

**PERCEPTIONS OF HEALTH WORKERS REGARDING THE  
OCCUPATIONAL HEALTH SERVICES AT ONANDJOKWE  
HOSPITAL, NAMIBIA**

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BY

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**DECLARATION**

I, **Kristofina Tsenaye Sipa**, hereby declare that “Perceptions of health workers regarding the Occupational Health Services at Onandjokwe Hospital, Namibia”, is a true reflection of my own study and has not been submitted for any degree at any other university.

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**Kristofina Tsenaye Sipa**

**Date**

## **DEDICATION**

I would like to dedicate this work to all health workers at Onandjokwe Hospital along with my loving family. A special thanks to my parents who have offered me their unconditional love, patience and guidance throughout my life.

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First and foremost, I acknowledge above all of us, the omnipresent God, for answering my prayers and giving me the strength to plod on despite wanting to give up and throw in the towel, thank you so much dear Lord.

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**LIST OF ABBREVIATIONS**

AIDS	:	Acquired immunodeficiency syndrome
CI	:	Confidence intervals
DCC	:	District Coordinating Committee
DR	:	Doctor
ELCIN	:	Evangelical Lutheran Church in Namibia
FDG	:	Focus group discussion
HIV	:	Human immunodeficiency syndrome
ICU	:	Intensive care unit
ILO	:	International Labor Organization
MOHSS	:	Ministry of Health and Social Services
NOHP	:	National Occupational Health and Safety Policy
OH&S	:	Occupational Health and Safety
OHIS	:	Occupational Health Information System
OHS	:	Occupational health services
PEP	:	Post exposure prophylaxis
PHC	:	Primary health care
PMO	:	Principal medical officer



PPE : Personal protective equipment

TV : Television

WHO : World Health Organization

## **ABSTRACT**

The aim of this study was to determine the challenges facing health workers regarding the occupational health services (OHS) at Onandjokwe Hospital. The objectives of the study were to determine the existing situation relating to the OHS rendered at Onandjokwe Hospital and to describe and explore the perceptions of health workers regarding OHS at the hospital. The study employed both quantitative and qualitative methodology that included the use of a checklist, key informant interviews and focus group discussions. Epi-info software version 3.5.1 was used to analyse the quantitative data for the first objective and contextual analysis was used to address the second objective for the qualitative data.

The study revealed that the provision of OHS in the hospital was extremely limited and many key documents guiding the provision of effective OHS were found to be lacking in several hospital departments. There was low awareness on OHS among employees in the hospital and only limited training had been conducted. Both management and staff cited lack of key personnel to drive the process as an important impediment to strengthening OHS in the hospital.

The main recommendations that arose from the research include the need for management to acquire key guiding documents and ensure their availability in all departments; the appointment of key staff including OHS nurses; the budgeting for and provision of necessary resources for OHS; and training and awareness creation among staff members.

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## CHAPTER 1

### INTRODUCTION AND RATIONALE OF THE STUDY

#### 1.1 Introduction

Occupational health services (OHS) is a programme that has been designed to perform basic preventive functions and is responsible for advising employers, workers and their representatives on how to carry out the requirements for establishing and maintaining a safe and healthy working environment in order to facilitate optimal physical and mental health in relation to work. The OHS has two main components, occupational health and occupational safety (WHO, 1995). The Ministry of Health and Social Services (MOHSS) (2006) views OHS as a multidisciplinary branch of preventive medicine which is concerned with the wellbeing of the employees in the work environment.

OHS is aimed at launching and upholding a healthy and safe environment, maintaining a well-performing and motivated workforce, providing a safe workplace, and performing surveillance on work environment factors and work practices that affect the health of the workers. These Occupational Health Services focus on employees' participation in the programme, which is essential to improve their working practices through the testing and treatment of earlier diagnoses of diseases (WHO, 2002). Safe practices can be ensured by creating awareness among employees about work-related risk as well as promoting safety on the job (Hammer & Price, 2004). A study conducted by Abdullah, Spickett, Rumchev, and Dhaliwal (2009) revealed that objective perceptions among health workers bring about harmony in the organisation and

workers were found to be important in mediating the relationship between early responses to workplace injury. This finding is supported by Granzow and Theberge (2009), who recommended that the dynamics in the workplace and the involvement of workers in participatory initiatives regarding occupational health and safety bring about harmony and job satisfaction.

The WHO (1995) and the International Labor Organization (ILO) (2004) have declared that OHS should focus on three main areas: the maintenance and promotion of workers' health and working capacity; the improvement of the working environment; and the development of work organisations and work cultures so that they support health and safety at work. The WHO (2002) explains that OHS provide the following benefits: protect health; promote health through a proper work culture and work organisation and support for social unity; uphold physical and psychological wellbeing on an individual level; promote a healthy lifestyle; prevent non-communicable diseases supported by specific workplace and health policies and management tools; preserve the health and sustain the work capacity of all staff throughout their working life; lessen the health care costs of injuries, illness and disease and ultimately retirement as a result of a combination of occupational, environmental, life style and social determinants; and protect the natural environment by using natural resources efficiently and effectively.

Somavia (2001) maintains that occupational health and safety is needed in the workplace to minimise occupational health hazards. It is expected that a programme for OHS should have all the essential elements of an occupational safety and health management system, including policy, organisation, planning, implementation and evaluation related to action in the occupational safety and health management system.

In an occupational health and safety programme, the stakeholders comprise governments, employers and management, architects and engineers, occupational health practitioners (doctors, nurses, and industrial psychologists), health and safety inspectors, employees, suppliers and customers of the work organisation, as well as families and friends of the employees (ILO, 2004 b).

The MOHSS is spearheading the implementation of OHS programmes in all health facilities, including the Onandjokwe Hospital in Namibia, with the aim of upholding and maintaining the health and safety of all employees in all sectors in Namibia (MOHSS, 2006). However, the implementation of occupational health services at Onandjokwe Hospital has met with a number of challenges, which will be dealt with in this study.

## **1.2 Background of the study**

According to the ILO (2004), there are more than two million work-related fatalities in the world every year. These accidents and injuries occur because of a lack of proper occupational health services, which are needed to minimise occupational health hazards. The Occupational Health and Safety Forum (2011) stated that approximately half of the world's population spends most of its time at work. As a result, fair employment and a decent work life are seen as significant social determinants of health and a healthy workforce is basically a prerequisite for productivity and economic development. However, only a small proportion of the global workforce has access to OHS, primarily for the prevention and control of occupational work-related disease and injuries. Moreover, there are global health problems that challenge the ability of health systems to preserve and restore working capacities.

Article 2 of the WHO constitution sets conditions for promoting and improving working conditions and additional features of environmental health. Accordingly, the WHO has implemented a global action plan for improving health protection for workers with the aim of devising and implementing policy instruments for workers, protecting and improving health in the workplace, improving the performance of and access to OHS, and providing and communicating evidence for action and practice. This has sustained numerous global political processes which provide enormous opportunities for scaling up the action for protecting and promoting the health of the workers. This promotes the achievement of the Millennium Development Goal no. 6, the prevention and control of non-communicable disease and working towards universal health coverage.

Bilia and Manyele (2003) mention that the challenges facing the environment and OHS in Tanzania, such as globalisation, interconnectedness and industrialisation, are growing quickly as a result of the many chemical compounds that are being used to facilitate human activities and the many chemicals that are used for commercial purposes. This rapid increase in the number of chemicals in the workplace has endangered workers and created public and environmental hazards.

However, in many African countries environmental and occupational health service issues are not being given adequate emphasis owing to a lack of priority setting, outdated registration, a lack of data and limited research. In addition, corruption and a lack of political will in many countries render environmental protection policies sub-standard and ineffective. It is also observed that there is a shortage of manpower for monitoring compliance with environmental regulations and a lack of technical knowledge and equipment. In Namibia, challenges relating to the effective implementation of OHS include the inadequate enforcement of legislation owing to

insufficient staff allocation and a lack of trained occupational health personnel in the MOHSS at all levels and the fact that employers and employees are ignorant of their legal responsibilities and duties. Furthermore, there is no formal OHS training for employees and a consistent approach to participatory risk assessment in workplaces is lacking. Notification and submission of compensation reports for occupational diseases and injuries are very weak and notification, compensation and OHS statistics are not available (WHO, 2012).

In Onandjokwe Hospital, health care workers are exposed to a variety of risks and health hazards in their daily work. According to Kotze (1994), this exposure puts them at risk of acquiring diseases, and psychological hazards such as stress, which have a negative effect on the human body and can lead to mental illness, absenteeism and job dissatisfaction. In view of all these risks and occupational hazards, for Onandjokwe Hospital to fully harness the potential of its employees, a comprehensive health and safety programme for all employees is mandatory. Work Cover (2002) states that an occupational health and safety policy is needed in the workplace as part of a comprehensive programme which aims to minimise injury. The programme should indicate management goals, objectives and policy implementation, as well as responsibility and accountability.

Furthermore, the systems for addressing these challenges are not well defined and the needs of the health workers are not well documented. One of these challenges could be the positive or negative perceptions of health workers regarding the OHS. It is evident from the literature that it is important to investigate the perceptions of the health workers before and after the implementation of OHS. A study conducted by Abdullah et al. (2009) revealed that objectivity perceptions among health workers bring harmony in the organisation and workers were found to be important in mediating the relationship between early responses to workplace injury and

awareness to occupational health services. This sentiment is supported by Granzow and Theberge (2009), who recommend that the dynamics in the workplace and the involvement of workers in participatory initiatives for occupational health and safety bring about harmony and job satisfaction.

### **1.3 Statement of the problem**

In Namibia, occupational health is targeted by the MOHSS at the national, regional and district levels. Occupational health is also targeted by the private sector, as occupational health focuses on the health of employees where there is a risk of accidents and diseases. Although the positive contribution of occupational health programmes is widely documented, there seems to be limited information about how these policies manifest themselves at beneficiary level; especially the employees at government hospitals, of which Onandjokwe Hospital is one of them (MOHSS, 2006).

Despite the existence of an OHS policy in the MOHSS and its adoption by Onandjokwe Hospital, there has been an increase in the number of reported occupational health incidents at the hospital. According to the Onandjokwe Hospital Annual Report (2011), health workers at the hospital experienced the following health problems during the report period: needle prick injuries (20), musculoskeletal disorders (15), abortion (3) and varicose veins (5). Furthermore, 20 of the health workers resigned as a result of stress and burnout.

Currently, in the face of a shortage of health workers, it would seem that Onandjokwe Hospital may find it difficult to cope with these challenges and the demands made on health workers if they succumb to an occupational injury or disease. Furthermore, it would seem that the systems

that should address the challenges are not well defined and the needs of health workers were not well explored before the incorporation of the OHS.

Currently, no study has been done to examine the challenges relating to the hazards threatening health workers in Onandjokwe Hospital. Consequently, this study was conducted on occupational health and safety to address occupational health hazards, recommend possible strategies and provide both critical and relevant information on the practice of occupational health and safety in this regard. It is against this background that the researcher was interested in exploring the perceptions of health workers at Onandjokwe Hospital regarding the OHS.

#### **1.4 The aim of the study**

The aim of this study was to determine the challenges facing health workers regarding the OHS at Onandjokwe Hospital.

#### **1.5 Objectives of the study**

The objectives of the study were to:

- Determine the existing situation pertaining to the occupational health services rendered at Onandjokwe Hospital
- Describe and explore the perceptions of the health workers regarding occupational health services at Onandjokwe Hospital

#### **1.6 Significance of the study**



The results of this study will contribute to an understanding of the challenges facing OHS at Onandjokwe Hospital. In addition, this study will be useful in improving the implementation of efficient and effective OHS in Onandjokwe Hospital and in similar health facilities across Namibia.

### **1.7 Paradigmatic perspective**

Amukugo (2009) describes a paradigmatic perspective as a collection of logically connected concepts and propositions that provide a theoretical perspective. In addition, assumptions are useful in directing research decisions (Mouton, 2006). This research is anchored on a positivist/quantitative paradigm and an interpretative/qualitative paradigm. The quantitative/positivist paradigm is based on an objective assessment of the truth as it pertains to the situation analysis, using a checklist to evaluate the present situation as regards OHS in the different departments of the hospital. An interpretative/qualitative paradigm takes the view that assessing and understanding the OHS in the hospital will be better elucidated through the many truths and realities that exist, as different people and role players within the institution have different perceptions, needs and experiences.

#### **1.7.1 Theoretical assumptions**

In this study the researcher has made specific assumptions about specific theories and methodological strategies that have been tested in order to direct this researcher toward guidelines on which decisions should be made (Mouton, 2006). Accordingly, the *National Occupational Health Policy of 2006* is used as a paradigmatic point of departure in this study. In Namibia, OHS are formulated on the basis in recognition of ILO policies in order to increase

national coverage, guide the appropriate services content, address challenges experienced both in public and private in the workplace, protect the employees from work-related hazards and eliminate work-related injuries, disease, ill health and fatalities and their associated cost. The policy further affirms that national occupational health shall be formulated and implemented in a transparent manner, in line with the principle of a legal framework for OHS in Namibia. Such legal frameworks include the Constitution of the Republic of Namibia, the Labour Acts of 1992 and 2004, Government Notice No. 156, Presidential Proclamation No. 10, the Employees Compensation Act of 1941, the HIV Code of Employment, the Public Health Act of 1919, as well as the Affirmative Action Act of 1998.

A legal framework for OHS focuses on OHS strategies, occupational hygiene and occupational medicine. OHS strategies include the following aspects: human resources development and training, information strategies on OHS and information dissemination with regard to the occupational health information system and research. Occupational hygiene, on the other hand, addresses the statutory duties of the employer such as occupational hazards, which cover risk assessment, personal protective equipment and training. Occupational health and safety covers both the founding and strengthening of OHS and welfare facilities in the workplace (WHO, 2012).

### **1.7.2 Definition of concepts**

The concepts to be defined in this study are derived from the title of this dissertation, that is, *“Perceptions of health workers regarding occupational health services at Onandjokwe Hospital, Namibia”*. The concepts are defined as follows:

### **1.7.3 Perceptions**

Perceptions are described as the process of becoming aware of the world around, or insight which is shaped by experience of life through the different senses or the mind (Positive-Thinking-Principles, 2012). In this study perception is regarded as a noun that describes health worker awareness of the environment around them, influenced by their senses and previous experiences, practical or theoretical, of OHS. It can be summed up as an expression of health workers' 'insight' into the world of occupational health and safety around them, and it significantly affects how people relate to the environment around them.

### **1.7.4 Health workers**

Health workers are all the people that are engaged in the promotion, protection and enhancement of the health of the population (WHO, 2007). In this study the health workers are nurses, doctors, laboratory staff, pharmacists and pharmacist assistants, radiography staff, dental staff and physiotherapists.

### **1.7.5 Occupational health services (OHS)**

OHS is the "multi-disciplinary branch of preventive medicine that is concerned with the health of the employees in the work environment" (MOHSS, 2006, p. 20).

## **1.8 Limitation of the study**

The study was to some extent constrained by insufficient numbers of research subjects and their willingness to participate and cooperate. The study was self-financed by the researcher and there was a limitation on the finance required to undertake some activities including procurement of stationery for the research. Moreover, some participants withdrew because no compensation was

offered for participating in the study. There was also at times insufficient money for the transport needed to travel to the hospital to conduct interviews, as some participants changed the time of the interviews or rescheduled the interview dates and times to suit themselves.

In addition, the study was carried out at Onandjokwe Hospital with only to a certain group of health workers and it is unfortunate that permission to conduct the study to include laboratory staff was refused by the chief executive officer of the Namibian Institute of Pathology.

As the research was conducted among health workers who are always burdened by high daily workloads, their attention and participation in the research might have been limited.

## **1.9 Conclusion**

This chapter described the orientation of the proposed study. The chapter also presented statements of the problem, the aim and objectives, the paradigmatic perspective, the meta-theoretical assumption and the significance of the study, which form the backbone of this research.

## **CHAPTER 2**

### **METHODOLOGICAL APPROACH**

#### **2.1 Introduction**

The aim of this chapter is to describe the research design and the methodological approach. These comprise the research method a researcher chooses to guide the entire process that a research study follows in order to achieve the articulated goals and objectives (Mouton, 2006). In this chapter the research design methods will be described, as well as all the components of the research design. In addition, the research reasoning strategies will be explained. This serves to clarify the implementation of both the qualitative and quantitative methods in order to understand the perceptions of health workers at Onandjokwe Hospital with regard to OHS. The chapter concludes with a description of the research method, the measures for ensuring trustworthiness and the ethical standards that have been adhered to during the study to ensure its scientific value.

#### **2.2 Research design**

This research was anchored on a qualitative and quantitative, exploratory, descriptive and phenomenological methodology. Macnee and McCabe (2008) stated that the research design ensures that research is conducted in such a way that the answer that is found is significant. The research design also identifies how subjects will be recruited and merged into the study.

A research design has two broad purposes, namely, the plan to be followed and the approaches that will best answer the research question and ensure the rigour and validity of the result. The study design must be suited to the research question and should be practical for the study purposes. Polit, Becker and Hungler (2005) mention that a research design includes the key methodological decisions of the study, such as the data collection plan, the sampling plan and the important decisions to be made, and it stipulates the fundamental form the research will take. Mouton (2006) stated that the rationale behind a research design is to enable the researcher to anticipate the appropriate research decision in order to minimise the errors and maximise the validity of the research result. In this study the design combined both a quantitative and a qualitative approach.

### **2.2.1 Quantitative design**

Burns and Groves (2009) explain that a quantitative design is a formal, objective, systematic process which illustrates and tests relationships between variables. Armstrong and Grace (2009) confirm that a quantitative design is concerned with counting reducing phenomena and tends to restrict the sort of answer that can be obtained. Furthermore, quantitative research is aimed at addressing the underlying causal mechanism that links one variable to another. In this study, a quantitative design was used to determine the existing situation as regards the OHS provided at Onandjokwe Hospital, because it focused on a moderately small number of concepts and numerical information which were analysed using statistical procedures. The checklists were used as planned practice and as the official instrument for assembling information through a situation analysis (Brink, 2010).

### **2.2.2 Qualitative design**

According to LoBiondo-Wood and Haber (2006), a qualitative research design is based in natural settings where the phenomenon being studied has taken place, as well as in text where the data are in a textual form which is narrative or the words from interviews that were recorded and transcribed. Macnee and McCabe (2008) stated that a qualitative research design has three broad functions that include increasing understanding, promoting participation and linking the ideas and concepts. A qualitative approach was used to describe and explore the perceptions of health workers regarding OHS. The study was conducted at Onandjokwe Hospital, in the health workers' setting, which promoted their participation in the study.

### **2.2.3 Exploratory design**

An exploratory design is one intended to explore the measurement of a miracle or to advance a proposition about the association between the miracles (Polit, Becker & Hungler, 2005). Babbie and Mouton (2009) state that it is a design that facilitates the researcher gaining insight and understanding of the phenomenon of OHS with a dual role of health and safety.

This study facilitated the gathering of new ideas which assisted the researcher in obtaining an overview of what was actually happening within the clinical situation of occupational health where the research was conducted (De Vos, 2002). In addition, the exploratory research design was used to generate penetrating questions based on the participants' responses to the central questions that were asked. This enabled the participants to clarify the responses that were not clearly understood. An extensive survey of relevant literature was undertaken after the identification of the concepts, categories and subcategories (Bowen, 2005). This study was conducted in order to explore the perceptions of health workers regarding OHS so as determine

the challenges they face regarding the OHS at Onandjokwe Hospital. The researcher explored of various health workers' perceptions of OHS in the same hospital.

