers have been found not to recognize hazards to their health until signs and symptoms of health impairment manifest (Egbe, 2004). Therefore, the situation of things at government hospitals in Ondo state calls for immediate action. The lives of health workers in the state are not safe from the hands of hooligan especially during cases of road traffic accident at the casualty department, blood transfusion procedure and during any emergency situation.

There were various cases reported at Nigeria police station where health workers were assaulted by patient relatives. Many health workers had reported dead as a result of deadly diseases contacted in the course of discharging their duties in the hospital. Five health workers were reported to have lost their life during 2008 National Immunization Days (NIDs) in course of discharging their duties in the riverine area of the

state. Incidentally, no study, to the best of the researcher's knowledge has been conducted in Ondo State regarding perceived occupational health hazards among health care workers in government hospitals. The questions therefore are; what is the health workers' perception of occupational health hazards? Furthermore, are the occupational health hazards among health workers depend on variables like age, level of education, job type, gender and location? These constitute the problem of the present study. The main objective of the study was to identify the perceived occupational health hazards among health care workers in government hospitals in Ondo state with aim to ascertain the health workers perception of occupational hazards is dependent on their job type

### **Literature Review**

Nowadays, work place safety is considered by World Health Organization (WHO) as a priority setting for health promotion in the 21st century (Takala, 1999; WHO, 2010). International Labour Organization (ILO) and WHO reports indicated that in manufacturing industries many employees suffer from workplace injuries and property damage resulted in economic crisis (ILO, 2010; WHO, 2010). Every 15 seconds, a worker dies from a work-related accident or disease. Every 15 seconds, 153 workers have a work-related accident. Every day, 6,300 people die as a result of occupational accidents or work-related diseases – more than 2.3 million deaths per year. Annually, 317 million accidents occur on the job; many of these resulting in extended absences from work.

As a result of the ever-increasing pace of worldwide liberalization of trade and economies, as well technological progress, the problem of occupational accidents and diseases are becoming more and more global concern, particularly in developing countries (Green & Kreuter 1999). In recent years, occupational health and safety of the workers has improved and is relatively satisfactory in developed countries, whereas in developing countries, occupational health receives little attention and comes at low level in the list of national priorities. Studies showed that there are baskets of measures providing information on a range of health and safety performances (HSE 2001).

### **Occupational Safety and Health (OSH) Performance Measurement**

Most business sectors prefer a single OSH performance measurement. It would be optimal if such a measure were to be found, but in occupational health and safety no such single measure can be completely adequate to measure occupational health and safety (Green & Kreuter 1999) in solving the challenges. This researcher's finding concludes that the risk has never been eliminated but minimized. However, it is difficult to minimize OSH, its practices focus is less than 1% of organizational and national researches issues (Bonnie, Fulco, & Liverman ,1999). Promoting occupational health and safety practices such as OSH promotion, OSH awareness, OSH research and OSH education requires a broader platform (Ajala, & Bolarinwa, 2000). Although in a survey among International Commission on Occupational Health members from 47 industrialized and industrializing countries, 70% reported OSH being in place and 80% noted the existence of a national institute for OSH, the estimated coverage of workers with OSH services was only 18% (Rantanen, 2013). WHO and ILO have elaborated programs to foster the development of international occupational health, but the real effect of this effort is still not optimal likely due to insufficient funding (LaDou, 2003).

This lack of funding is not alone the reason but also globalization and industrialization has a strong impact in development of OSH hazards development.

### **The Negligence of Occupational Health in Developing Countries**

Occupational health remains neglected in most developing countries under the pressure of devastating social, economic, and political challenges (Ahasan, 2001). A striking characteristic of occupational health in the industrialized world, and a message frequently disseminated in developing countries, is the contribution of science to progress in occupational health through data collection, ongoing assessment of problems, and innovative technological solutions (Ashford & Caldart, 1996). The traditional workplace-oriented occupational health has proven to be insufficient in the developing world, and tangible progress in occupational health can be achieved only by linking occupational health to the broader context of social