#### **2.2.4. Descriptive design**

A descriptive design is used to recognise a phenomenon of interest, identify the variable within the phenomenon, develop a conceptual and operational definition of the variable and describe the variable in a study situation (Grove & Burns, 2009). The main reason for a descriptive study is to describe situations and events; accordingly, the researcher observed and described what was observed. However, scientific descriptions are more truthful and specific than casual ones (Babbie & Mouton, 2009). This research study is descriptive as it was directed at describing and understanding the situation relating to OHS in the hospital and the perceptions of different health workers on OHS in terms of its ability to prevent the occupational hazards and risks that are facing them. It was also intended to assess their knowledge about OHS in the workplace.

#### **2.2.5 Contextual design**

Holtzblatt, Wendell, and Wood (2005) describe a contextual design as a structured, well-defined user-centred design procedure that offers methods for collecting data about users in the field, interprets and merges that data in a structured way, uses the data to create a prototype product and service concepts, and iteratively tests and refines those concepts with users. It is a process that integrates the theory, method and application of the study process rather than focusing on the study object. In this study, a contextual design was used to understand the health workers' fundamental intents, desires and drivers.



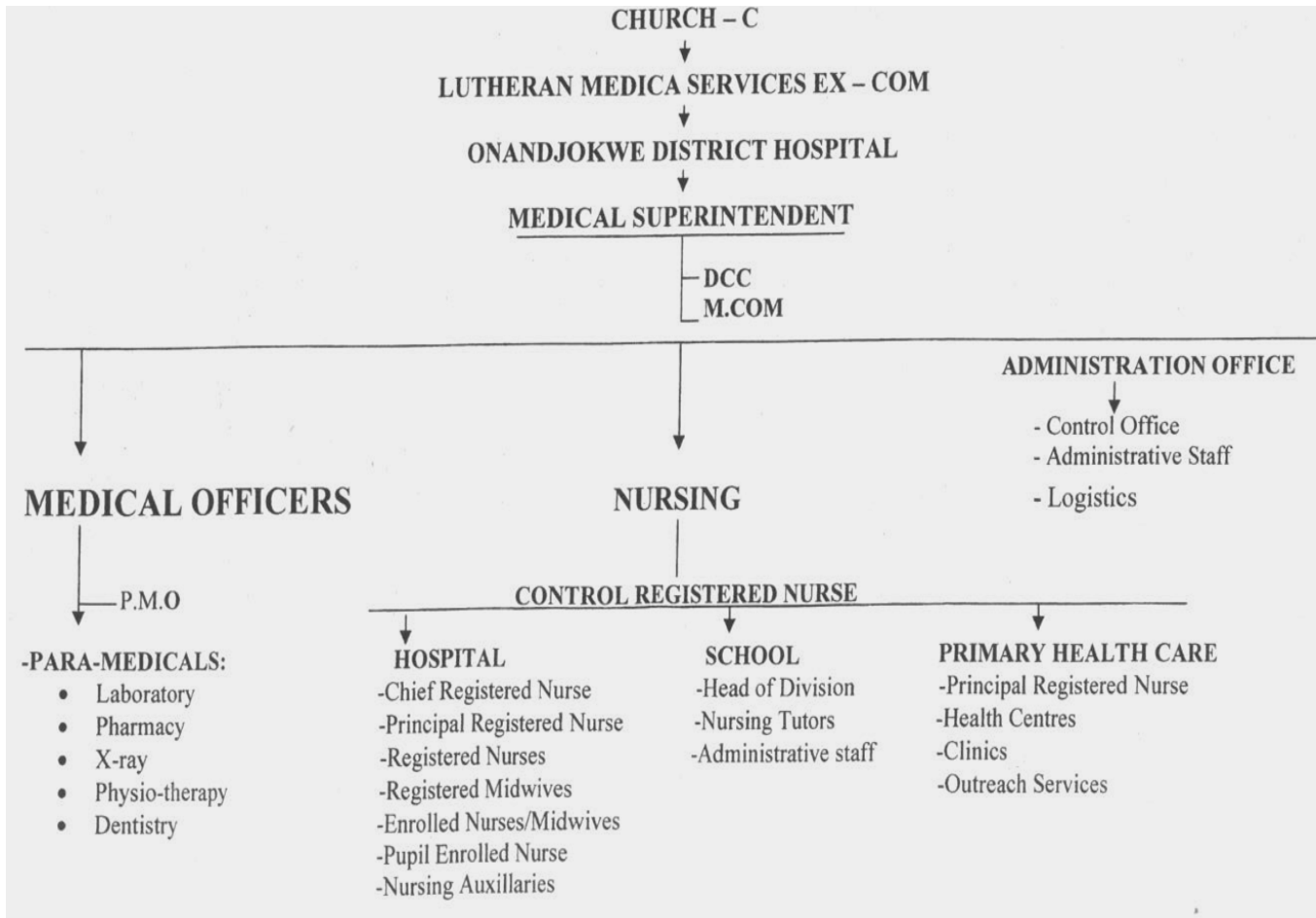
The point of view of the researcher acknowledges the fact that the participants were not isolated from their environment and the factors that affected their environment. The contextual design assisted the researcher with understanding the context in relation to OHS. In the research, it was considered to be effective to incorporate a focus group discussion and individual interview sessions with the participants' world, because it would have been easier for the participants to portray what they knew about the research phenomenon. The context of the participants involved an understanding of the interaction between health workers and their immediate setting and consequently avoided the separation of participants from their context (Henning, Van Rensburg, & Smit, 2007).

A contextual design was used because the study that was conducted focused only on health workers in the setting of Onandjokwe Hospital. The aim of using a contextual design in this research was to study the perceptions of the health workers in Onandjokwe Hospital. This was done purposively so as not to disturb the natural setting of the phenomenon being studied. This ensured obtaining true, valid and accurate information without the influence of external factors (Mouton, 2006).

### **2.3 Research Setting**

This study was conducted at Onandjokwe Hospital. Onandjokwe Hospital is a mission hospital owned by the Lutheran Medical Services of the Evangelical Lutheran Church in Namibia (ELCIN). It is completely subsidised by the government through the Oshikoto Regional Health Directorate. The hospital was established in 1908 by Finnish missionaries under the leadership of Dr Selma Raino with the aim of addressing injuries and health in the victims of colonial-era wars, as well as other health conditions prevalent at the time.

Onandjokwe health district is one of the three health districts in Oshikoto region and has an estimated surface area of 12 000 square kilometres and a catchment population of 183 589. It serves eight constituencies. The hospital employs about 600 workers comprising both professionals and support staff (Onandjokwe Health District Profile, 2013). The health workers include doctors, nurses, radiographers and assistants, laboratory staff, pharmacy staff, dentists and assistants, physiotherapists and assistants, clerks, drivers, cleaners, and administrative and support staff. There are 20 departments, which consist of outpatient screening, casualty, the laboratory, the theatre, the intensive care unit (ICU), the dental clinic, the physiotherapy department, primary health care, the Centre of Communicable Diseases, Ward 1 (gynaecology), Ward 2 (male medical), Ward 3 (female medical), Ward 4 (female surgical), Ward 5 (maternity), Ward 6 (male surgical), Ward 7 (paediatrics), Ward 8 (tuberculosis), Ward 9 (communicable diseases) and Ward 10 (private ward).



**Figure 2.1: Structure of Lutheran Medical Services**

## 2.4 Population

A research population is the total set of persons, events or objects that has some ordinal feature that is of interest to the researcher (Brink, 2010). The population comprises all components such as specific objects and the elements that meet certain criteria for inclusion in a given world

(Grove & Burns, 2009). It is an entire set of individuals having some common characteristics (Polit, Beck, & Hungler, 2005). Welman, Kruger, and Mitchell (2008) define a target population as a group of all prospective participants to whom the conclusion of a research project would have meaning and to whom the research results could be generalised.

The target population is divided into two parts according to the objectives of the study – there were two objectives for this study. The first objective was to determine the existing situation of OHS rendered and the second objective was to describe and explore the perceptions of the health workers regarding OHS at Onandjokwe Hospital. The target population for the first objective were all the departments and wards in the hospital. In this research, 50% of the departments were assessed in order to analyse the existing situation with regard to OHS.

The target population for the second objective was health workers in the hospital. The population for the study consisted of 293 health workers which included 239 nurses, 20 doctors, 17 laboratory staff, seven pharmacy staff, six X-ray staff, three dental staff and one physiotherapist. However, five focus group discussions (FGDs) were held which consisted of three groups of nurses – a combined category comprising registered nurses, enrolled nurses and midwives, and enrolled nurses. These nurses were selected from different departments, such as casualty, the maternity ward, the medical wards, the surgical wards, the operating theatre, the ICU, paediatric, gynaecology and obstetrics wards, the Communicable Disease Clinic, the infection control department, the personnel development office and the health programme administrators. One group comprised a combined group of a radiography assistant, a social worker and a customer care officer, while the final group was a group of doctors from various departments such as medicine, paediatrics, casualty, gynaecology and obstetrics.

## **2.5. Sample and sampling method**

Sampling is the process of choosing a group of people, events, behaviour and other components as contributors in a study (Burns & Groves, 2009). Polit and Hungler (2001) state that sampling is the method by which a part of the population is chosen in order to represent the whole population. Sampling has its own history in health care and social research that was adopted from political polling stations. Researchers discovered that the process of selecting the best candidates from the entire population based on specific reasons why they were elected was successful in that field (Babbie & Mouton, 2009).

To address the first objective of this study, which was to determine the existing situation of the OHS rendered at the hospital, a random sampling method was used. The method was chosen to enable the result to be generalised; consequently, ten department and wards out of the 20 departments and wards were selected randomly for the purposes of conducting a situation analysis (Brink, 2010).

According to Gomm (2004) a qualitative researcher was seen as the best strategies to facilitate the setting participants with developing a sympathetic of the phenomenon that was being studied. Intensive exploration of the participants' views during the interview session would help to achieve this, as it could result in information being provided that facilitates the understanding of the research phenomenon. In this study purposive sampling was used by employing homogenous sampling strategies, since it relied on the judgments of the researcher to select the participants who were similar in that they had similar knowledge in terms of the research phenomenon of interest and the assistance they could give to achieve the research objectives. Purposive homogenous sampling enabled the researcher to include ten out 20 doctors, 20 out of 239 nurses, two out of six radiography staff, and one out two social workers.

Purposive sampling was chosen to address the second objective of the study, which focused on exploring and describing the health workers' perceptions of OHS at Onandjokwe Hospital. The sample was selected to represent the population of health workers in the hospital and participants were interviewed until the data were saturated. Participants were included in the sample based on the judgement of the researcher, who decided which participants had the characteristics that she needed for the study (as explained in the inclusion criteria) (De Vos, Strydom, Fouche, & Delpont, 2006). In this study one of the sample criteria stated that the health workers who were included in the study had to have worked at the hospital for more than two years. This was because of their perceived experience in the practice of OHS in the hospital.

### **2.5.1 Inclusion criteria**

Inclusion criteria are a crucial requirement for consideration when choosing a sample. They also assisted the researcher when deciding on participants to include in the interview session. Purposive sampling is a feature that ought to be considered when including participants in a qualitative research study. Preferred participants are those who can best assist other people to understand the research phenomenon and they are expected to have more information about the topic under research and the ability to expressively articulate such information (Welman et al., 2008). In this study, the inclusion criteria for the first objective were:

- all wards and department in the hospital
- ten department and wards selected randomly

The inclusion criteria for the second objective were:

- all health workers who had worked in the hospital for more than two years because of their experience in the practice of OHS
- participants should be able to speak English
- participants should agree to participate on a voluntary basis

Participants were chosen using a purposive sampling method. Health workers who were included in this study comprised nurses, doctors, laboratory staff, pharmacists and pharmacist assistants, radiography staff, dental staff, and physiotherapists.

### **2.5.2 Exclusion criteria**

Exclusion criteria are basic features for consideration which allow the researcher to exclude the participants who do not have the characteristics that the researcher is interested in and the fact that their inclusion would not have met the purpose of the study (Welman et al., 2008). In terms of the first research objective, which called for a situational analysis, there were no exclusion criteria. In terms of the second objective, that is, to describe and explore the perceptions of the health workers regarding OHS at the hospital, health workers who were excluded from the study were:

- nurses, doctors, laboratory staff, pharmacists and pharmacist assistants, radiography staff, dental staff, and physiotherapists who had worked at the hospital for fewer than two years
- cleaners, drivers, institutional workers, clerical, administrative staff and cooks because of their limited understanding of OHS
- health workers who were on leave, night shift or had a day off during the study were also excluded from the study

## **2.6 Data collection**

The WHO (2014) defines data management as the continuing methodical collection, analysis and interpretation of the health data essential for designing, employing and weighing up public health prevention programmes. The aim of data collection is to develop efficient prevention strategies and facilitate countries' need to improve their information. In this study, data collection involved the collection, analysis and interpretation of study results regarding the perceptions of the health workers at Onandjokwe Hospital in order to help the hospital develop strategies to improve the efficiency of OHS and increase health workers' knowledge about OHS.

### **2.6.1 Overview of the fieldwork activities**

Data collection in this study was a twofold process. The first phase focused on objective 1, which was to determine the existing situation as regards the OHS rendered at Onandjokwe Hospital. In order to do so, a checklist was used to analyse the existing situation as regards OHS.

The second phase, which focused on objective 2, was to describe and explore the perceptions of the health workers regarding OHS at Onandjokwe Hospital. Accordingly, a triangulation method was used which consisted of focus group discussions, individual interviews and field notes as tools for data collection. In this regard, a central question was formulated in order to accomplish these objectives. The focal point of both the focus group interview and the individual interviews was supplied by the central question "How do you perceive the occupational health services offered to you in this hospital?" Hence, the study focused on the OHS offered to health workers by the hospital.



### **2.6.2 Description of participants**

- **Situational analysis**

The situational analysis was conducted in departments and wards that were chosen randomly. These included the tuberculosis, paediatric, medical, surgical and maternity wards, the operating theatre, the casualty and X-ray departments, the dental clinic and the pharmacy. A check list was used as the data collection instrument in order to analyse the situation in terms of OHS. The situational analysis was conducted to address the first objective of the study.

- **Focus group discussion**

To address the second objective of the study, five focus group discussions (FGDs) were held consisting of three groups of nurses in the combined categories of registered nurse, enrolled nurse and midwife, and enrolled nurse. The nurses were selected from various departments, including the casualty, maternity, medical and surgical wards, the operating theatre, the ICU, the paediatric, gynaecology and obstetrics ward, the Communicable Disease Clinic, the infection control department, the personnel development office and health programme administrators. One group was a combined group consisting of a radiography assistant, social workers and a customer care officer, while the other group comprised a group of doctors from various departments such as medical, paediatric, casualty, gynaecology and obstetrics.

### **2.6.3 Preparation of the research field**

Permission to conduct the research was granted by the University of Namibia Postgraduate Committee and the Lutheran Medical Services management committee. Both the letter requesting permission and the research proposal were submitted to the Lutheran Medical

Services. In response, the Lutheran Medical Services management committee sent a letter granting the researcher permission to collect data at the hospital.

When preparing the field for data collection, De Vos et al. (2006) caution researchers that this must be done properly. Accordingly, background information about the nature of the research field should be obtained in order to give the researcher confidence and provide guidance on approaching both the participants and the field. The rationale for field preparation is to ensure that the venue will be relatively quiet and private, and that the researcher will be able to engage freely with the participants without any distraction such as noise, people's movement, telephone and cell phone calls and visitors (Watson, Mckenna, Cowman, & Keady, 2008).

The researcher went to the field two weeks before the data collection session, with the intention of meeting all the health workers who were going to participate in the study, as well as to secure appointments for the assessment of the departments and the interview sessions. The supervisor of the department were given time to schedule an appropriate time for the situational analysis which they then communicated to the researcher. Each supervisor was then given the time that data collection would take place in the specific ward or department.

As regards the interview session, the venue was arranged with the purpose of facilitating a relaxed comfortable conversation. To this end, for the focus group interview, the researcher created a circular seating arrangement, using seats on the same level. During the 14 interview sessions, the seating arrangement comprised two small tables facing each other (Burns & Grove, 2009). These preliminary arrangements were made since the field has to be prepared before entering it to conduct qualitative research. The preparation of the participants for the focus group

discussion sessions was facilitated by the researcher and a research assistant. Prior to the sessions, all participants were informed about the aim and the benefits of the study.

#### **2.6.4 Pilot study**

Polit et al. (2005) explain a pilot study as a system whereby the researcher uses a similar subject, the same location and the same data collection and data analysis method to administer the instrument of data collection to a small group of participants from the intended test population. These participants should not later participate in the main study. A pilot study is conducted in order to identify unforeseen problems and to assess the feasibility of the study (Brink, 2010). The other purposes of a pilot study include determining the effectiveness of the intervention and identifying the elements of a prototype that may need to be revised (De Vos et al., 2006).

In this study, the pilot study was conducted at Onandjokwe Hospital and was used to determine whether the recommended study was feasible, to refine the research instruments, and to diagnose problems with the design of the study. A small group of health workers, and departments and wards were selected to participate in the pilot study; however, the health workers, departments and wards that participated in the pilot study did not participate in the main study.

The selection criteria which were indicated in section 2.5.1 were also applied during the pilot study. To address the first objective, the checklist was used to assess the existing situation of OHS. To address the second objective, the following research question was posed: “What are your perceptions regarding the occupational health services at this hospital?” This was followed by asking probing questions based on the responses given to the central question.

The problems which were identified during the pilot study were rectified. The findings and remedial action taken were as follows:

- the interview sessions were too long and, accordingly, probing questions needed to be more focused
- participants attached different meanings and different interpretations to concepts such as perception
- in case of the FGD, some participants dominated the discussion
- the checklist was too long to be completed within 30 minutes

To address this, prior to the main interviews the researcher gave a detailed explanation of the meaning of the word “perception”; participants were told to adhere to the time constraints; and the checklist was reduced to enable it to be completed within the time allocated.

### **2.6.5 Selection of the data collection method**

The study process was twofold, namely, a situational analysis and triangulation. The first part was a situational analysis that was conducted to assess the existing situation as regards the OHS provided at Onandjokwe Hospital from February to March 2013, and a checklist was used as the instrument for data collection. The second part described and explored the perceptions of the health workers regarding OHS using a number of triangulation methods, that is, FGDs, individual interviews and field notes. This data collection took place at Onandjokwe Hospital during May and June 2013.

A checklist was used to analyse the existing situation as regards OHS by undertaking a self-assessment in the hospital departments and wards with the intention of examining all health and

safety activities. The researcher based the assessment on real evidence which was obtained from what was actually taking place in the workplace. The situation that prevails as regards OHS may be ascertained from documents, workplace inspections and audits and discussions with staff and management (Victoria, 2003).

De Vos et al. (2006) describe investigator triangulation as the involvement of more than one interview in a particular study. Triangulation methods are also defined as the use of two or more methods of data collection. Triangulation was ensured during this study by conducting five focus group discussions (FGDs) and individual interviews, with a voice recorder and field notes being used to capture the proceedings of all the interview sessions. In this study triangulation was used to enhance the trustworthiness of the collected data. Triangulation was also used in addressing the second research objective during May and June 2013, that is, describing and exploring the perceptions of the health workers regarding OHS. All data were collected by the researcher with the assistance of a research assistant who was also a registered nurse.

Triangulation consisted of FGDs, individual interviews and fieldwork notes. The reason for this choice of methods was twofold. Firstly, the researcher had no control over the availability of the participants at the sites on data collection days. In terms of, for example, FGDs a minimum of five persons are needed to conduct such a discussion and that number of participants was not always available at the time of the planned interviews. In addition, it was suggested that focus groups should not be so small as to fail to provide substantial coverage on the topic concerned. Secondly, triangulation was carried out in order to enhance the trustworthiness of the data (Polit et al., 2005). The methods used for data collection will be described in the following sections:

## **2.7 Situational analysis**

The Business Dictionary (2013) defines a situational analysis as a process of collecting and evaluating past and present economic, political, social and technological data. It is intended to aid in the discovery of internal and external facts that could persuade the organisation's performance and an estimation of the organisation's existing and prospective strengths, weaknesses, opportunities and threats. According to Victoria (2003), a checklist is used to analyse the existing situation of OHS by undertaking a self-assessment by the researcher in the hospital departments and wards with the intention of examining all health and safety activities and basing their assessment on any real evidence that can be obtained of what is actually taking place in the workplace.

In this study the checklist was used to address the first objective of the study in order to determine the existing situation regarding the OHS rendered at the hospital. The situational analysis was conducted in selected departments and wards which were chosen randomly, such as the tuberculosis, paediatric, medical, surgical and maternity wards, the operating theatre, the casualty and X-ray departments, the dental clinic and the pharmacy. The supervisor of each department together with the researcher assessed the department and ward using a checklist as the data collection instrument in order to analyse the situation as regards OHS.

### **2.7.1 Checklist**

A checklist is described as a certain type of questionnaire that consists of list of items to which a respondent typically has to respond by indicating whether the item is applicable or not applicable. Usually the items in the checklist are not provided with a scale format, on which a respondent can choose from a different option, but are provided with a check box in which one can indicate whether the attribute being measured is present or not (De Vos et al., 2006). In this study the unit supervisor responded to the items together with the researcher, who then ticked whether the items relating to OHS were available or not available.

### **2.8 Focus group discussions**

Krueger and Casey (2000) define a focus group as a qualitative data collection method that is designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment. The session is usually tape recorded. The researcher chose focus group interviews in order to obtain data directly from the participants, to interact effectively with the group and to ensure free and adequate responses. Participants were selected because they had certain characteristics in common that related to the topic. An FGD involving five to ten participants (composed of homogeneous persons) is preferable when the participants have a great deal to share (De Vos et al., 2006).

Silverman (2006) emphasises that a focus group is a group of interviewees which is being sampled for the specific topic in order to generate qualitative data. This is facilitated by the moderator who interacts with the group. Five FGDs were held which consisted of three groups of nurses – combined categories of registered nurse, enrolled nurse and midwife, and enrolled nurse. These nurses were selected from various departments, such as casualty, the maternity,

medical and surgical wards, theatre, ICU, the paediatric, gynaecology and obstetrics ward, the Communicable Disease Clinic, the infection control department, the personnel development office and health programme administrators. One group comprised a combined group of a radiography assistant, social workers and a customer care officer, and the final group was a group of doctors from various departments, including medicine, paediatrics, casualty, and gynaecology and obstetrics.

The FGDs were continued until data saturation was obtained. Tape recordings of the FGDs and individual interviews as well as field notes were kept. FGDs were used because they are designed to obtain participants' perceptions in a focused area and the group dynamics in focus groups can assist people to express and clarify their views in ways that are less likely to occur in a one-to-one interview (Burns & Groves, 2009). The advantage of focus group interview sessions was the creation, progress and adjustment of attitude that occurred at the same time as the participants in the research study were interacting with one another. FGDs also provide a good opportunity to examine the sequence of the discussion and observe the interaction of the participants on the research phenomenon. FGDs may also provide certain dynamics that can encourage the acceptance of a domain view and suppress other participants (Gomm, 2004).

Participants in the FGDs were divided into categories, including doctors and dentists, nurses, and one combined group of X-ray staff, physiotherapists and pharmacists. The number of groups that were interviewed depended on the level of data saturation. This is an important measure because the researcher needs data that are rich in description of the practice of OHS. Hence, the research conducted using FGDs with health workers in Onandjokwe hospital. The main question that led the discussion in the focus group was: **“How do you perceive the occupational health services offered to you in this hospital”?**



## **2.9 Individual interviews**

An individual interview is a method of data collection in terms of which an interviewer obtains responses from participants during face-to-face encounters. Individual interviews are a form of conversation in which the researcher probes deeply to uncover new clues and to open up new dimensions of a problem in order to get accurate and more detailed accounts that are based on the personal experience of the subject (Krueger & Casey, 2000). The researcher chose this method because it is an appropriate method for an exploratory and descriptive study; it is also a useful method for eliciting facts from the respondents (Brink, 2010).

These interviews were held with key informants and the purpose was to ensure sufficient flexibility by the researcher in following up interesting ideas. The interviews were conducted with key informants in a face-to-face encounter, with those at management level, such as the medical superintendent, principal medical officer, medical specialist, dentist, radiographer, pharmacist, control registered nurse, and chief registered nurse. Moreover, five principal registered nurses (unit supervisors) from the maternity, surgery, medical and paediatric wards and the theatre department were similarly interviewed at the same time as the situation analysis was conducted in selected department. The unit supervisors whose departments were assessed also became candidates for key informant interviews.

Individual interviews are beneficial, since the participants become comfortable enough to describe experiences that are highly sensitive and critical in nature without the fear that someone else will overhear the opinions they are expressing. Participants in this study were also comfortable enough to supply detailed descriptions that enabled the researcher to understand the

phenomenon without unnecessarily wasting time during the interview sessions. The participants were more comfortable when the individual interviews were conducted in their natural work environmental (Gomm, 2004).

The dates for the individual interviews session were scheduled with the participants so that they did not interfere with their work schedule. The medical superintendent's advice to the researcher was to conduct individual interviews in the morning before 10:00, since this was the most convenient time for unit supervisors. The individual interview sessions were the time during which the researcher got to understand the experiences of the participants and the meanings they assigned to those experiences (Babbie & Mouton, 2009).

Consequently, thirteen individual interviews were conducted and assisted the researcher to understand the lived experiences of the participants, by providing them with an opportunity to describe their lived experiences of the OHS. The interviews were conducted in different departments depending on the participants' preferences.

## **2.10 Field notes**

Field notes are contemporaneous notes of conversations taken during qualitative research. The notes taken can be taken by hand or recorded with a tape recorder and full field notes should be written up as promptly and as fully as possible (Krueger & Casey, 2000). The aim of this process is to remember what happened during the interviews, and to incorporate and correlate this information with the voice-recorded data in order to meet the requirement of trustworthiness. Field notes also serve as a supplement for the data that cannot be portrayed by audio-taped interviews, for example nonverbal communication as well as a description of the health workers. The field notes consisted of, firstly, observational notes whereby the researcher wrote down what

she heard and saw, as well as a description of events derived from watching and listening; and secondly, reflective notes/personal notes which included the researcher's reflections on her feelings, thoughts and experiences during the interview. The latter helped the researcher to avoid personal influences affecting the research process as these could lead to bias (De Vos et al., 2006).

Written informed consent was obtained from each participant before the commencement of the study. Prior to commencement, participants were informed of the aim, objectives and methodology, as well as the arrangements, and the date, time and venue for the FGDs and the individual interviews. Individual interviews were held with health workers, such as unit supervisors and heads of department. The research assistant, a registered nurse who understands medical terminology, took notes during the FGDs and was trained prior to the procedure. Field notes were taken both during and after the interviews.

### **2.11 Observation notes**

Hennink, Hunter and Bailey (2011) maintain that, in order to facilitate the researcher to observe and record participants' behaviour, actions and how they interrelate with both their environment and the people around them, observation has to be included in qualitative research data collection methods. In this case, observation further assisted the researcher in getting hold of a detailed description of the participants' experiences in the context. The benefits of observation during qualitative data collection include exploring a new topic of research, describing the specific context in relation to the described experience and providing an understanding of the contextual findings of the research data collection methods such as the FGDs and the individual interview sessions. In this study, notes on observations were written during the FGD sessions conducted by

the researcher in order to capture all the participants' behaviour and actions and how they interacted with their context during the discussion of OHS.

### **2.12 Voice recording**

In line with Matheson (2007), in order to capture the verbal interaction during all interview sessions a voice recorder was utilised. The researcher prepared the voice recorder by creating a new file which indicated the number of the interview sessions prior to the FGD sessions and individual interviews. In order to maintain confidentiality and protect participant identity, participants' names were not used in naming files and the names were not used during the recording. A backup copy was created by transferring the voice recording to the researcher's laptop and a flash drive directly after each interview session. The rationale behind creating backup copies was to be able to retrieve and use them if a problem arose with the master recording. The voice recorder had a locking function and the researcher locked it after every interview session to ensure confidentiality. The voice records were made available to the research supervisor by creating a controlled copy on a flash drive and on disk.

### **2.13 The interpersonal attitudes and skills employed during data collection**

The following imperative interpersonal attitudes and skills were employed and observed during FGD sessions and individual interviews in order to acquire pertinent information about the phenomenon studied without frustrating the participants (Watson, Mckenna , Cowman ,& Keady 2008).

### **2.13.1 Interpersonal attitude**

The word “attitude” in this study refers to an orientation on the part of the researcher that communicates care to the participants. During the conversation there is a need to demonstrate warmth, caring and a non-judgemental understanding of the participants while communicating with them (Watson et al., 2008).

### **2.13.2 Congruence**

Congruence refers to the ability of the researcher, during the interview, to be aware of the way in which he/she interacts with the participants as well the ability to communicate this to them. This means that, during the interviews and the FGD sessions, the researcher played her role in such a way that what she said to the participants and the way in which she spoke remained consistent during her interaction with each participant. This consistency helped to build up a relationship of trust which would enable the participants to provide valid information about their perceptions of OHS, which could subsequently be explored and described. During the FGDs, the researcher respectfully asked all the participants in the FGDs and the individual interviews one central question. Follow-up questions were based on the first response given by the participants relevant to the purpose and objective of the research phenomenon (the purpose and objective were explained at the beginning of each interview session) (Watson et al., 2008).

### **2.13.3 Acceptance**

During the interviews and FGDs the researcher took into account the quality of acceptance in order to avoid making judgements, either covert or overt, in respect of the participants. Therefore, during the conversations the researcher did not either directly or indirectly indicate that answers were right or wrong; indeed, all answers were acceptable (Watson et al., 2008).

#### **2.13.4 Minimal verbal response**

The interviewer listened carefully and limited all verbal and nonverbal responses. However, the participants' body movements, facial expressions, quality and tone of voice and gestures were taken into account. All the verbal and nonverbal responses were clearly indicated in the field notes and also in the transcriptions of the data. During the listening process the researcher focused on extracting the factual information and the cognitive message that the participants were conveying. The interviewer also attempted to ascertain the feelings behind what the participants were conveying, although this could be a more difficult task (affective messages) (Watson et al., 2008).

#### **2.14 Communication techniques used during data collection**

The researcher utilised the following communication techniques during both the interviews and the focus group sessions to encourage the participants to share their perceptions (Burns & Grove, 2009).

- **Reflecting feelings**

In reflecting feelings, the researcher reflects what the participant has said back to them. This must be done in a natural and genuinely warm way so that the participants do not perceive the researcher as being monotonous and affected.

- **Timing**

Participants were given sufficient opportunity to describe their experience and were not interrupted in any way before finishing what they intended to articulate. This meant that a reasonable amount of time was allowed to elapse between the time the participants had finished speaking and the researcher made a reflection. In this way, the participants were given adequate time to hear the reflection.

- **The language and terminology**

The researcher's use of language and terminology was simple to facilitate the participants' understanding, while the participants were allowed to express themselves in their mother tongue when they felt that they could not express themselves in English. In addition, the participants' level of education was also taken into consideration.

- **Paraphrasing**

Paraphrasing was done by the researcher by restating the participant's message in a simple way and using fewer words, but without adding new ideas to the message particularly at the end of each session (De Vos et al., 2006).

- **Clarification**

Clarification was used when the researcher was not sure of the meaning of the participant's message. Clarification with the participants enabled the researcher to ascertain that what she had heard was correct (De Vos et al., 2006).

- **Focusing**

Focusing was used to direct or redirect the attention and the conversation between the participants and the researcher, by allowing the participant to focus only on the question being asked or on the topic of discussion (Henning et al., 2007).

- **Silence**

Silence was a means to give both the participants and the interviewer a chance to think, and also to encourage the participants to talk and to share perceptions and decide what could be added (Henning et al., 2007).

- **Probing**

Probing assisted the researcher in stimulating the participants to provide additional information in order to clarify what was not described in full, as well as vague responses (Babbie & Mouton, 2009).

- **Reflective summary**

The researcher used reflective summary to summarise the participants' ideas, thoughts and feelings in order to confirm with them that the researcher understood what had been said (De Vos et al., 2006).

## **2.15 Measure to ensure trustworthiness**

Specific criteria were used in order to ensure trustworthiness. These criteria or principles are important in guiding the researcher in maintaining the true value, applicability, consistency and



neutrality of the entire research process. These criteria are, namely, credibility, transferability, conformability and dependability, and are the four criteria in qualitative research which ensure trustworthiness (Babbie & Mouton, 2009; De Vos et al., 2006). In this study these criteria were implemented as follows:

### 2.15.1 Credibility

According to Bowen (2005), credibility refers to the confidence one has in the truth of the findings; this may be established by complying with various methods. In this study, credibility was maintained through prolonged engagement in conducting unstructured individual interviews, persistent observation, triangulation, referential adequacy, peer group debriefing and member checks. Participants were allowed to describe their experiences with regard to the research over a period of two months until data saturation occurred. Each interview session lasted approximately 20 minutes and the FGDs lasted about an hour, which enhanced the exploration of the unit supervisors and participants' experiences. Triangulation of data collection methods was guaranteed by conducting FGDs and unstructured individual interviews.

**Table 2.1: Criteria and their application for credibility**

Strategy	Criteria	Application
	Prolonged and varied field perception	<ul style="list-style-type: none"> <li>• Researcher is a registered nurse.</li> <li>• The researcher has worked in</li> </ul>

<b>Credibility</b>		maternity and male medical and surgical wards.
	Examine the phenomenon under different circumstances	<ul style="list-style-type: none"> <li>Data were collected in the same hospital but in different departments and wards, in which the participants were health workers.</li> </ul>
	Re flexibility	<ul style="list-style-type: none"> <li>Researcher participated fully in the research as a principal investigator, during the research proposal development, data collection, analysis and interpretation.</li> </ul>
	Triangulation	<ul style="list-style-type: none"> <li>Fourteen individual interviews and five FGDs were used in data collection.</li> <li>Different literature controls were used.</li> <li>Purposive and random samplings were used.</li> <li>The services of three coders were used in the thematic</li> </ul>

		<p>development.</p> <ul style="list-style-type: none"> <li>• Data were collected until saturation to allow for the generalisation of study findings to all health workers, department and wards.</li> </ul>
	Member checking	<ul style="list-style-type: none"> <li>• When necessary, participants were debriefed at the end of each interview.</li> <li>• The voice recordings were played back to the participants.</li> </ul>
	Peer examination	<ul style="list-style-type: none"> <li>• The University of Namibia and the Lutheran Medical Services analysed the research proposal.</li> </ul>

### 2.15.2 Transferability

Bowen (2005) stated that transferability is the process that could permit other researchers to apply the findings of the study to their own settings, using the research method that the other person had used, provided it was described thoroughly. In this study, transferability was ensured through thick, descriptive, clear criteria when nominating the sample and a clear description of the participants based on the intensive way in which the data were collected. This will take place

in the same way as that in which the researcher will report sufficient and precise information in response to inquiries or to the participants. The researcher collected sufficiently detailed data in the natural setting of the participants, in this instance Onandjokwe Hospital. The study findings were not generalised to all mission hospital and public hospitals, but were limited to Onandjokwe Lutheran Medical Hospital.

**Table 2.2: Criteria and their application for transferability**

Strategy	Criteria	Application
<b>Transferability</b>	Dense description	<ul style="list-style-type: none"> <li data-bbox="824 848 1351 1100">• The researcher provided an adequate and clear database which allowed for the transferability of judgement by others.</li> </ul>

### **2.15.3 Dependability**

Dependability refers to the stability of the findings over time and confirms the internal coherence of the data in relation to the findings, interpretations and recommendations (Bowen, 2005). In this study, dependability was maintained through an external inquiries audit, a dense description of the research method, stepwise replication, the checklist, triangulation, peer examination, Epi-info analysis and a code–recode procedure. The concept of dependability refers to the consistency of the research findings in a qualitative study. Indirectly, the measures of credibility were ensured by dependability (Babbie & Mouton, 2009). The researcher sent the notes that emerged from the interviews and the interpretations of these notes together with the recordings

of the interviews to supervisors to check whether she had adhered to acceptable standards in respect of the research process. Triangulation of the data collection was guaranteed by using a focus group interview sessions.

**Table2.3: Criteria and their application for dependability**

Strategy	Criteria	Application
<b>Dependability</b>	Dependability audit	<ul style="list-style-type: none"> <li>• Peer examination was done.</li> <li>• Intense guidance by supervisors was undertaken.</li> <li>• A dense description of the methodology was provided.</li> <li>• Experts in the field were consulted.</li> <li>• Literature controls were also implemented.</li> </ul>
	Dense description of the research methods	<ul style="list-style-type: none"> <li>• Research methods, such as nomination of the participant population, sample and sampling, data collection and analysis were clearly indicated.</li> </ul>
	Triangulation	<ul style="list-style-type: none"> <li>• Sampling, data collection and data analysis were also done.</li> </ul>
	Peer examination	<ul style="list-style-type: none"> <li>• Experts in the field were used to</li> </ul>

		critique and comment on the study.
	Code-recode procedure	<ul style="list-style-type: none"> <li>The researcher analysed the data and arrived at a theme independently and an independent coder was then given the raw data. The researcher and independent coder subsequently reached agreement about the final themes.</li> </ul>

#### 2.15.4 Confirmability

The researcher ensured the safekeeping of the voice recordings and written documents and notes from the interviews to enable the supervisor to determine whether it was possible to trace the conclusion and interpretation back to their sources and whether the conclusion and interpretation were supported by the inquiries (De Vos et al., 2006).

**Table 2.4: Criteria and their application for confirmability**

Strategy	Criteria	Application
<b>Confirmability</b>	Conformability audit	<ul style="list-style-type: none"> <li>Researcher attended thesis workshop at the beginning of the study.</li> <li>The researcher conducted a literature control during the</li> </ul>

		study.
	Referential adequacy	<ul style="list-style-type: none"> <li>• Written field notes and the use of a voice recorder</li> <li>• The use of a checklist.</li> </ul>
	Independent coder	An independent coder who was experienced in interpreting qualitative data.

The researcher used the strategies of credibility, dependability, transferability; confirmability and inferential validity to establish the trustworthiness of the data (Brink, 2010).

## 2.16 Data analysis

The two approaches that were used for data analysis were Epi-info software version 3.5.1 for the first objective and data coding and contextual analysis to address the second objective.

### 2.16.1 Quantitative data analysis

Epi-info software version 3.5.1 was used to process the quantitative data collected in April 2013; this process was conducted by the researcher and a statistician. Descriptive statistics were used in this regard.

- **Descriptive statistics**

Descriptive statistics are defined as a group of statistics that categorises and summarises mathematical data that are obtained from a population sample. They convert and condense the data collected into an organised, visual representation in order to give meaning to the reader of the research report (Brink, 2010). In this study, data were presented in frequency tables, bar graphs, proportions and confidence intervals.