justice and national development (Schneiderman, Speers & Silva 2001). The fatality rate in Sub-Saharan African countries is 21/100,000 workers and the accident rate is 16,000/100,000 workers (Takala, 1999). In Sub-Saharan African countries about 54,000 fatal and approximately 42 million occupational accidents happen annually that results to at least 3 days absence from work of every workers. In Ethiopia, the fatal occupational accidents rate is 5,596 per year with a fatality rate of 21.5/100,000 workers and an accident rate of 16,426/100,000 workers (Takala, 1999) regardless of its poor reporting culture and availability of data accuracy. Accordingly, if people are not safety conscious, then there will be no remedy (Schneiderman, et al 2001). Hence, majority of African countries have poor health and safety culture (RCAR, 2004). The study conducted in Tago (Nigeria) found that the nature of work environment and the experience about work environment has a great share on low productivity and in developing countries safety management and measurement is at its infancy (Ajala, & Bolarinwa, 2000). Although the positive impact of healthy workplaces on growth is well known, some companies, small enterprises and organizations are still facing challenges in adopting preventive measures of the working place hazards. Most of African countries are noted for poor occupational health and safety practices. Most of the company's focus is on the external customer satisfaction with their product or service disregarding workers satisfaction and working environment comfort in economic lagging countries. Because of workplace safety and health improvement, it increases the health of the employees and satisfaction of the employees (WHO, 2007). Many researchers said that health means wealth. The problems emanate from different angles of the workplace environment in industrial sectors. Ajala, and Bolarinwa, (2000) and WHO listed out some of several problems of occupational safety and health problems as psychological stress of employees, physical body damages, socio economic dissatisfaction, property damage, family disorder, and sever accidents. Figure 4 Shows that the neglects of the developing countries on occupational safety and health problem control.

Occupational health research in the developing world focus on the internal of the organization than on the social and political issues and then move inward to address the peculiarities of the workplace (i.e., from the “external–contextual domain” to the “internal domain”). OSH for development has been stated that it is heart of health and development. While it had long been recognized that lack of development was responsible for poor health outcomes in low-income countries. It was not until 1990s or so that the reverse processes the impact of health on development became a key topic for research and policy (ILO, 2012). Developing countries have few assets, little access to credit, and their current income puts them uncomfortably close to the poverty line (ILO, 2012). When there is high accidents, there is high disease and require more economic currency. When a country pays more money to health caring, the country's economy leads to poverty (ILO, 2012).

### **Safety Management System**

Safety Management system (SMS) is one example of a system safety method. ICAO (2009) defines SMS as an organized approach to managing safety, to include the necessary organizational structures, accountabilities, policies, and procedures. The four pillars of SMS are:(1) Safety Policy,(2) Risk Management, (3) Safety Assurance, and (4) Safety Promotion . A future study proposed (Fasunloro, & Owotade 2004) shows how safety climate moderates the level of integration of environmental health and safety system? How to develop a new domains (e.g. top management team's impact) that has been commonly investigated in other research context (e.g., quality and environmental management system). Research questions, such as “Whether the top management team's background and composition affect the adoption of EHS systems, and whether their experience moderates the safety performance? are interesting for future research (Fasunloro & Owotade 2004). This agrees that management system integration (e.g. Knowledge management, quality management, safety management, environmental health management) has less consideration). Knowledge management system helps in disseminating and using knowledge regarding workplace safety and health management (Schulte et al., 2003).

They added that information dissemination is a mandated, but understudied requirement of occupational and environmental health laws and voluntary initiatives. Research is needed on the factors that enhance and limit the development, transfer, and use of occupational safety and health information (OSH). In this study, how to disseminate knowledge has been discussed but lack how to integrate knowledge

management system to management systems related to safety. Research domain classification made by (Fasunloro and Owotade 2004) indicates that more researches were conducted on safety culture and safety climate during their studies. Only 14 articles were obtained from 128 articles on management system integration. Integrations were the combination of two or three elements. Despite widespread adoption of OHS-MS by organizations, its effectiveness has been debatable. Goh *et al.* (2012), among others for example, have posited that OHS-MS is beneficial to an organization's overall performance. In contrast, Goh *et al.* (2012) have estimated the failure rate of OHSMS to be at least as high as the failure rate of quality management systems, which is between 67% and 93% respectively

## METHODS AND MATERIALS

In order to accomplish the objectives of this study, the cross sectional survey research design was used because it provides a snap shot of a situation in a population, and the characteristics associated with it at a specific point in time. The population for this study comprised 4150 Ondo State Hospitals Management Board (HMB) staff and 1179 staff of Federal Medical Centre (FMC), Owo. A total of 5,329 health care workers was constitute the population for the study, sourced from Office of statistic and personnel management of HMB and FMC, 2018. This generated as 14 general hospitals, 4 state specialist hospitals, one Neuro Psychiatric specialist hospital and one Federal Medical Centre in the state. Basically, the 18 local government areas had one general/specialist hospital as applicable. In essence, about 20 government health institutions with total of 5,329 workforces were participants in this study.