- **Frequency distributions**

Frequency distribution is a complete summary of the frequencies of the values or categories of a variable, often displayed in a two-column table: the left-hand column lists the individual values or categories, while the right-hand column indicates the number of observations in each category (Bonita, Beaglehole, & Kjellström, 2006). Bryman (2008) states that a frequency table is a table that provides the number and the percentage belonging to each of the variables in question. In this study, frequency tables were provided from variable 0001 to variable 00026. Variables were allocated according to the ward and department selected.

- **Bar chart**

Bar charts are described as a visual display of the size of the different categories of a variable. As a result, in the study each category or value of the variable was represented by a bar chart (Bonita et al., 2006), as well as the findings relating to some of the variables (as shown in the figure 3.1, figure 3.2. figure 3.3 .figure 3.4. figure 3.5 ,figure 3.6 and figure 3.7in chapter 3 ).



- **Proportions**

Bonita et al. (2006) describe a proportion as a type of ratio in which the numerator is included in the denominator. The ratio of a part to the whole is expressed as a decimal fraction or, loosely, as a percentage. In this study proportion was expressed in percentages as indicated in the discussion of the result.

- **Confidence intervals**

A range of values for a variable of interest is constructed so that the range has a specified probability of including the true value of the variable. Confidence intervals contain a whole range of values. These are a range of reasonable values that are intended to contain the parameter of interest (population mean or proportion) with a certain degree of confidence (Bonita et al., 2006). In this study, a proportion of the population has been used to indicate the confidence interval as discussed in the study findings.

### **2.16.2 Qualitative data analysis**

The second approach focused on the analysis of the qualitative data that were collected from FGDs and the individual interviews. By replaying the recordings of the interviews, these interviews were transcribed in full. In July 2013, the transcriptions were then used to code the data with the assistance of a professional statistician. The data analysis began with the coding of the themes, identifying them with unique codes and categories and making memos about the context and variation in the phenomenon under study. The themes and concepts were then examined. In verifying the selected themes through reflection on the data, the categories were

refined through repetitive scanning of the data which were then presented in the form of frequency and variables (Armstrong & Grace, 2009).

In qualitative studies, data analysis occurs concurrently with data collection (Babbie & Mouton, 2009). The researcher used qualitative analysis techniques to analyse words rather than numbers. The data analysis in this study was concerned with theoretical and empirical data. Accordingly, the following steps were taken: reading, coding, displaying, reducing and interpreting (Ulin, Robinson, Tolley, & McNeill, 2002).

- **Reading:** During this phase, the researcher immersed herself in the text, reading and re-reading it and subsequently reviewing the notes with the aim of extracting categories and subcategories.
- **Coding:** During the coding process the researcher began to attach codes to chunks of text by listening for emerging categories and subcategories.
- **Displaying:** After coding the researcher began to explore the categories and display the subcategories.
- **Reducing:** After displaying the information relevant to each category in detail the data were reduced to the essential points.

- **Interpretation:** Finally, the overall interpretations of the study findings were indicated, namely, the way in which the categories related to one another and also the way in which the network of concepts corresponded to the research questions.

During the data analysis, data were reduced by selecting, focusing, simplifying, abstracting and transforming the information that had emerged in the writing of the field notes and the memos. These data reduction/transformation processes were repeated until the final report was complete and the conclusions drawn and verified (Ulin et al., 2002).

- **Conceptualisation:** The lists of concepts were reorganised and rearranged into new categories and subcategories. This was done by using the emic approach. The ethic approach implies the perspective of generalisation of data as developed by the researcher on the basis of cross-cultural knowledge and from relevant findings which emerged from the literature study (De Vos et al., 2006; Brink 2010).

### **2.16.3 Transcription and translation of data**

The voice recordings of the interviews and FGDs were transcribed verbatim in order not to lose any meaningful information and to incorporate nonverbal data, such as the tone of voice or facial expressions; the data were transcribed soon after the interviews had taken place. After the translation has been completed the transcribers and the translator came together to confirm whether what had been translated corresponded with what the participants said (Ulin et al., 2002).

An independent coder was used to analyse the data. Prior to the analysis of the data the coder was furnished with the aim and objectives of the study in order to enhance their focus during data analysis. The external coder was given the transcribed voice recordings of the individual, in-depth interviews and the FGDs together with references to Tesch's eight steps, which are used in qualitative data analysis. These eight steps include the following:

- Step 1: The researcher obtained a sense of the bigger picture by reading through all the transcripts carefully. Ideas that came to mind were jotted down.
- Step 2: The researcher picked up one interview randomly and read through the document focusing on the meaning rather than the content. She jotted down any thoughts in the margin of the document.
- Step 3: After the researcher had completed reading and coding all interview documents she made a list of all the topics and parallel topics that were clustered together. She rearranged these concepts in three different columns under the headings, major, unique and anomalous concepts.
- Step 4: Afterwards, the researcher revisited the data. The concepts were abbreviated into codes and the codes were written next to the appropriate segments of text. The researcher tried out this preliminary system of data organising to ascertain whether it was possible to observe new categories.
- Step 5: The researcher revealed the most descriptive wording for concepts and converted it into categories with the intention of reducing the list of categories by grouping related concepts together. Lines were drawn between the categories to illustrate any interrelationships.

- Step 6: The researcher made final decisions regarding the abbreviations for each category and arranged these codes alphabetically.
- Step 7: After she had finished with coding, the data belonging to each category were all put in one place and a preliminary analysis was performed.
- Step 8: The existing data were recorded if the need arose.

### **2.17 Literature control**

In view of the fact that not much has been written about research phenomena or research populations, one of the main reasons for conducting a qualitative study is to authorise the study as exploratory. Consequently, the researcher had to listen to the participants, find out facts, assemble new data and construct a bigger picture based on their experiences, with the purpose of comparing it to existing literature on existing phenomena (Mouton, 2006). In this study, a literature control is presented in chapter 3 during the discussion of the results.

### **2.18 Ethical consideration**

Research ethics provide guidelines for the identification of the study purpose, design, methods of measurement, the collection and analysis of data, the interpretation of results, and the presentation and publication of results (Burns & Grove, 2009). This system was implemented to prevent bureaucratic and rigid practice, especially during healthcare research, to guarantee that the design and conduct of all research steps were ethically sound without violating the participants' rights. The ethics were applied by the researcher, the research institution; the ethics review committee and regulatory bodies (Slowther, Boynton & Shaw, 2008).

In this study, research ethics was considered in terms of the purpose, design, methods of measurement, the collection and analysis of data, the interpretation of results, and the presentation and publication of results. Accordingly, they were closely monitored by the research committee of the University of Namibia as well as the external examiners to guarantee that sound knowledge for practice is generated. In addition, research ethics is imperative for this study because the respondents are human subjects and interaction between the researcher and health workers can invade privacy and confidentiality when voice recorders are used to conduct data collection.

#### **2.18.1 Permission to conduct the research**

Permission to conduct the research was granted by the Lutheran Medical Services management committee after the research proposal for the study had been approved by the University of Namibia Postgraduate Studies Committee (see Annexure A, B and C). Annexure A contains the permission granted by the University Postgraduate Committee, Annexure B contains the letter in which the researcher requested permission to collect data, and Annexure C contains the letter in which the Lutheran Medical Services Management Committee granted its permission to conduct the research.

#### **2.18.2 Confidentiality and anonymity**

Confidentiality is the management of private data in the research so that subjects' identities are not linked to their responses. Anonymity means subjects' identity cannot be linked even by the researcher with his/her individual response (Burns & Grove, 2009). Confidentiality involves the

non-disclosure of information that was discussed by the researcher and the participants. In this study, participants were made aware that while confidentiality was guaranteed at all times, quotes by participants would be included in the research report without revealing the identity of the respondent. The research participants were informed that the voice recordings were only made available to the researcher, the researcher's supervisor and the independent coder (Ruger, 2008). Accordingly, the researcher protected the anonymity of the subjects and maintained the confidentiality of data collected during the study in the following way.

Participants' anonymity was protected by making it impossible to link the specific data to a specific person. When writing the research report, the researcher made sure that individuals or groups could not be identified by their responses; in addition, the master list of subject names and code numbers was kept separate from the data collected in order to protect the subjects' anonymity. This master list was also kept in a safe place (Matheson, 2007).

### **2.18.3 Informed consent**

Polit et al. (2005) state that informed consent means the participants need to have adequate information concerning the research, that they should comprehend this information and that they should have the power of choice. The researcher may document the informed consent by having participants sign a consent form. During the process of obtaining consent from participants, the researcher should not in any way coerce the recruited participants to participate in the study. When receiving informed consent from each participant they were personally guaranteed the right to refuse to participate in the study without fear of recrimination (Bowen, 2005).

In this study, informed consent was explained to the respondents in a written document. This document included an explanation of the aim and objectives of the study, the methods, the duration of the study and the fact that confidentiality would be maintained by not identifying the subjects. In addition, it was stated that privacy would be maintained and the participants' identity would not be disclosed. It also stated the researcher's qualifications. The participants were requested to sign the form giving their consent to participation prior to responding to the research question. In addition, before the voice recorder was used to collect data from a participant, permission was requested. Further, ground rules were set including the way in which participants should voice any concerns and expectations of one another. All this was done prior to starting the interview sessions.

#### **2.18.4 Privacy**

Burns and Grove (2009) stated that individuals have the freedom to decide on the degree, period and overall conditions whereby private information will be withheld from others. The researcher provided participants with privacy by guaranteeing that no one would be allowed to access the records except for the researcher and the supervisor. Participants were reassured that no private information would be shared without the individuals' knowledge or against their will, since invading an individual's privacy might cause loss of dignity, feelings of anxiety, guilt, embarrassment and shame. In addition, the instruments and methods used during the interviews were known to the participants. During data collection, the researcher did not gather information by, for example, taping conversations or using hidden cameras and microphones, without their knowledge. Accordingly, all data collection methods were scrutinised to protect participants' privacy.



### **2.18.5 Balancing the benefits and the risks**

The participants were told that they had the right to terminate their participation in the research study if they felt that they could not continue. The researcher explained the inherent risk of the interview session to the participants, for instance if the participants felt that they could not respond to a certain question due to a perception that it might be violating their privacy. Furthermore, they were reminded that they could refuse to respond to any question if they felt that it would violate their right to confidentiality, and participants were also informed that field notes would be written during the interviewer session (Slowther et al., 2008).

### **2.18.6 The participants' right to self-determination**

In respect of the right to self-determination, the researcher should respect the participants during the research project (Burns & Groves, 2009). Individuals have the right to determine their own participation in a research study, including the right to refuse to contribute without negative consequences; this includes avoiding intimidation by obtaining informed consent and the way in which the participant were identified, approached and engaged (Slowther et al., 2008). In this study the researcher showed respect for the participants by obtaining informed consent without coercion from the participants before starting individual FGDs and individual interviews. The procedure to be followed during the discussions was made clear to the participants before commencement and the duration of each interview session was estimated at one hour for FGDs and 20 minutes for individual interviews.

## **2.17 Conclusion**

In this chapter, the reader was introduced to the methodological approach that the researcher used during the study. The main purpose and objectives of the research were briefly stated as well as the research design and method chosen on the basis of these objectives. The quantitative and qualitative exploratory, descriptive and contextual nature of the research was described and explained. The pilot study was also described and its outcome consequently indicated.

The completion of the checklist, the focus group interview sessions and individual interview sessions were also described. Furthermore, the chapter also discussed the rationale for the choice of methods that were used and clarified the research ethics. The trustworthiness of the research was described in relation to its validity in terms of the credibility, transferability, dependability and conformability of the study.

The researcher took cognisance of reflexivity in guarding against the possible influence that the researcher might have had on the research design, participant selection, the study setting, the behaviour of the researcher during data collection, and the discussion, interpretation and interpretation of the data (Hennink et al., 2011). This was achieved by constantly submitting the completed research work to the main supervisor and co-supervisor on a monthly basis, the employment of a literature review during the definition of terms, the involvement of a co-coder during data analysis, and the presentation of the research proposal to the research committee.

## CHAPTER 3

### PRESENTATION AND DISCUSSION OF THE RESULT

#### 3.1 Introduction

In this chapter the results of data analysis are presented. The research design and method used in this study were described in chapter 2. This chapter presents a discussion of the data analysis of themes which emerged during the qualitative data analysis with the intention of organising and giving meaning to the collected data. The conclusions that are reached are based on the data collected by means of the checklist and triangulation methods that were carried out by the research. In a quantitative study results are presented in numerical form, while in a qualitative study results are presented in a narrative format using participants' direct quotations written in italics and supplemented by literature to embed and re contextualise the results with the existing literature.

The main purpose of the study was to determine the challenges facing health workers regarding the OHS at Onandjokwe Hospital. In this chapter, the results of data analysis are presented. This analysis is aimed at organising and giving meaning to the collected data. It also forms the background against which the appropriateness of the methods that were used is examined (Burns & Groove, 2009). These results are based on the data collected by means of the checklist, the FGDs and the in-depth interviews. Finally, the findings of the study will be discussed and a literature control will be formulated to address the main purpose of the study based on its first and second objectives.

## **3.2 Discussion of the result**

The results of this study are discussed in terms of the first and the second objectives of the study as follows:

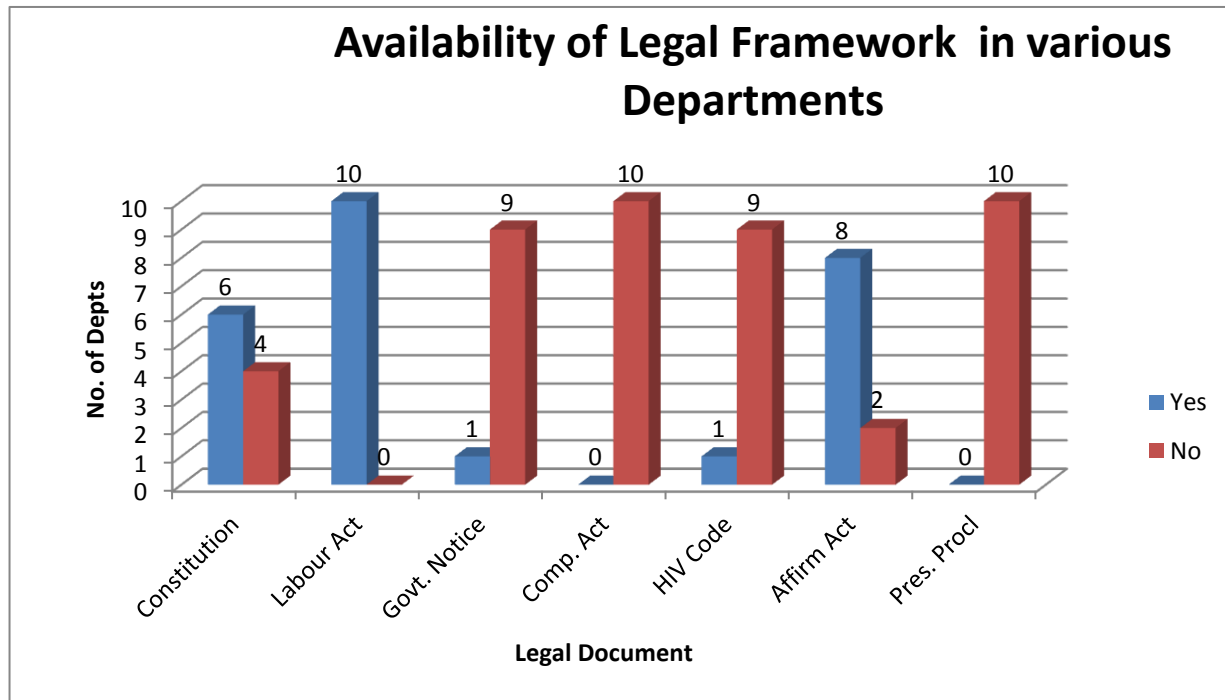
### **3.2.1 Discussion of the result for objective 1**

This discussion is focused on the checklist whereby 50% of departments were assessed in order to analyse the existing situation of OHS in ten departments and wards. These department and wards were selected randomly from twenty departments. The first objective was to determine the existing situation of OHS rendered at Onandjokwe Hospital.

#### **a) Availability of a legal and regulatory framework**

On the topic of a legal framework, six (60%) of the ten departments were found to have a copy of the Constitution of the Republic of Namibia; however, in four (40%) departments this was not available. All the departments (100%) were found to have a copy of the Labour Act of 2004. The Government Notice No. 156 “Regulations Relating to Health and Safety at Work” was only available in one (10%) department, while the Employees Compensation Act, 1941, was not found in any of the departments. The HIV Code on Employment was available in one department, that is, 10% of departments, and was not available in nine (90%). The Public Health Act, 1919,) was also found in one department (10%) only. However, the Affirmative Action (Employment) Act, 1998, was found to be available in eight (80%) departments, with it being unavailable in two (20%). The Presidential Proclamation No. 10 of the Labour Act 1992 was not

available in any of the departments assessed. Figure 3.1 shows the findings regarding the legal and regulatory framework at the hospital based on the departments assessed.

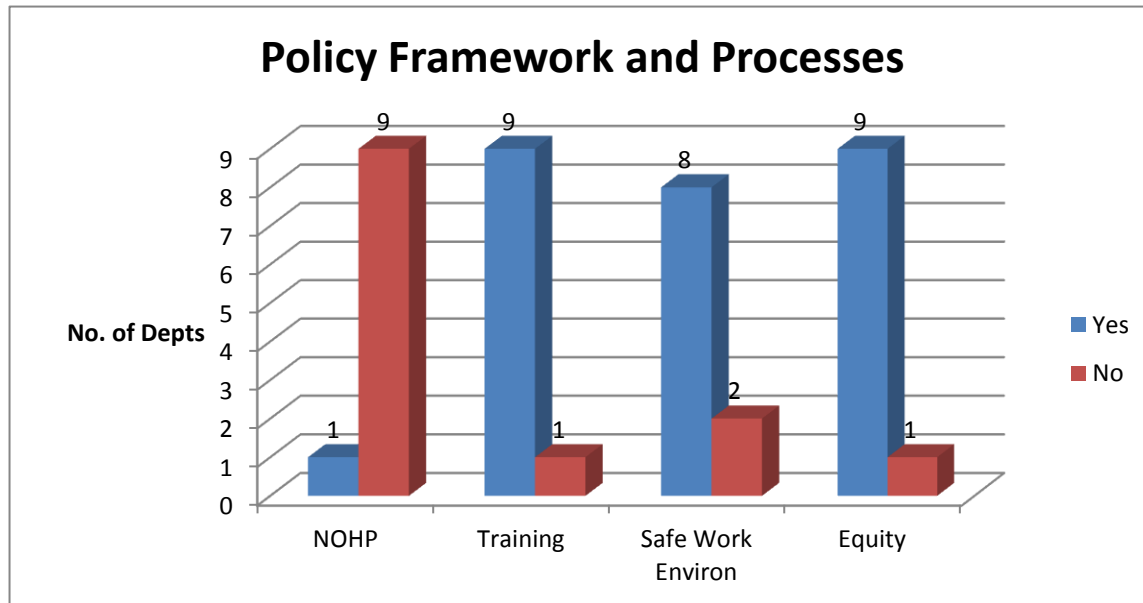


**Figure 3.1: The availability of legal framework in various departments (n = 10)**

#### **b) Availability of policy documents and processes**

Regarding a policy framework, the National Occupational Health policy for OHS, which governs OHS in the country, was only available in one (10%) of the departments and was not available in nine (90%) of the departments. Training and education on risk mitigation regarding OHS was reported to be provided in nine (90%) of the departments, while a safe working environment was reported by eight (80%) of the departments, with two (20%) departments reporting otherwise.

Equity in the workplace was reported in nine (90%) of the departments while one (10%) stated that there was no equity in the workplace. Figure 3.2 shows the findings regarding policy and processes at the hospital based on the departments assessed.



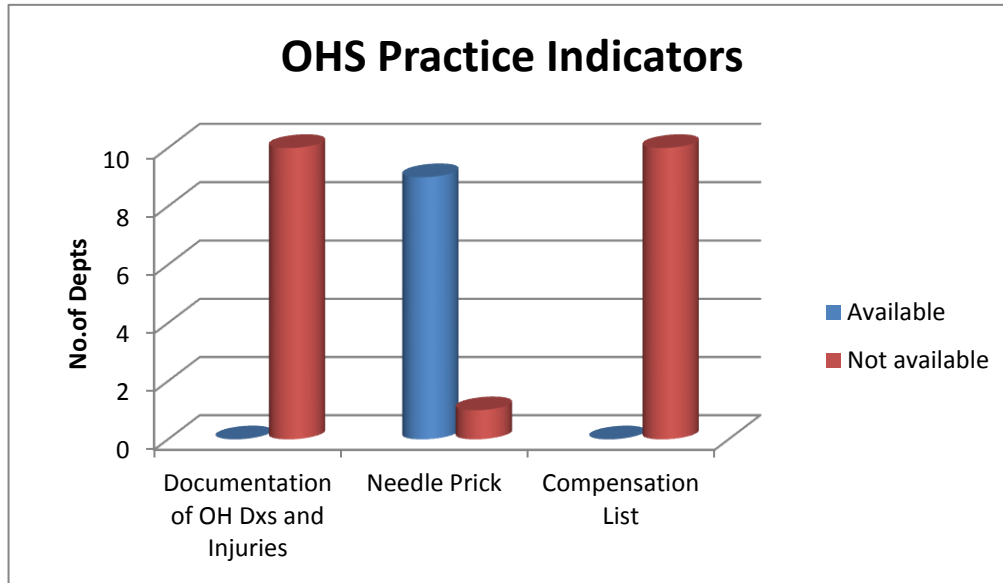
**Figure 3.2: Policy framework and processes (n = 10)**

### c) Policy strategies and practices

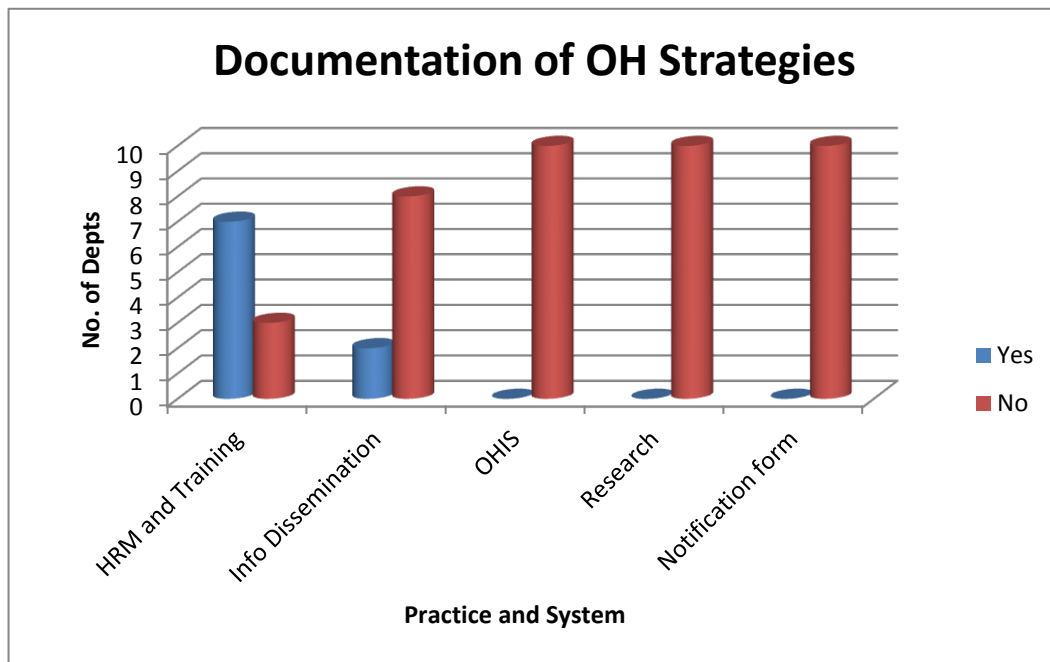
Policy strategies relating to practice indicators showed that documentation on types and causes of occupational diseases and injuries experienced at the hospital was not available in all departments. However, documentation on needle prick injuries was available in nine (90%) of the departments but unavailable in one (10%). A list of the type of compensation given for occupational disease and injury was not available in any of the departments assessed.

Documentation on the occupational health strategies relating to human resources management and training was available in seven (70%) of the departments but unavailable in three (30%), while the dissemination of OHS information was reported as being carried out by only two (20%) of the departments. An occupational health information system was not available in any of the departments assessed, nor had any research been done in relation to OHS nor had any notification of occupational disease forms been completed. Occupational hygiene and medicine provision as well as a risk assessment policy was only available in five (50%) of the departments. However, personal protective equipment (PPE) and a staff training policy were available in nine (90%) of the departments although unavailable in one (10%). Emergency training and first aid were provided in eight (80%) of the departments, while medical surveillance at the workplace was provided only in one department which represents just 10% of the selected departments.

The availability of staff in OHS was found to be as follows: The practice of medical surveillance at the workplace was reported to be provided only in one department (10%), while a health and safety officer was not available in any of departments assessed. Moreover, a health and safety representative was available in just one department, which represents 10% of the departments surveyed. Figure3.3 below summarises the situation pertaining to policy strategies and activities.

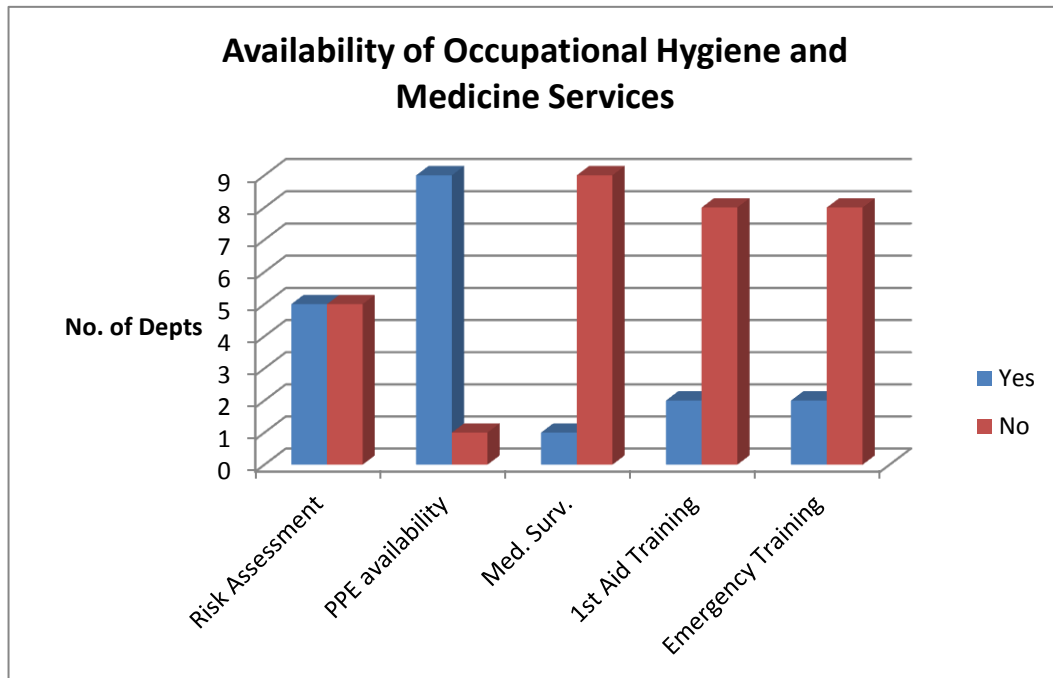


**Figure 3.3: OHS practice indicators (n = 10)**

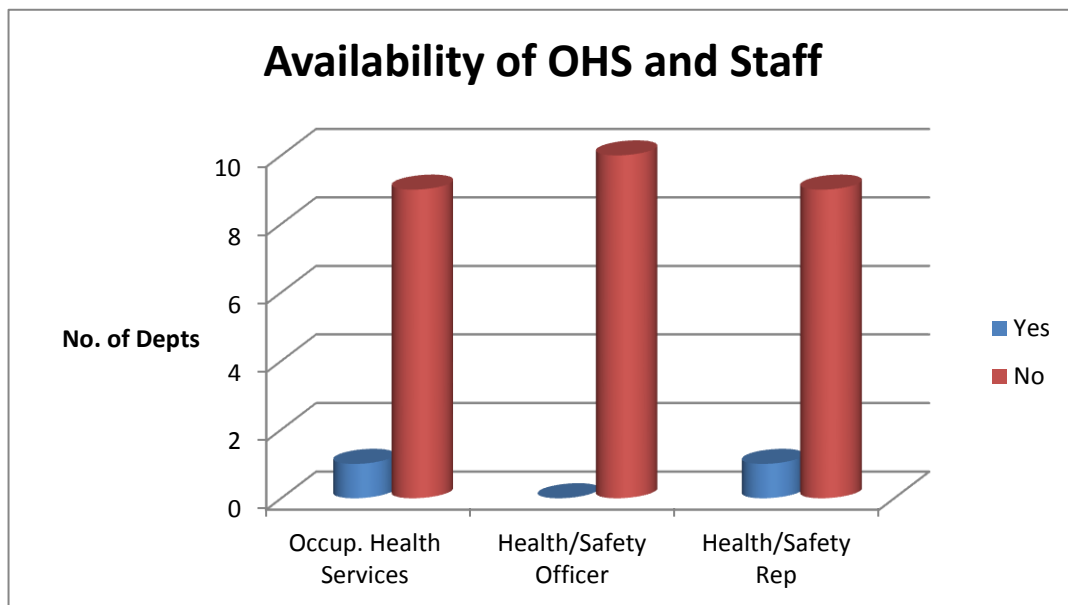


**Figure 3.4: Documentation of occupational health strategies (n = 10)**





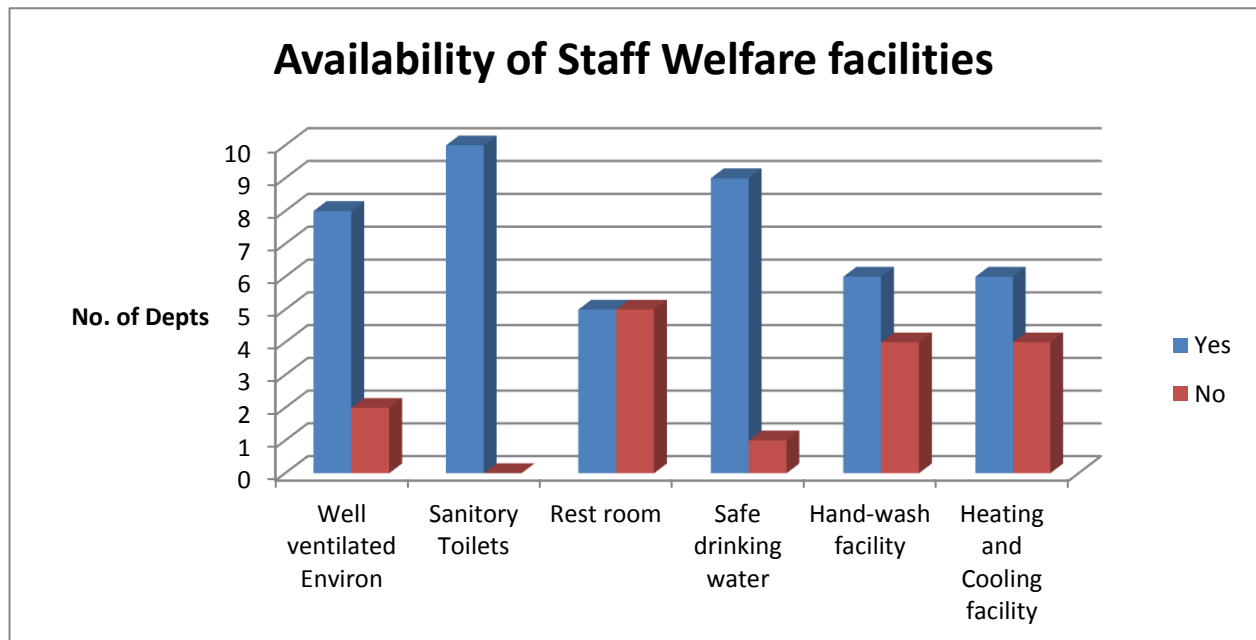
**Figure 3.5: Availability of occupational hygiene and medicine services (n = 10)**



**Figure 3.6: Availability of OHS and staff (n = 10)**

### e).Staff welfare and facilities in the workplace

In terms of staff welfare and facilities in the workplace, it was indicated that eight (80%) of the departments were found to have a well-ventilated working environment that was well lit and clean, while only two (20%) of the departments were found to have poor ventilation and poor lighting and not to be clean. All departments had clean and sanitary toilets (100%), but restrooms were found in only five (50%) of the departments. However, 90% (9) of the departments were found to have safe drinking water close to the workplace with only one (10%) of the departments not having safe drinking water. Hand washing facilities were provided in six (60%) of the departments, which is similar to the finding for heating and cooling appliances, which were also found in only six (60%). These findings on staff welfare and facilities are presented in Figure 3.7 below:



**Figure 3.7: Availability of staff welfare facilities (n = 10)**

**3.2.2 Discussions of the findings for objective 2**

The second objective was to describe and explore the perceptions of health workers regarding OHS at Onandjokwe Hospital. Triangulation methods were used for data collection consisting of FGDs, individual interviews and field notes.

- **Discussion on themes and subthemes**

Five FGDs were held consisting of three groups of nurses – combined categories of registered nurse, enrolled nurse and midwife, and enrolled nurse. These nurses were selected from different departments such as casualty, the maternity, medical and surgical wards, theatre, ICU, the paediatric, gynaecology and obstetrics ward, the communicable disease clinic, the infection control department, the personnel development office and health programme administrators. The second group was a combined group comprising a radiography assistant, social workers and a customer care officer, and the final group consisted of a group of doctors from various departments such as medicine, paediatrics, casualty, gynaecology and obstetrics.

The main themes and sub-themes that emerged from the analysis of the FGD data that were obtained from the different discussions are summarised in the table below. The emergent views are classified under positive and negative perceptions and the experiences of the health workers pertaining to OHS in the hospital.

**Table 3.1: Themes and sub-themes**

Themes	Sub-themes
<p><b>3.1 Theme:</b> Health workers' perceptions of the availability of occupational health support</p>	<p>3.1.1 Availability of standards and policy; post exposure prophylaxis (PEP) to upscale response to occupational injury; medical surveillance of X-ray staff regarding OHS and protective equipment to enhance occupational health support</p>
	<p>3.1.2 Proper health education given to staff members regarding occupational health safety</p>
	<p>3.1.3 Provision of medical aid scheme regarding occupational health and safety</p>
<p><b>3.2 Theme:</b> Health workers' perceptions regarding OHS challenges</p>	<p>3.2.1 No guidance from MOHSS regarding OHS</p>
	<p>3.2.2 Lack of resources such as material, financial and human to facilitate the implementation of the OHS</p>
	<p>3.2.3 Health workers' fear of stigma and discrimination by members of the public by being in the same queue for the treatment</p>
	<p>3.2.4 High staff turnover contributes to the non-implementation of OHS</p>
	<p>3.2.5 Unavailability of workers compensation for</p>

	occupational injuries
	3.2.6 National Occupational Health policy not properly implemented
	3.2.7 No comprehensive OHS
<b>3.3 Theme:</b> Health workers' perception of knowledge on OHS	3.3.1 Lack of knowledge on the use of protective equipment provided
	3.3.2 Lack of knowledge of health workers' charter and rights
	3.3.3 Lack of knowledge and awareness of occupational health risk
	3.3.4 No clear procedure for reporting work-related injuries and grievances
	3.3.5 Lack of knowledge about the existing occupational health services

Perceptions are described as the process of becoming aware of the world around, or insight that is shaped by experience of life, through the different senses or the mind and that give meaning to the environment (Positive-Thinking-Principles, 2012). In this study perception describes the health workers' awareness of the environment around them, which is influenced by their senses and previous experiences, practical or theoretical, of OHS. It can be summed up as an expression

of health workers' 'insight' into the world of occupational health and safety around them. Perception significantly affects how one relates to the environment around one.

### **3.1. Theme 1: Health workers' perceptions of the availability of occupational health support**

A positive perception OHS refers to the fact that some health workers who participated in this study supported the idea of the availability of occupational health services. During the study health workers showed their appreciation through laughter, smiles and gestures (field notes). On the positive perceptions of the health workers regarding the availability of occupational health support, the health workers perceived the situation as follows:

The majority of the respondents said that OHS support was provided to health workers, including adult fitness walking programmes that had been provided as part of wellness activities; however, this was taking place outside the hospital within the community. Medical surveillance of X-ray staff was also found to be available on an annual basis. Protective measures that had been implemented to guarantee health workers' safety in the workplace include protective clothes, safety, surgical face masks, N95 masks, gloves, hepatitis B immunisation, safe injection information, air conditioning and fans. In addition, guidelines on protection as well as health education are given to staff members to help them protect themselves against infection and health hazards. A standard operating procedure has also been formulated. Occupational health has also been implemented and provided to some groups outside of the organisation. For example, a committee for occupational health services has been established chaired by the

former principal medical officer and some groups have been tasked with certain activities for instance the formulation of standard operating procedure. Medical aid has also been provided as part of OHS. In addition, post-exposure prophylaxis is available in the casualty ward 24 hours a day so as to upscale the response to occupational injury. The respondents also mentioned the availability of an infection control officer and an environmental health officer, as part of the OHS support available.

In line with health workers' positive perceptions of the availability of occupational health support, the sub-themes identified are as follows:

### **3.1.1 Availability of standards and policies; post-exposure prophylaxis (PEP) to upscale response to occupational injury; medical surveillance of X-ray staff regarding occupational health services and protective equipment to enhance occupational health support**

#### **a) Availability of standards and policies**

Standards are described as the expected level of performance structured as written statements, whereas a policy is described as principles in a written form to direct decision-making during a specific action; it is also known as a rule or prescription that regulates behaviour or structures standards (Muller, 2004). In this study, standards refer to health and safety standards and policy refers to the National Occupational Health Policy.

These definitions are supported by Woodward (2006), who states that standards are designed to encourage and support a move to better practice. They are designed to give the organisation a measure against which it can assess itself and demonstrate improvement, thereby raising the

quality of its services and reducing unacceptable variations in the quality of services and service provision; to enable service users and care-seekers to understand what quality of service they are entitled to and provide an opportunity for them to help define and shape the quality of services provided. Standards are key service use and care value, including dignity, respect, independence, rights, choice and safety. Standards have five key quality themes: corporate leadership, the accountability of organisations, safe and effective care accessible, flexible and responsive services. This finding is harmonised with the study findings when the participants stated that standards are in place to upscale the response to occupational injury by making PEP available in casualty 24 hours a day. This PEP standard is available in all departments and health workers are oriented in this regard in order to promote, protect and improve health and social wellbeing through effective communication and information sharing.