The sample size for the study was 1,116 respondents using purposive sampling technique to select one general hospital and one state specialist hospital in each of the three senatorial districts of Ondo State including psychiatric hospital and Federal Medical Centre. However, 40 per cent of the population of FMC, Owo, was randomly selected via simple random sampling technique of balloting without replacement to select 472 respondents. Furthermore, proportionate sampling technique was used to select 644 respondents from 1,610 health care workers in the selected seven (7) hospitals under Hospital Management Board and select 40 percent each from all the hospital staff stratified for the study.

The instrument for data collection was 55 items, Bi-polar Adjective scale. Meanwhile, Bi-polar adjective scale was used through questionnaire otherwise known as Health Workers Perception of Occupational Health Hazards Questionnaire (HWPOHHQ) is made up of two sections.

The section A comprised of five relevant demographic information of the respondents; while section B involved statements to measure the health workers perception of occupational health hazards using Bi-polar adjective Scale which was made up of two opposite adjective-one favourable, the other unfavourable) each with 7-response options to cover all the five dimensions of physical, biological, psychological, chemical and mechanical hazards studied. The scale is scored as follows: Favourable Adjective (e.g. Necessary) 7,6,5,4,3,2,1. Unfavourable Adjective (e.g. unnecessary). The ten items addressing each of the dimensions of occupational health hazards studied- physical, biological, psychological, chemical and mechanical hazards respectively were stated in the instrument.

Methods of data analysis used for this study include arithmetic mean for the research questions and t-test statistics for the hypotheses and ANOVA using SPSS 24 software.

**RESULTS AND DISCUSSION**

**Table 1: T-Test For Significance Of Difference Between Health Worker’s Perception Of Occupational Hazards And Their Demographic Data**

	Test Value = 1.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Sex	6.093	239	.000	.18333	.1241	.2426
Location	-14.469	239	.000	-.34167	-.3882	-.2951
Job type	16.957	239	.000	1.46250	1.2926	1.6324
level of education	37.114	239	.000	2.15833	2.0438	2.2729
Age	16.681	239	.000	1.27917	1.1281	1.4302
Marital status	9.003	239	.000	.40833	.3190	.4977
Number of biological children	9.782	239	.000	.45000	.3594	.5406
Number of children adopted	-7.903	239	.000	-.24583	-.3071	-.1846
Number of dependants	4.815	239	.000	.24583	.1453	.3464
Level of monthly income	22.302	239	.000	1.90833	1.7398	2.0769
Assault may lead to physical weakness of the body	33.154	239	.000	4.07083	3.8290	4.3127
Sharp objects could be dangerous and capable of causing discomfort to one’s life	37.970	239	.000	4.34167	4.1164	4.5669
Exposure to ionizing radiation e.g. x-ray may damage tissue and be life-threatening.	36.052	239	.000	4.23750	4.0060	4.4690
Noise from hospital machine may cause hearing disability or deafness.	30.869	239	.000	3.84583	3.6004	4.0913
Poor ventilation as a result of overcrowding may lead to suffocation	36.314	239	.000	4.16250	3.9367	4.3883
Extreme cold or hot weather may lead to physical health hazard and altered body thermo regulation	32.197	239	.000	3.90000	3.6614	4.1386
Trauma arising from unsafe environments within hospital may be injurious and life threatening	32.424	239	.000	3.86667	3.6317	4.1016
Hospital machine may produce noise capable of causing nervousness and fatigue	29.057	239	.000	3.58333	3.3404	3.8263

Source: Authors ‘ Computation,( 2020)