The promotion of an occupational safety and health policy is seen as part of an overall improvement in working conditions that represents an important strategy for ensuring the wellbeing of workers, and contributing positively to productivity and sustainable socioeconomic development. Health workers who are motivated are likely to enjoy greater job satisfaction and contribute to better quality products and services, thereby enhancing the overall quality of life of individuals and society. Every country should put in place a coherent national policy in order to ensure that satisfactory and durable results are achieved in the field of occupational safety and health. Such a policy should be aimed at promoting and advancing the right of workers to a safe and healthy working environment at all levels (Alli, 2008). These findings concur with the findings of this study, in view of the fact that Onandjokwe Hospital is guided by the National



Occupational Health Policy which is aimed at promoting and protecting the right of workers to a safe and healthy working environment at all levels.

The ILO (2004a) has identified and specified codes of practice on occupational safety and health that address the following practices: “Recording and notification of occupational accidents and diseases” (1995), “Guidelines on occupational safety and health management systems” (2001), “Ambient factors in the workplace” (2001), and “HIV/AIDS and the world of work” (2001). The primary objectives of these codes of practice are to promote the goal of basic protection for all workers in conformity with international labour standards; to enhance the capacity of member states and industries; and to design and implement effective preventive and protective policies and programmes. Based on the findings of the current research it became obvious that no code of practice was followed at Onandjokwe Hospital. Work Cover (2002) concurs with the study findings by pointing out that a code of practice, which is regarded as part of a standard, must be available as part of health and safety issues in the workplace. They may also be used by a court of law as evidence of an employer's failure to implement their duty of care responsibility.

Rantanen, Lamberg and Taskinen (2004) identified the critical components of an effective occupational health practice as including the establishment of norms and standards, the development of objectives, health surveillance, survey of work environment and risk assessment, health education and safety training, information and initiatives for prevention and control, corrective rehabilitation and action. Other components cited by these authors include diagnosis of occupational diseases, general health services, maintenance of work ability and preventative and control measures, which include workers, the working environment and the work

organisation. Regular feedback needs to be given on development objectives, and follow up and assessment should be provided through the assessment of occupational health needs. What the checklist assessment in the different departments has revealed, and which is further supported by the findings from the key informant interviews and the FGDs, is that an effective occupational health service does not exist in Onandjokwe Hospital.

Some of the participants stated that an occupational health service has been provided as a committee has been established and is chaired by the former principal medical officer. Below are some of the comments the participants made during the FGDs:

*“Occupational health is implemented and has been provided to some group from outside of the organisation.”*

*“Standard operation procedure has been formulated, some groups were tasked.”*

*“Standards and policies are in place.”*

*“There is well-known and established procedure to follow when handling occupational exposures; standards and policies are in place.”*

#### **b) Availability of post-exposure prophylaxis to upscale the response to occupational injury**

The WHO (2007) describes PEP as a treatment administered to health workers and individual members of society following exposure to harmful agents, such as being punctured with a used needle or contaminated sharp items; splashed on the mucous with infected blood or body fluid and human bite with the aim of reducing infection. The main aim is to protect health workers

from being infected with HIV and hepatitis B. PEP should begin as soon as possible after exposure to HIV but certainly within 72 hours. Treatment comprises two or three antiretroviral (ARV) drugs, which are only available on prescription.

In this study, PEP refers to the taking of ARVs and receiving the hepatitis B vaccination as soon as possible after exposure to HIV or hepatitis B, so that the exposure will not result in HIV or hepatitis B infection.

This sentiment is supported by Sikorski, Swerhun, Lawrie, and Macpate (2012), who revealed that PEP, including hepatitis B immune globulin and PEP starter kits must be available on site, or arrangements have to be made for rapid access to PEP. The workplace must have policies and procedures for the management and follow-up of workers exposed to blood-borne pathogens either through an injury or exposure to mucous membrane or non-intact skin. This finding corresponds with the findings of this study, because it was mentioned that hepatitis B immunisation, safe injection and PEP are provided and are regarded as one of the major achievements in OHS.

This finding corresponds with a study done by Carter and Hughson (2012) in which they found that PEP has been used for many years for healthcare workers who have had possible exposure to HIV, for instance after accidentally pricking themselves with needles used on people who were known to be HIV-positive or at risk of HIV and after contact with body fluid, such as blood, semen, vaginal fluid, amniotic fluid and cerebrospinal fluid. PEP is also used in rape cases and in incidents of human bites. The main principle of PEP is to prevent HIV from entering the cells in the body and so stop a health worker from becoming infected with HIV. This finding of Carter

and Hughson (2012) supports the study findings because it was reported in the study that responses to occupational injury and PEP have been up scaled by making them available 24 hours a day in casualty. Moreover, the standard operating procedure for safe injection and PEP were available and known to all health workers. Manzoor et al. (2010) conducted a study among nurses in Pakistan and found that 74% of the nurses in the research had been vaccinated against hepatitis B. This finding concurs with the finding of this study, in which health workers stated that the fact that they had been immunised against hepatitis B was a major achievement of the OHS.

One of the individual interviewees stated that one of the major achievements of OHS was PEP:

*“By making available PEP 24 hours a day in casualty upscale of response to occupational injury.”*

The majority of the participants in the FGDs mentioned that PEP was seen as one of the achievements of OHS:

*“PEP and safe injections are seen as some of the achievement on occupational health services”.*

*“We are having post-exposure prophylaxis.”*

#### **b) Availability of medical surveillance for X-ray staff regarding occupational health services**

Medical surveillance is described as a process whereby employees are subjected to health examinations, which may include examinations for pre-placement and transfer, periodic examinations, or examinations on leaving the organisation. The main reasons for these are to

establish a baseline of the candidate's health against which any future changes can be measured. This is done in order to identify possible risk of deterioration in the health status which might be caused by the job process and the work environment, as well as to determine whether the candidate's physical and mental status is suitable for the performance of the requirements of the job (Occupational Health Services, 2003).

In this study medical surveillance referred to is the periodic examination of health workers, which includes clinical examinations and medical tests by a medical practitioner.

Niu (2010) states that the ILO has a mandate to protect workers against sickness, diseases and injuries resulting from workplace hazards and risks, including ergonomic and work organisation risk factors. By contrast, in this study the participants revealed that nothing had been put in place by the hospital management for risk assessment or the protection of employees. Despite this the study found that medical surveillance was provided to X-ray staff only as well as some groups from outside the hospital, especially food handlers. The MOHSS (2006) has pointed out that OHS play a key function in advancing health and preventing disabilities in the workplace. The overall goal of OHS is to promote and improve socioeconomic development through the provision of safe and healthy work environments and the prevention of work-related adverse health through the implementation of reasonable practices. The research has revealed that compliance with OHS regulations on hazard notification and periodic health examination of workers has only been partly done at Onandjokwe Hospital.

To implement OHS (Medical Surveillance, 2013), a well-planned strategy must be implemented in order to follow all legislative as well as ethical guidelines. This would include annual planning of the number of employees to go for medical examinations per month and their outcome-based

projections; a facility for examination or evaluation, for instance a staff clinic; a record-keeping system that is accessible and sustainable; and annual reports to management. Problem areas identified during surveillance should be reported and recommendations should be made to mitigate the risks identified (Medical Surveillance, 2013). This is contrary to the current study, which found that the annual examination was done only for the X-ray staff and other health workers were excluded. Moreover, there was no staff clinic and no annual reports on OHS were prepared for the management.

Some of the participants stated that medical surveillance was provided for X-ray staff on an annual basis:

*“Annual screening for X-ray staff is one of the major achievements on OHS.”*

*“Annual medical check up for radiographer”*

These opinions were supported by the radiography staff. They expressed their perceptions on the availability of medical surveillance as follows:

*“As a radiographer I use to undergo medical surveillance on annual basis.”*

#### **d) Availability of protective equipment to enhance occupational health support**

The MOHSS (2006) has pointed to protective equipment as meaning the application of suitable administrative and technical control according to occupational health and safety policy. Administrative control relates to risk assessment and priorities for improving the working environment. Technical control is the implementation of protection by the employer to guarantee that employees are using the using the protection to the satisfaction of the inspector and that equipment is suitable and adequate for personal protection.

In this study, protective equipment and administrative control are referred to risk assessment and priorities within the working environment, such as hepatitis B immunisation and safe injection. On the other hand, technical control refers to personal protective equipment. In this study personal protective equipment includes aprons, gloves, boots, gowns, goggles and facemasks, such as surgical, disposables and N95 face masks which that are intended to protect the health workers against tuberculosis .

Hammer and Price (2004) support the findings of this study when they state that protection in the workplace is considered as imperative for employee safety to prevent accidents and employers must ensure that the organisation adheres to occupational health and safety regulations by guaranteeing that there is the right protective clothing in the workplace. Keeping employees safe while on the job is an incredibly important responsibility. Protective clothing, which is worn for long periods of time at work, should be comfortable to wear. Personal protective equipment is a kind of working wardrobe designed to safeguard the health and physical wellbeing of working people on the job. Personal protective equipment covers the body from head to toe and includes safety eyewear, respiratory masks, chemical suits, gloves, footwear, gowns and aprons. Their use depends on the jobsite and the potential hazards of the particular job.

However, at Onandjokwe Hospital, it was found that the personal protective equipment provided by the hospital included aprons, face masks, boots, gloves and gowns. Accordingly, the Western Australia Committee for Biological Agents (2006) gives the order of priorities in occupational safety and health to be applied with respect to protective measures in all working areas and these are described as structural, technical and organisational, including hygienic and personal protection. Protective clothing and personal protective equipment must be cleaned regularly and where relevant, and disposed of at the employer's expense. The following personal protective

equipment should be considered: protective clothing, gloves, and eye protectors. This recommendation has harmonised with the study findings with the participants' statements that they were given protective equipment such as boots, gowns, aprons, gloves and face masks to use as a protective measure at the workplace.

The majority of the participants responded that they had been provided with protective measures to guarantee their safety at work by the organisation. These included protective clothing, safe injections and a safety box. They stated the following in this regard:

*“Protective equipments are provided to guarantee the safety at work. Health workers are provided with N95 face mask and surgical face masks.”*

*“Protective measure that has been provided to me is hepatitis B vaccination.”*

*“Protective equipments provided such as face mask and gloves are provided as occupational health services.”*

*“Except for the protective clothes and safe boxes that are provided in theatre”*

*“Protective measures provided were such as face mask and gloves”*

### **c) Proper health education given to staff members on occupational health and safety**

Health education has been defined as a combination of learning experiences designed to facilitate voluntary actions conducive to health. The terms in the definition – combination, designed, facilitated and voluntary action – have significant implications in the definition. “Combination”



emphasises the importance of matching the multiple determinants of behaviour with multiple learning experiences or educational interventions. “Designed” distinguishes health education from incidental learning experiences as systematically planned activity. “Facilitate” means to create favourable conditions for action. “Voluntary action” means behavioural measures are undertaken by an individual, group or community to achieve an intended health effect without the use of force, such as with full understanding and acceptance of purposes (Iqbal & Alem, 2004). In this study health education is regarded as the combination of learning experiences of the hospital management, which is designed to promote health behaviour among health workers to prevent occupational injuries and promote safety at work.

Rantanen et al. (2004) point out that the duty of OHS is to promote the health of workers. Health promotion is partly the improvement of people’s opportunities for actively taking care of their own health, and to stay healthy. Health promotion in work life is seen as an area that is reflected in the relationships between an individual, work and health. The maintenance and improvement of health is seen as one entity in work life, and the prevention of illnesses and reducing risk factors as another. Health education is seen as one of the tools of the OHS for promoting health. However, health workers stated that OHS is needed to provide care for the caregivers. Nevertheless, it is not provided to them as caregivers and they had not been given training in occupational health hazard preventive measures. However, the participants did state that health education had been given to health workers regarding the anticipation of occupational injuries.

Health education is aimed at motivating people to adopt health-promoting behaviours by providing appropriate knowledge and helping to develop positive attitudes. It is also intended to

help people to make decisions about their health and acquire the necessary confidence and skills to put their decisions into practice (Alli, 2008). However, this sentiment was harmonised with the study findings in that the participants applauded the fact that they have been given health education on handling occupational exposures.

Some of the interviewees who took part in the in-depth interviews regarded health education as the key to preventing occupational injuries and perceived the situation as follows:

*“Injury is minimised, because the employees are aware about OHS given through health education.”*

*“Health education is given on the procedure to follow when handling occupational exposures.”*

#### **e) Provision of a medical aid scheme regarding occupational health and safety**

A medical aid scheme has been described as a fund that offers cover to the citizens of a country for medical expenses. Such a company undertakes responsibility in return for a premium, otherwise called a contribution, to make provision for any relevant health services, assistance in defraying expenditure incurred in connection with the rendering of any health services by the medical scheme itself, by any suppliers or group of suppliers of a relevant health service and any person in terms of the medical scheme agreement (Well@ Pfizer, 2013).

In this study, a medical aid scheme refers to the Namibian Medical Care scheme provided for health workers in the hospital. Health workers are enrolled on the Ruby option in order to cover their medical expenses.

Medical aid funds are challenged to create initiatives and find solutions to make health care in Namibia affordable and sustainable. Medical aid schemes are needed to make social protection more accessible to more clients. Accordingly, Namibia needs benefit designs and packages that appeal to all employees in order to provide medical cover to all employees (Brockmeyer, 2012). These findings are harmonised with the study findings in that participants mentioned that their employer has contributed to improving health and social wellbeing among its employees by providing them with medical aid cover.

One of the participants of the FGDs highlighted medical aid as a form of occupational health support available under the OHS.

*“I was only given medical aid as part of Occupational Health Services.”*

### **3.2 Theme 2: Health workers’ perceptions of OHS challenges**

Negative perceptions in this study refer to the fact that the health workers who participated in the study declined the availability of OHS in the hospital. Accordingly, they mentioned the challenges that hamper the effective implementation of OHS. Participants listed the managerial challenges that influence OHS negatively such as the fact that no training or seminars are provided on OHS or occupational health hazards; there is no guidance from the MOHSS and no focal person for OHS, to control how protective measures are used or to answer their questions about work-related problems. Additionally, these participants identified a lack of financial and human resources, and stated that compensation and medical surveillance are not available in the workplace. Also they cited the problem that some of the infrastructure was beyond repair and poses an occupational hazard in the workplace.

Another pertinent issue was the lack of infection control measures coupled with the unavailability of an occupational health committee and absence of OHS representative in all departments. Although the policy is available it is not implemented. No comprehensive OHS were available, including a lack of staff welfare services. In this theme, the negative perceptions of health workers regarding OHS challenges, the sub-themes were described as follows:

### **3.2.1 No guidance from the Ministry of Health and Social Services regarding occupational health services**

Guidance refers to the help and advice that is given to someone about their work, education, or personal life (The Longman Dictionary, 2013).

In this study no guidance from the MOHSS referred to the absence of education, help and advice from the MOHSS regarding the utilisation of OHS in the hospital.

In their study, Bilia and Manyele's (2003) findings concur with those of this study. They mention the challenges facing environmental and occupational health services in many African countries, for example issues are not given adequate emphasis due to a lack of priority setting, outdated registration, lack of data and limited research. Lack of political will in many countries renders the effectiveness of environmental protection policies below standard. It was also observed that there is a shortage of manpower for monitoring compliance with environmental regulations and a lack of technical knowledge and equipment. In this study, the participants mentioned that there was lack of direction from MOHSS, a lack of management foresight and there were critical issues that hamper the effective implementation of OHS, such as a shortage of

staff, a lack of occupational health officers, as well as limited finances and poor technical knowledge on OHS.

A report by the WHO (2012) revealed that the challenges that hamper the effective implementation of OHS in Namibia include inadequate enforcement of legislation because employers and employees are ignorant of their legal responsibilities and duties. This is strongly supported by the current study when participants stated that the employers are ignorant of their legal responsibilities and duties.

Certain of the participants highlighted some of the managerial challenges that influence OHS negatively:

*“No guidance from Ministry of Health and Social Services regarding occupational health services.”*

*“There is reluctance in government to strengthen the implementation of occupational health services.”*

*“There is lack of capacity in strategic office, to strengthen the implementation of occupational health services.”*

*“There is lack of knowledgeable and poor support effort from management.”*

*“There is ignorance of management level to implement occupational health programme.”*

### **3.2.2 Lack of resources such material, financial and human to facilitate the implementation of occupational health services**

The majority of the participants bemoaned the fact that there was a shortage of resources that were seen to obstruct the effective implementation of the OHS. On the lack of material

resources, the participants highlighted that some of the health workers did not take the complete hepatitis B immunisation dosage due to the unavailability of resources. In addition, health workers sometimes worked without taking protective measures, such as gloves, gowns and boots and washing hands with soap. Sometimes protective measures were provided but they were not sufficient for all health workers; consequently health workers were forced by circumstances to share protective clothing such as boots and gowns.

Under the heading a “lack financial resources”, participants mentioned some of the problems that were experienced, such as the fact that there was no compensation given for occupational injuries and that medical surveillance was not available in the workplace, the problem relating to the state of the infrastructure as some of it was beyond repair and posed an occupational hazard in the workplace. In addition, there was no separate clinic for the health workers.

Regarding the lack of human resources, one participant mentioned the following issues: no focal person for OHS to control how protective measures are used, to guide health workers on protective measures, and to answer their questions regarding work-related problems; moreover, other were no OHS representatives in any of the departments. Furthermore, training and seminars on OHS and occupational health hazards were not provided and there was high staff turnover which contributed to the staff shortage. Lack of support after medical surveillance had been carried out on X-ray staff and the absences of an occupational health committee were also mentioned.

**a) Lack of material resources**

The Business Dictionary (2013) describes a lack of material resources as the absence of assets in the form of material possessions and resources in the organisation, whereas an asset is seen as anything of material value that is useful and is owned by a person or company.

In this study, material resources included hepatitis B immunisation, protective clothing and liquid soap for hand washing, building infrastructure as well as a staff clinic.

Constantinidis et al. (2010) findings concur with those of this study when they found that a significant percentage of health workers do not use personal protective equipment adequately and workplace safety design is relatively poor. In the present study, health workers stated that they are facing hazards in the workplace seeing that the hospital buildings are so old and are without adequate lighting. Occasionally, personal protective equipment was insufficient and health workers operated without them, or they shared personal protective equipment such as gowns. Such conditions also prevailed in the study by Ahmad et al. (2012) who found that the common challenges to occupational health and safety are a lack of basic infrastructure and poor sanitation. Likewise, in the current study participants bemoaned the fact that facilities were poor and there was a reported shortage of material resources.

Yassi et al. (2009) conducted a study on workplace assessments and found access to supplies and personal protective equipment as the major reason reported for failure to follow proper procedure. In the current research, the shortage of and limited resources in OHS were highlighted by health workers. Furthermore, they also bemoaned the fact that sometimes health workers are exposed to occupational hazards because they operate without protective equipment such as gloves, gowns and boots and hand wash soap. This dismay on the part of the participants is supported by the Work Safe Western Australia Commission (2002), which states that the

employer has an obligation to provide employees with adequate protective clothing and equipment free of charge where hazards cannot be avoided. Unfortunately, this study showed that protective equipment at Onandjokwe Hospital was inadequate and could put health workers' lives at risk. Employers must take reasonable care to protect the of their employees safety and avoid harming others.