Table 1 reveals that the t value (i.e. the t-calculated at 0.05 level of significance) is greater than 2.601 for sex (6.093), location (14.469), job type (16.957), level of education (37.114), and age (16.681). Since t value is greater than t-tabulated at 0.05, the null hypotheses are rejected at five percent level of significance, hence it is concluded that (i) The health workers perception of occupational hazards is dependent on their age. (ii)The health workers perception of occupational hazards is dependent on their level of education.(iii)The health workers perception of occupational hazards is dependent on their job type.(iv)The health workers perception of occupational hazards is dependent on their gender. (v)The health workers perception of occupational hazards is dependent on their location. A similar finding has been reported by Bailey (2004) who found in his study conducted among professional nurses in Bangkok that personal factors like age, marital status, education, position, experience, salary and wards have no relationships with the quality of work life. Hattingh, 2003) also found that for both genders, work-life imbalance turned out to be a risk factor affecting mental health. The study conducted by Ongori and Evans (2008) among the employees working in public sector organizations in Botswana found that the stress at

work affects the employees in many ways leading to poor quality of work life. According to them, stress is the main reason for employee turnover in most of the organizations. They suggested that managers should develop the appropriate measures to minimize occupational stress.

**Testing of hypothesis (for ANOVA)**

There is no significant difference between job types with respect to the health workers’ perception of occupational hazards.

To test the hypothesis “there is no significant difference between Job types with respect to the health workers’ perception of occupational hazards” ANOVA was done using F test and considered five job categories as Doctor, Nurse/Midwife, Pharmacist, Scientist/Technicians and Attendants/Non professional

**Table 2 ANOVA Table**

		Sum of Squares	df	Mean Square	F	Sig.
Assault may lead to physical weakness of the body.	Between Groups (Combined)	166.564	4	41.641	14.015	.000
	Within Groups	698.232	235	2.971		
	Total	864.796	239			
Sharp objects could be dangerous and capable of causing discomfort to one’s life.	Between Groups (Combined)	192.655	4	48.164	20.308	.000
	Within Groups	557.328	235	2.372		
	Total	749.983	239			
Exposure to ionizing radiation e.g. x-ray may damage tissue and be life-threatening. J	Between Groups (Combined)	185.217	4	46.304	17.919	.000
	Within Groups	607.245	235	2.584		
	Total	792.463	239			
Noise from hospital machine may cause hearing disability or deafness.	Between Groups (Combined)	129.177	4	32.294	9.971	.000
	Within Groups	761.119	235	3.239		
	Total	890.296	239			

Source: Authors ‘ Computation,( 2020)

Since P Value is less than 0.05, the null hypothesis is rejected at 5 percent level of significance with respect to assault may lead to physical weakness of the body (0.000), sharp objects could be dangerous and capable of causing discomfort to one’s life (0.000), exposure to ionizing radiation e.g. x-ray may damage tissue and be life-threatening (0.000), noise from hospital machine may cause hearing disability or deafness (0.000), poor ventilation as a result of overcrowding may lead to suffocation (0.000), sharp instrument or skin-piercing instrument should be well kept after use otherwise it can harbor infection (0.001), needle recapping can lead to transfer of deadly disease like HIV/AIDS (0.000), indiscriminate disposal of syringe and needle may lead to needle stick injury (0.000), and passing of instrument to doctor /nurse carelessly may be life threatening by causing injury to the care giver. (0.000).Hence it is concluded that there is significant difference between the categories of job types with respect to the health workers’

perception of occupational hazards.

**Result of findings on Biological and Non-biological Hazards**

Table 3 and 4 below are summary of frequencies of the biological and non-biological hazards as perceived among health care workers in government hospitals in Ondo state.

Table 3 Biological and non-biological hazards experienced by health workers in major hospitals in Ondo state Nigeria.

Hazards experienced by health workers	Frequency (240) Yes (%)
<b>Biological hazards</b>	132(.55)
Sharp related injuries (such as needle sticks)	117(43.6)
Cuts and wounds	92 (36.7)
Direct contact with contaminated specimens/biohazard materials.	121(48.2)
Infectious diseases and/or infections	114 (45.4)
Others (blood borne pathogens, vector borne diseases, and bioterrorism)	111 (44.2)
<b>Non-biological hazards</b>	108(.45)
Stress	236 (94)
Physical, psychological, sexual, and/or verbal abuse	112(44.6)
Musculoskeletal injuries	82 (32.7)
Slips, trips, and/or falls causing Fractures	103 (41)
Others (chemical spills, noise, burns, and radiations)	102 (40.6)

Source: Authors ‘ Computation,( 2020)

Table 4. Occupational health and safety hazards experienced by health workers in major hospitals in Ondo state, Nigeria

Characteristic	Category	Biological hazard Yes (%)	Non-biological hazard Yes (%)
Overall	Total	132(.55)	108(.45)
Sex	Male	40 (16.5)	32(13.5)
	Female	92 (38.5)	76 (31.5)
Age	≤30 years	40 (16.7)	18 (7.52)
	>30 years	92 (38.3)	87 (37.48)
Cadre of health worker	Nurses	63 (25.69)	50 (21)
	Others	69 (29.4)	58 (24)
Monthly income	≤130,000	25 (18.75)	20 (8.44)
	>130,000	107 (36.25)	88 (36.56)
Work location	Urban	111 (46.31)	91 (37.89)
	Rural	21 (8.69)	23 (7.2)
Pressure from job	No	2(0.94)	2 (0.76)
	Yes	130 (54.06)	106 (42.4)

Source: Authors ‘ Computation,( 2020)

Overall, more than half of the respondents reported experiencing an occupational health hazard. Among these, 55% experienced biological hazards while 45% reported experiencing non-biological hazards. Table 3 shows that the biological hazards mainly experienced by healthcare workers were sharp related injuries (43.6%), cuts and wounds (36.7%). The proportions of biological hazards (Table 3) were higher among healthcare workers who earned more than # 130,000 per month (<130,000 (18.75%) versus >130,000 (36.25%), worked in government hospitals located in Urban location (Urban (46.31%) versus Rural (8.69%), and experienced job related pressure (experienced job pressure (54.06%) versus others (0.94%)

Among those that experienced non-biological hazards (Table 3), the majority experienced stress (94%), physical, psychological, sexual, and/or verbal abuse (44.6%), and musculoskeletal injuries (32.7%). The proportions of non-biological hazards (Table 4) were higher among females; male (13.5%) versus female (31.5%), those older than 30 years ( $\leq 30$  years (7.52%) versus >30 years (37.48%), those who earned higher monthly incomes ( $\leq 130,000$  (8.44%) versus >130,000 (36.56%), those who worked in government hospitals located in Urban location (Urban (37.89%) versus Rural (7.2%), and those who experienced work related pressure (44.24%) versus others (0.76%).

## DISCUSSION OF FINDINGS

This study highlights that half of respondents had experienced an occupational health hazard, mostly sharp related injuries and stress. The likely predictors for both biological and non-biological hazards were not wearing all the necessary personal protective equipment, were working overtime, and were having job related pressures. In addition, non-biological hazards were predicted by working in multiple health facilities. The mitigation measures to control the hazards were mainly availing waste disposal facilities for the medical waste and provision of safety tools and equipment. These findings are largely comparable to previous studies conducted in low and middle income countries. Ziraba in Uganda, Nsubuga in Uganda, Orij in Nigeria, De Castro in Philippines, and Adib-Hajbaghery in Iran reported that sharp related injuries and stress were the major health related hazards experienced by healthcare workers in their studies.

In our study, we established that using all the necessary personal protective equipment was associated with reduced exposure to both biological and non-biological hazards. This finding supports evidence by Hayden *et al.*, who reported that use of PPEs reduced acquisition of illnesses in hospital settings.

In addition, we found that respondents who worked overtime had increased likelihood of experiencing both biological and non-biological hazards. This is consistent with previous literature that reported increased risk of experiencing occupational. Work related pressures have been reported to have negative impacts including the compromise of patient care thus resulting to a diminished quality of life for both healthcare workers and patients.

Although many health facilities provided waste disposal facilities for the medical waste and safety tools and equipment as control measures for occupational health hazards, simple measures like hand washing were not fully embraced.

## CONCLUSION AND RECOMMENDATIONS

Healthcare workers continue to face several hazards in their workplaces. The study concluded that job related pressures, and complacency in adhering to mitigation measures should be addressed. Based on the above findings and conclusion, the study suggested the following recommendations. Hospitals should organize programs such as picnics and tours during holidays or whenever possible, to keep the employees happy particularly those who do technical jobs. The hospitals should take the various health issues of their employees very seriously and make provisions in their Health Related policies to safeguard the physical and mental wellbeing of their employees.

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