On the lack of material resources participants highlighted that some of the health workers did not complete hepatitis B immunisation due to the unavailability of resources and sometimes even if protective measures were provided they were not sufficient for all health workers, consequently they were forced by circumstances to share protective clothing such as boots and gowns. Participants had this to say on the matter:

*“I need specific clinic for the health workers consisting of Dr and nurses working there full time, even in event of needle prick a person may be attended at once; we need quick services.”*

*“The infrastructures are going beyond replacement, walls are falling down, not enough light, and this can contribute to hazard at workplace that may affect the client or health worker.”*

*“Health workers are provided with gowns but they used to share them from one health worker to another.”*

*“No specific department for Occupational Health Services due to organisation structure.”*

*“Sometimes health workers are exposed to occupation hazards because they operate without protective measures such as gloves.”*

*“I did not complete the dose for hepatitis B, because vaccines were not enough and now I don't know if I have to restart the vaccination or not, we use to ask several times if the immunisation*



*for hepatitis B is available at PHC but the response was none; I was told to go to private practitioner to complete the vaccination.”*

#### **b) Lack of financial resources**

A lack financial resource is described as the absence of accessible capital in the business for spending in the form of cash, liquid securities and credit lines. Entrepreneurs and business operators are required to secure financial resources adequately before they start a business, so that they will be able to function proficiently and sufficiently in order to facilitate the success of their business (Business Dictionary, 2013).

In this study, a lack of financial resources referred deficient capital in the hospital in the form of cash (a deficiency of money), which resulted in OHS not being included in the hospital budget.

Benach, Amable, Menéndez, and Muntaner (2004) have reported that work-related health problems in Spain place as an enormous health and economic cost burden on workers, companies and society as a whole. There is a high level of occupational injuries reflecting major failings in the prevention systems that a developed country cannot afford to have. This is in line with the finding of the present study when participants claimed that financial problems were seen as an obstacle to the implementation of an OHS programme. This notion is sustained by Rebman et al. (2008) who state that the financial resources of health care organisations also affect the availability of OHS services. If funding bodies, whether national or local government, do not allocate appropriate financial resources to occupational health, it is impossible to adequately address the prevention and treatment of occupational diseases and injuries. This finding is echoed in the present study where participants states that there was a lack of financial resources

to carry out occupational health service activities since OHS were excluded from the funds for the hospital allocated by the government.

By contrast, an Occupational Health Services (2003) report has emphasised that it is mandatory that all employees be subject to health surveillance which possibly will include pre-placement examinations, transfer examinations, periodic examinations and examinations on exiting the organisation. The rationale for this is to identify a baseline for the candidate's health against which any future changes can be measured and the possible risk of deterioration in health status which might be caused by the job process and work environment can be discovered. However, the research has revealed that medical surveillance is not performed to all health workers in the organisation as only X-ray staff has been considered owing to limited financial resources. The study participants further stated that they required medical surveillance to determine their health and illness status of the and whether they have acquired an occupational disease.

Here is what some of the participants in the study stated regarding the problem:

*“We are having a problem at our hospital. There is no money implement such programmer.”*

*“There are financial constraints that prevent health workers to undergo medical surveillance.”*

*“Post for occupational health services are not advertised since there is no budgeted for it.”*

*“The financial problem is the barrier to occupational health services implementation.”*

### **c) Lack of human resources**

The Business Dictionary (2013) describes human resources as the branch in the organisation that is focused on strategies relating to employees. These strategies usually comprise the recruiting and hiring of new employees, the direction and training of current employees, employee benefits, and retention. In this study the respondents mentioned the lack of human resources, which means that the division in the hospital which is responsible for recruiting and hiring of new employees, directing and training current employees, employee benefits, and retention has failed to supply the hospital with adequate personnel.

Human resources in this study include the nurses in various categories and medical practitioners, as well as other health professionals who carry out OHS.

According to the Royal College of Nursing Public Health Forum (2010), there is a need to have occupational health support workers within the occupational health setting to execute agreed health screening and surveillance of the workers. This may include elements such as health education and the collection of health data that contribute towards the assessment of health risks arising from any work activity. This finding contrasts with the findings of the current study that a focal person for occupational health is not available at Onandjokwe Hospital.

This finding concurs with the study findings because participation in emergency and disaster planning by, for example, first-aiders and fire fighters is present in the setting in which this research took place. However, there were no occupational health medical officer or risk managers in relation to employee replacement and transfers on medical grounds within the workplace. According to Goetsch (2005), risk managers are needed in the workplace to focus on the prevention of workplace violence and its direct adverse consequences, which may include stress, and issues related to human resources management and health and safety. Respondents

did not report any workplace violence and there appeared to be no measures in place for the prevention of violence save for adherence by health care workers to professional ethics and the Public Service Staff Rules.

The report by the WHO (2012) supports the study findings. This report revealed that challenges regarding the effective implementation of OHS in Namibia include the inadequate enforcement of legislation due to insufficient staff allocation and the lack of trained occupational health personnel in the MOHSS at all levels. This finding is supported by this study as participants confirmed that there was a shortage of trained experts. Alli (2008), in line with other research, found that management commitment to occupational safety and health may be demonstrated in ways such as allocating sufficient resources, especially human resources, for the proper functioning of the occupational safety and health programmes, establishing organisational structures to support managers and employees in their OHS duties and designating a senior management representative to be responsible for overseeing the proper functioning of OHS management. Alli (2008) study, in common with the present study, found a shortage of human resources, limited medical surveillance and a lack of support for the health workers after they acquired occupational injuries. There were no occupational health representatives as well.

Frijstein, Hortensius, and Zaaier (2011) support this sentiment when they found that the number and nature of occupational exposures indicated that preventive measures must focus on the training of experienced occupational health nurses and physicians. By contrast, in the current study one of the most important study findings was that there was no occupational nurse or physician in the organisation. Ahmad et al. (2012) concur with the study finding when they state

that the common challenges to occupational health and safety that must be confronted include deficient qualified human resources in occupational health and safety, a lack of research and decreased interdisciplinary cooperation between social science and medicine. The findings from this study have revealed that there was no focal person for OHS, and that no OHS research had been reported at the hospital.

The majority of respondents indicated a lack of human resources in the following responses:

*“We need appointment of occupational health committee – active one, health and safety representative in each unit.”*

*“There is no OHS representative.”*

*“We are having a problem at our hospital, no people to implement such programme.”*

*“There is staff shortage since people are resigning.”*

*“I think although protective measures are provided there is a need for focal person to control how protective measures are used and monitor health workers needs.”*

*“As a health worker I am expecting at least to have a (private consultation for health worker) clinic for the health workers, where there is a nurse, doctors and social workers.”*

*“As a health worker I am expecting at least to have certain examination to be done; annual check up to be done to determine health or illness status of the health workers, blood test should include the x-ray and dental services.”*

*“Health workers are exposed to occupational hazards like prolonged standing, no assessment done; at least we need three months assessment or periodical assessment.”*

### **3.2.3 Fear of stigma and discrimination of health workers by members of the public by being in the same queue for treatment**

Stigma is about beliefs and attitudes, while discrimination relates to actions. Both are based on negative views of people simply because they are seen as belonging to a particular group (ILO, 2004). In this study, stigma and discrimination are applied to the health workers by the community members because health workers used to be in the same queue with members of the public looking for treatment. The health workers thus feel stigmatised.

Lashuay and Harrison (2006) reported in their study that fear of stigma and discrimination of health workers by their patients when they are in the same queue with their patients is potentially jeopardising for their health. There are also other variations of the often overt pressure on workers not to report injuries or speak up in the workplace and look for professional help. The respondents in the FGDs highlighted the absence and need for a staff clinic where they do not need to queue with the patients. This might potentially arise from fear of stigma and discrimination, as the study by Lashuay and Harrison (2006) has pointed out.

Work Safe Western Australia Commission (2002) states that it is an offence for an employer or prospective employer to discriminate against employees or prospective employees: representative or committee member; giving information or assistance to a safety and health representative or committee member; or making a safety and health complaint to specified persons. This finding harmonises with the study findings when respondents claimed that they were afraid of being stigmatised by community members if they were seen in the queue waiting for the treatment together with members of the public. This sentiment is supported by Intra

Health (2014) which states that the fear of stigma might obstruct entry into health occupations and contribute to absences from work, lower productivity, poor health and low morale. Therefore, health workers deserve safe workplaces where they can do their jobs. Health workers should not have to live with the fear of becoming infected and experiencing discrimination. This finding concurs with the study finding when participants stated that they feared being discriminated against by community members when they accessing health services.

Fear of stigma and discrimination were expressed by some of the participants as follows:

*“I fear of being seen in the queue with the patients, I am afraid of the patient! Because the patient may feel that nurse are also sick even though they are the one who suppose to help us.”*

*“Occupational health services provided is for the PEP after needle pricks at casualty, other services that a health workers might need, she/he need to queue with other patients but the health workers fear to be stigmatised by the community.”*

### **3.2.4 High staff turnover contributes to the non-implementation of occupational health services**

High staff turnover refers to the rate at which staff changes in the workplace. High turnover means that staffs are leaving at a fast rate and this can harm the productivity of the company. There may be reasons for this such as low pay and poor working conditions among others (Leahy, 2012).

In this study high staff turnover is regarded as staff shortage caused by the resignation of health workers which contributed to health workers' stress and overworking.

The findings of Whipple (2013) that employee turnover is a fact that affects many organisations, concur with the findings of this study. It is known that the cost of employee turnover is more than the annual salary of the individual lost. Reducing employee turnover is not rocket science; poor leadership is the common denominator of high turnover in organisations. For that reason organisations that stress leadership development have an intrinsic advantage that can mean the difference between survival and extinction. This agrees with the study findings, as study participants bemoaned the fact that they were overworked as a result of the staff shortage and many were burnt out. The WHO (2012) sustains this notion by citing the following strategies that can help to reduce high rates of staff turnover in organisations. Organisations that focus on employee development enjoy higher employee satisfaction, which leads to lower turnover. Reinforcing people for doing good work lets them know they are appreciated. Organisations should build trust in relationship among employees, reduce boredom and communicate. However, the research has revealed an absence of such strategies at the hospital to reduce the high turnover rate among the health workers.

This finding has been acknowledged by Van Wyk and Pillay-Van Wyk (2010) when they state that it may be useful to provide health managers with evidence about the effects of preventive staff-support interventions that aim to help staff cope with occupational stress and improve health worker motivation for improved performance. Despite the study finding there were no preventive staff-support interventions provided to help staff to cope with occupational stress since health workers complained about staff burnout, staff shortages and overwork. Additionally, the research revealed there were no programmes on worker motivation to improve their performance. Consequently high staff turnover was reported.

Some of the participants in the FGDs highlighted the following in this regard:



*“We are over-working due to shortage of staff.”*

*“There is a staff shortage since people are resigning.”*

*“I think because there are new workers coming and there is high staff burnout.”*

### **3.2.5 Unavailability of workers compensation for occupational injury**

The WHO (2012) mentions that workers' compensation systems require employers to provide workers who suffer job-related injuries and disabilities with medical treatment and monetary compensation to replace lost income. Compensation in this study is related to health workers' compensation after having acquired an occupational injury.

The Texas Department of Insurance (2013) mentions that the Employees Compensation Act No. 30 of 1941 as amended in Australia declared that all workers are eligible for compensation if they are injured while working or contract an occupational disease. The types of compensation paid to workers for injuries or diseases are medical aid, temporary disablement, permanent disablement and fatality compensation. The Compensation for Occupational Injuries and Diseases Act requires employers to report all diseases that are caused by work. Despite the provisions of the Act, participants in the study revealed that compensation was not available and they requested that it should be made available to all health workers to sustain their families and their future in the case of sustaining occupational diseases and injuries.

This is supported by the Government of Canada (2013), which states that, in Canada, it is mandatory for workers to receive compensation once they become victims of work accidents or come down with work-related illnesses. Upon sustaining such injuries or illnesses they qualify for compensation through the Workers' Compensation Board in their province. The monies paid out may include the following: temporary payments for lost income, permanent payments paid

out following the final settlement of a claim, payments to cover medical expenses, such as prescription drugs, payments to cover medical treatments, such as chiropractic or physiotherapy expenses, rehabilitation expenses, such as training, medical equipment, clothing, and auxiliary care for day-to-day activities and payments to cover a physical disability. However, this practice is not in consonance with the study findings in Onandjokwe Hospital, in view of the fact that the majority of the participants complained that there was no compensation available in the workplace to cover occupational injuries at work.

Trewern (2008) concurs with the reports from Texas and Canada and states that if an injury occurs, the organisation should have a process to follow in order to ensure that all parties have a clear understanding of the requirements and desired outcomes. It is the company's responsibility to direct and guide the insurer, participating in claims management activities and to instruct the insurer to act on their behalf. Hence, the company has a duty to manage its own workers' compensation claims and injured workers with the assistance of the insurer and, if required, an external consulting company. This must be done by following set procedures:

- Immediately upon becoming aware that an employee has sustained an injury, the supervisor should arrange for suitable medical treatment and transport to hospital, notification of the manager.
- Completion of a claim form must be done and sent within 24 hours and rehabilitation procedures initiated.
- Once the claim is established and rehabilitation has commenced, regular conversations will be held with the insurer. This will include the following exchange of information: Supervisor will outline worker's current status such as hours, duties, treatment being

received and progress. The insurer outlines their information such as medical reports, accounts being received, and medical appointments.

This recommendation is in contrast to the present study finding where it was found that there were no compensation available in the workplace and health workers complained that they wanted to be compensated in cases of occupation injury so that their future would be secure.

The WHO (2012) has reaffirmed the poor state of OHS in many countries by declaring that the notification and submission of compensation reports for occupational diseases and injuries are very weak. Moreover, notification, compensation and other OHS statistics are not available. This has been rightly supported by the study when participants stated that there was no compensation available in the workplace, consequently there was no notification of or reporting on occupational diseases and injuries and OHS statistics.

However, one cornerstone of a responsive occupational health service is that compensation, rehabilitation and curative services must be made available to workers who suffer occupational injuries, accidents and work-related diseases. Action must be taken to minimise the consequences of occupational hazards. The information gathered through the FGDs suggests that generally no action is taken to address occupational injuries, accidents and work-related diseases at Onandjokwe Hospital. Compensation and rehabilitation are not provided and a curative service is only addressed in the form of medical aid provision to all health workers in the hospital. The Workmen's Compensation Act of Namibia does, however, makes provision for the compensation of employees for injuries sustained while on duty, once the due process of reporting and assessment has been followed by the organisation. It would appear that this process is not followed at Onandjokwe Hospital.

In one of the FGDs, the following statements indicated the need for health workers to be compensated after having acquired occupational injuries or diseases:

*“We need to be compensated in order to support our family.”*

*“Compensation is a must; we need it to support our family just imagine, you are working in TB ward and you acquire MDR, or pricked by needles and acquire HIV, we need to be compensated in order to support our family.”*

*“No compensation made on occupational injury.”*

*“Nothing can be done when you got injury at workplace regarding our future.”*

### **3.2.6 National Occupational Health Policy not properly implemented**

Policy implementation is a dynamic and evolving process owing to a confluence of factors, including networked implementation structures, socio-political conflict, and administrative reforms that shape how policy ideas are translated into social betterment programmes. Policy implementation is regarded as the process of carrying out a government decision (De Groff & Cargo, 2009). In this study policy implementation refers to the implementation of the National Occupational Health Policy.

According to the ILO (2004), there are methods for implementing policies relating to occupational health and safety. Having regard to the diversity of national circumstances and practices, OHS may be provided as expected by the laws or regulations, collective agreements or as otherwise agreed upon by the employers and workers concerned and in any manner approved by the skilled authority after consultation with employers’ and workers’ organisations. In the

present study it was found that the National Occupational Health Policy was not effectively implemented. Only a few components of the policy have been implemented in the hospital such as the annual medical surveillance of X-ray staff, and the availability of PEP in the hospital to all health workers. However, the majority of the health workers stated that the policy had not been implemented. Some mentioned that although the policy was available and had been implemented theoretically, practically it had not been implemented. Consequently, the hospital does not comply with ILO requirements which state that OHS may be provided, as expected by laws or regulations after being approved by the skilled authority and after consultation with employers' and workers' organisations.

This was also proved by Work Safe Victoria (2001), which states that policy procedures must be understood as an important part of implementation. Policy involves a statement to all employees and therefore policy content needs to be communicated to all employees. Implementing a procedure may also require resources and changes to existing administrative procedures. Contrary to this assertion, it was found that the National Occupational Health Policy had been only partially implemented; the policy had been implemented theoretically but practically it had not. Moreover, health workers are not oriented to the content of occupational health services policy. The majority of the health workers expressed the fact that there was a problem on the implementation side resulting from a lack of human, material and financial resources.

In line with other researchers, Hamzoui (2007) mentions that the key strategic principles of international and national occupational health and safety policies are the avoidance of hazards, safe technology, optimisation of working conditions, integration of production, health and safety activities, government's responsibility, authority and competence in the development and control of working conditions, the primary responsibility of the employer and the entrepreneur for health

and safety at the workplace, the recognition of employees' own interests in occupational health and safety, cooperation and collaboration on an equal basis by employers and workers, the right to participate in decisions concerning one's own work, the right to know and the principle of transparency, as well as continuous follow-up and the development of occupational health and safety. Nevertheless, it was found in this study that the hospital did not recognise employees' own interests in occupational health and safety and health workers were not granted the right to participate in decisions concerning their work. The study findings are in line with findings from other research such as that of Niu (2010), who states that health problems in the workplace are similar around the globe. The main problem is on the implementation side and not as regards policy development. In developing countries such as Namibia, where Onandjokwe Hospital is located, the policy had only been partially implemented, as has already been highlighted.

Regarding the implementation of the National Occupational Health Policy, the following was highlighted:

*"To me the policy is not implemented. I am not satisfied; I was not oriented toward occupational health services."*

*"We are expecting OHS to be provided according to the policy, but now we cannot give details since we don't know the content of the policy and we need to see the policy first in order to know what is required."*

*"The way I see it is that, the policy is available but not implemented; there is no provision for occupational health services. Because people are too busy to implement it, some departments need to be prioritised."*

*"I do not know what services is stipulated in the policy."*

*“We are expecting occupational health services to be provided according to the policy, but now we cannot give details since we don’t know the content of the policy and we need to see the policy first in order to know what is required.”*

*“I need to know the policy content so that I will know my right and my obligation”*

### **3.2.7 No comprehensive occupational health services**

Comprehensive OHS are seen as a process that helps to bring about changes that prevent health hazards, and enhance the quality of working conditions and employee health, wellbeing and work capability. This process is expected to realise the goals of OHS. The process begins with an assessment of the occupational health needs, and continues with the planning and follow-up of certain services such as risk assessment and preventive, rehabilitative, curative and health-promotion activities. Documenting and assessing the achieved results is the final step in the process (Rantanen et al., 2004).

In this study a deficiency in comprehensive OHS is regarded as the fact that the services that are supposed to ensure that health workers can be as effective as possible in their work and that their health is protected were not offered to the health workers as expected.

The Health and Safety Authority (2013) reveals the rights of the breastfeeding mother at workplace as stipulated by the Maternity Protection (Amendment) Act 2004 of Victoria government. This Act provided that breastfeeding mothers are entitled, under legislation, to paid time off for the purposes of breastfeeding or else expressing milk in the workplace, where facilities are provided by the employer; or a reduction in working hours with full pay to facilitate breastfeeding where facilities are not provided. During the study, women and men of child-

bearing age raised concerns for the need for a mother and baby friendly environment for health workers in which they can breastfeed their babies while they are working. Currently, they are forced to leave their babies at home with unqualified baby sitters even when the baby is sick and they feed their babies with formula milk instead of breast milk. Therefore this right to breast feeding is not exercised in the institution.

In line with other research, Shealy, Li, Benton-Davis, and Grummer-Strawn (2005) state that support for breastfeeding in the workplace is mandatory and it must include several types of employee benefits and services, such as writing corporate policies to support breastfeeding women; teaching employees about breastfeeding; and providing on-site or near-site child care which are not available in the organisation. Work Safe Victoria (2001) adds that OHS helps industry to comply with the duty of care principle, but it was found that the setting where research took place had not complied fully with the duty of care principle since it did not offer comprehensive OHS.

The Health and Safety Executive (2006) also supports this notion when it states that the workplace facilities needed for staff include staff restaurants, first aid and occupational health services. It is important to make provision for workers to make a drink and heat up food and to allow workers to take their longer meal breaks away from their workstation by providing them with a restroom. However, the study found that such amenities were not present at the hospital as the participants stated that there was no comprehensive OHS, including no staff welfare services of which a staff restroom is a pertinent issue. Occupational safety and health programmes and policies must aim at both prevention and protection. OHS covering all workers should be established. Ideally, all workers in all categories of economic activity should have access to such services, with the aim to protect and promote workers' health and improve working conditions.



The information gathered from the FGDs seems to indicate that there is no organised and comprehensive OHS in the hospital; merely fragmented OHS. Moreover, an important component such as an annual medical check-up for workers targets only the X-ray workers and some groups from outside the hospital such as food handlers. This is a timely reminder for the employer of the need for comprehensive OHS in the hospital.

Work Safe Victoria (2008) supported the previous finding that employers have an obligation to provide adequate facilities for the welfare of employees at any workplace under their management and control. Employers need to identify and assess the needs and requirements of their employees prior to the provision of adequate amenities and facilities. Workplace facilities are needed for the health, safety, welfare and personal hygiene needs of employees. They include toilets, shelter, seating, dining rooms, change rooms, drinking water, personal storage, air conditioning and washing facilities. The quality of the work environment is also important, such as workspace, temperature and air quality, lighting and flooring. Lighting from natural and artificial sources needs to be provided for employees to ensure working conditions that are appropriate to the nature of the work, the location of the work and the times at which the work is performed. This requirement is in contrast to the study finding because it was reported during the situational analysis that some of the departments were found to be without hand washing facilities. Moreover, no dining room, change room or washing facilities were available in any department. Also, the health workers mentioned that some buildings are too old with inadequate lighting. This could lead to health hazard in the workplace. However, some air conditioning was provided by the organisation in certain departments to improve the condition of the environment

The Occupational Health Services (2003) revealed that a comprehensive OHS should include the promotion of wellness. Accordingly, the organisation should conduct employee medical and

health surveillance, and encourage personal responsibility for health care to reduce illness and absenteeism. When preventing occupational injuries and diseases and monitoring risks in the workplace, administration should include developing and maintaining an information management system, as well as statutory records and reports. It is also necessary for OHS to become involved in relevant research in order to evaluate the effectiveness of its services, and the development of new trends in occupational health. Health needs may arise and those needs will be addressed in special programmes, for instance programmes for vulnerable groups; HIV/AIDS; chronic lifestyle diseases; and employee assistance programmes. Such programmes were not found in this study; indeed, participants complained that their health needs were not attended to by their employer. They also mentioned that they were in need of restrooms.

The FGDs and in-depth interviews with the various categories of the health worker revealed the following perceptions regarding comprehensive OHS:

*“I need a comprehensive OHS, such as a staff bus to be provided. Swimming pools and Christmas party for all health workers.”*

*“As we are mothers and bearing children then our babies stay long time without breastfeeding, we need a place in the hospital to breastfeed our baby, hospital must provide the place and health workers.”*

*“I think an occupational health service is necessary because health workers need to be attended to separately not in the same queue with general public patients.”*

### **3.3 Theme 3: Health workers’ perceptions of knowledge on occupational health services**

The majority of the respondents indicated that OHS does not exist in the organisation; furthermore, some were not aware of whether or not the services or the policy were available because they did not have any knowledge of OHS or the occupational health hazards in the hospital. They expressed the need for awareness on OHS to be raised. Some of the health workers had never heard about OHS in the hospital but had heard about it elsewhere. They were also not aware of the content of the policy on occupational health and safety since they had never seen it or heard about it.

A few of the respondents said that OHS have been provided but people were not aware of it because they were not well informed; moreover, the policies and guidelines were available but had not been implemented. X-ray staffs were provided with medical surveillance on an annual basis but they were not informed as to why medical surveillance had been carried out and what action would be taken in the event of abnormalities. Furthermore, health workers were not informed about the Health Workers Charter or Bill of Rights. Health workers need a Health Workers Charter so that patients know the rights of health workers, given that they are also have social problems that need to be attended in order to provide quality services and be happy at work.

### **3.3.1 Lack of knowledge on the use of the protective equipment provided**

Lack of knowledge is the condition of being without or having insufficient knowledge (Merriam Dictionary, 2014), while protective equipment is the application of suitable administrative and technical controls according to occupational health and safety policy. Administrative control is related to risk assessment and priorities for improving the work environment. Technical control,

on the other hand, is the implementation of protection, as employers should ensure that employees wear and use the protection to the satisfaction of the inspector (MOHSS, 2006).

In this study, lack of knowledge on the use of protective equipment provided meant that health workers did not have any knowledge in this regard or that they have inadequate knowledge on the use of the protective equipment provided. Technical control includes personal protective equipment, including aprons, gloves, boots, gowns, goggles and facemasks (surgical, disposable and N95 masks). Administrative control includes risk assessment and priorities for improving the work environment, such as X-ray surveillance, safe injection and a safety box.

Sikorski et al. (2012) support this opinion when they stated that there must be a process in place to educate staff in the use and maintenance of personal protective equipment, and that such equipment should be available and accessible. Education must be provided on a regular basis and worker competency should be maintained and evaluated. This does not harmonise with the study findings – health workers stated that they need guidance and education on how protective measures are used. Moreover, it was found that the employer had failed to provide employees with education on the personal protective equipment and other protective measure provided, such as gowns, boots, aprons, goggles and face masks. Such equipment had all been provided without guidelines or education.

Yassi et al. (2009) support the finding of this study in their own study when they mention the lack of knowledge concerning the use of the N95 face mask and the need for improved training on all protective equipment. In this study, it was revealed that health workers have a lack of knowledge about the protective equipment provided; they did not know how to use it or the

reasons for using it, including the reason for medical surveillance carried out on X-ray staff because X-ray staff had never been informed about the reason for such surveillance.

Bigaignon-Cantineau et al. (2005) support this when they reveal that in their study they found that key elements in the infrastructure are needed to provide occupational health professionals with knowledge. These include scientific research and development, support of knowledge transfer through the development of instruments for practice and through national journals, education and training, including applied research, as an important element producing new knowledge and scientific instruments basic for new developments in practice. This finding contrasted with the findings of the current study; no scientific research or support of knowledge transfer through the development of instruments for practice and through national journals, education and training including applied research had taken place in Onandjokwe Hospital.

It is mandatory for the employer to ensure that workers are given documented training in the language they understand on the probable hazards to health and the performance of protective measures and the wearing of protective clothing. This must be done at the workplace and should be activity based prior to the commencement of their activity and regularly thereafter with reference to the operating instructions to be drawn up (Western Australia Committee for Biological Agents, 2006). This study finding was not in consonance with the present study findings, as the study participants revealed that protective equipment was provided without guidelines. As a result, health workers were not aware of the reasons why protective measures were provided. This was also proved by Work Safe Victoria (2001), which states that an employer has a duty to provide adequate information on hazards, as well as instruction, training and supervision to employees, to enable them to work safely and without risks to their health.

By contrast this study found that no information had been communicated to the health workers by the employer on the imperative for protective equipment. Generally speaking, training related to glove use and skin care was more common (Holness & Kudla, 2012). This finding is contrasted with the present study findings: the health workers who were interviewed complained that some protective measures had been provided without guidelines, there was no focal person to guide health workers on how protective measures should be used or to monitor how they were used.

Here's what some of the participants had to say regarding a lack of knowledge on the use of protective equipment provided:

*"I am not satisfied, I was not oriented toward occupational health services, only control measure provided, but not provided with the reason how to use them and why they should use them."*

*"Protective measures are provided, but not provided with the reason how to use them and why they should use them."*

*"I think although protective measures are provided there is a need for focal person to control how protective measures are used."*

### **3.3.2 Lack of knowledge on health workers' charter and rights**

According to the Merriam Dictionary (2014), lack of knowledge is the condition of being without or having insufficient knowledge; and a right is an ethical or lawful authority to own, claim and use possessions as one's own. A charter is a document issued by a sovereign state or

legislature or an organisation to create a public or private corporation that defines those privileges and purposes (American Heritage Dictionary, 2009).

In this study, lack of knowledge was revealed by the fact that health workers had no knowledge of their charter and rights. No document exists that spells out their privileges and rights despite the fact that these are the ethical principles of freedom to be exercised by health workers.

Intra Health (2014) reveals that health workers' rights must be protected to safeguard health workers and facilities. Therefore, key to protecting health workers' rights and strengthening the health system is the promotion of gender equality and facilitating the promotion of health workers' rights. This statement is in contrast with the finding of the study, since the participants stated that they had not been informed about a health workers' charter of bill of rights, and that as a health worker they needed the health workers' charter in order for the patient to know their rights, given that they are also experience social problems that need to be attended to. Further, it is their right to be protected in order to provide quality services and be happy at work.

This right is upheld by Macquarie University Hospital (2013), which acknowledges that health workers have the right to access health care, the right to safe and high quality care, and the right to be shown respect, dignity and consideration. In this case, health workers' culture, beliefs, values and characteristics, such as age and gender, are considered. Respect also includes being mindful of healthcare staff and other patients, the right to be informed about services, treatment options and costs in a clear and open way, the right to be included in decisions and choices about care as well as the right to privacy and confidentiality of provided information. In contrast, the study found that the health workers claimed that a health worker charter was needed to stipulate the rules and regulations to be followed by patients in respect of health workers.

Alli (2008) concurs, arguing that all workers have rights. Employees, employers and governments have an obligation to ensure that these rights are protected and should strive to establish and maintain decent working conditions and a decent working environment. This is more purposely focused on the fact that work that must take place in a safe and healthy working environment, conditions of work should be consistent with workers' wellbeing and human dignity, and work should offer real possibilities for personal attainment, self-realisation and service to society. However, this is in contrast to the study findings where health workers claimed that they were not informed about the health workers charter and their rights. However, they felt that the charter need to be displayed so that the community could understand the rights of health workers, and respect and understand them, since health workers also have problems that need to be addressed. This will help to stop the community from raising irrelevant complaints against health workers.

Many of the participants in the FGDs indicated that they needed to know their rights as health workers and an awareness of health workers' right should be raised among the general public because they have negative perceptions toward health workers. Here is a sample of what some of the participants said in this regard:

*"I think health workers need a bill of rights like the patient charter."*

*"Health workers are also having social problem that need to be attended to in order to provide a quality services. Therefore if their rights are provided then they will be a happy at work."*

*"I am also thinking that a charter is needed to stipulate rules and regulations to be followed by patients to respect health workers."*



*“Health worker charter is very much needed. If this happen it will stipulate health workers right/ need like right to treatment and right to be respected as well as to express the inner feeling; charter need to be that patient/community can understand health workers and behave well because health workers are also having problem to be addressed, for the community to know the right of the health and stop complaining.”*

*“I never seen health workers bill of right but I think it is needed!”*

### **3.3.3 Lack of knowledge and awareness of occupational health risks**

According to the Merriam Dictionary (2014), lack of knowledge is the condition of being without or insufficient knowledge and lack of awareness is the state of being not having knowledge of something. Occupational health risk refers to the probability of a worker suffering an injury or health problem, of damage occurring to property or the environment as a result of exposure to or contact with a hazard (Work Cover, 2002). In this study lack of knowledge and awareness on occupational health risk refers to health workers who have no or little knowledge of occupational health risks. Such risks include diseases and injuries that health workers may pick up in the workplace as a result of exposure.

The findings of Alli (2008) concur with the study findings as he reported that most informal workers have little or no knowledge of the risks they face and how to avoid them. This was proven in the current study when the majority of the health workers mentioned that they do not have any knowledge of OHS, in fact they had never of heard of OHS. This finding harmonises with the studies done in industrialised countries which have revealed that the cause of 90% of workplace accidents is human error and human factors which include lack of knowledge, lack of

interest, negative attitude, unsafe behaviour and incompetence (Nasab, Ghofranipour, Kazemnejad, Khavanin, & Tavakoli, 2009). This concurs with the study findings in that participants revealed that they lack knowledge and awareness on occupational health risks. They consequently expressed the need for training on occupational health hazards.

Studies conducted in India to assess awareness and practice with regard to all types of injuries and safety precautions in India have revealed that contrary to developed countries where awareness and regulatory measures to adhere to safety precautions exist, in many developing countries they are still in a nascent stage of development as the majority of them come under the non-organised sector and safety precautions are not strictly implemented. The main reasons for this would include a low level of education among workers, inadequate knowledge of health hazards and the unavailability of preventive measures. Lack of awareness regarding injuries, eye injuries, mechanical injuries and skin problems were detected (Kumar, Dharanipriya, & Kar, 2013). However, this situation is similar to that found by the present study, namely that health workers were not aware of nor did they have any knowledge of the OHS and occupational health risks in the hospital.

Rhebergen, Van Dijk and Hulshof (2011) hold similar views, arguing that many workers have questions about occupational health and safety, but lack the skills, experience or motivation to formulate an answerable question, seek and find information, appraise information, compose correct answers and apply information in OHS practice. The present study has revealed that health workers do have problems and questions regarding OHS, but there is no focal person to turn to – this is similar to what other researchers have reported.

Gyekye (2005) who conducted a study on workers' perceptions of workplace safety and job satisfaction in Finland reported that there is a positive association between job satisfaction and the safety climate. This proves that a positive perception of organisational climate can influence workers' perceptions of safety at the workplace. Workers who expressed more satisfaction at their posts had a positive perception of the safety climate. This finding appears to suggest that if workers have negative perceptions of the organisational climate this may negatively influence their perceptions of safety in the workplace.

This was also proved by Work Safe Victoria (2001), which states that employers have a duty to provide adequate information on hazards, as well as instruction, training and supervision to employees, to enable them to work safely without risk to health. In contrast, in the current study it was found the employer had provided the health workers with no awareness of OHS.

This is in contrast to the recommendation by Work Cover (2002), which states that OHS should be part of all workplace training, and an integral part of day-to-day management. Health and safety should be included in induction training, supervisor and management training, on-the-job training, as well as specific hazard training work procedures and skills training, emergency procedure training and first aid training. The situation in Onandjokwe Hospital, as cited by the health workers, shows that they need information and health education on protecting themselves against infection and occupational health hazards and that this is not currently being provided.

Frijstein et al. (2011) found that the number and nature of the occupational exposures indicate that preventive measures must focus on the awareness. One important finding of the current study was that no awareness-raising was done with regard to occupational health risk. This fact is underlined by the WHO (2012) which states that there is no formal occupational health and

safety training for employees and a lack of a consistent approach to participatory risk assessment at workplaces. This has been aptly supported by the study when participants observed that there was no formal occupational health and safety training and they expressed the need for training and seminars on OHS.

The FGDs with various categories of health workers revealed the following perceptions:

*“Health workers are not aware of the occupational health risk.”*

*“We also need information and health education on self-protection against infection but only little information provided; we need more and more information even weekly.”*

*“We need refresher course on Occupational Health Services by management”*

### **3.3.4 No clear procedure for reporting work-related injuries and grievances**

Free Dictionary (2009) defines procedure as a series of actions conducted in a certain manner to accomplish the affairs or established way of doing something of an organised body. Work-related injuries are described as illness or injury that arises throughout the course of employment on the employees' side (Vanderbilt University, 2013). Muller (2004), on the other hand, confirms that grievances refer to the incidence of dissatisfaction between employer, employees and other member of the services.

In this study, work-related illness refer to illness and injuries that health workers acquire on duty during the course of employment, and grievance procedures are the procedures to be followed after a health worker has experienced dissatisfaction in the workplace. Procedure refers to a

standard procedure to be followed by the health worker after having acquired an occupational injury.

Benach et al. (2004) reported that rules and regulations on the prevention of occupational hazards have often been only partially applied; as a result of this guidelines for OHS were found to be unclear. This is in line with the present study finding that no clear policy or guidelines had been made known to the health workers. Hence, health workers do not know where to report after acquiring occupational injuries and disease and they were not sure what to do if abnormalities were detected during medical surveillance.

This finding highlights the importance of Alli (2008) finding – he revealed that education and training are crucial components of safe, healthy working environments. Consequently, both employees and employer must be made aware of the importance of establishing safe working procedures and of how to do so. They should both be given training in the special areas that are relevant to particular industries, so that they can address the specific occupational safety and health concerns. Workers, employers and competent authorities have certain responsibilities, duties and obligations. Workers are expected to follow established safety procedures provided by their employer; employers must provide safe workplaces and ensure access to first aid. However, in the current study, the participants claimed that there was no known standard procedure to be followed by the health workers after they acquire occupational injuries, diseases or experience dissatisfaction. They were not trained, oriented or communicated with regard to the standard procedure to be followed. Hence, they were not aware of their rights, responsibilities and obligations.

Consequently, during the FGDs and the in-depth interviews the participants stated their opinions as follows:

*“I am having occupational health problem after medical surveillance but I don’t know where to go.”*

*“Problems are that there is no guideline on occupational health services.”*

*“If am in casualty I report to casualty chief, if I am in ward I report to PMO, but I experience problem and I didn’t report it because I don’t know where to report; there is no clear procedure.”*

*“People are having problem and questions regarding Occupational Health Services and occupational hazard but they do not know where to report during the weekend.”*

### **3.3.5 Lack of knowledge about the existing occupational health services**

Lack of knowledge is the condition of being without knowledge (Merriam Dictionary, 2014). The WHO (2007) describes existing OHS as services which are delegated with basically preventive functions and they are responsible for advising the employer, the workers and their representatives in organisations on the requirements for establishing and preserving a safe and healthy working environment that will best facilitate physical and mental health in relation to work.

In this study lack of knowledge refers to the fact that health workers do not have any knowledge about the availability of OHS in the hospital, that is, the services that are responsible for employer and employee wellbeing by providing them with physical and psychological health.

Alli (2008) stated that the key principle in occupational health and safety is that a national system for occupational safety and health should include all the mechanisms and elements necessary to build and maintain a preventive health and safety culture. Such a national system must be maintained, progressively developed and periodically reviewed. During formulation, implementation and review of all policies, systems and programmes, the social partners and other stakeholders must be consulted. Information is vital for the development and implementation of effective programmes and policies; therefore, the collection and dissemination of accurate information on hazards and hazardous materials, surveillance in workplaces, monitoring of compliance with policies and good practice, and other related activities are central to the establishment and enforcement of effective policies and must be known to all social partners involved. According to the findings of this study, this recommendation has not been applied at Onandjokwe Hospital because the health workers, as one of the social partners, had not been consulted during policy formulation, implementation and review. Moreover, they had not been provided with accurate information regarding the existing OHS.

This is also supported by Rantanen et al. (2004) when they reveal that the goal of OHS is to protect the health of workers, and to promote the establishment of a healthy and safe work environment and a well-functioning work community. To achieve this goal, OHS should carry out promotion, preventive and curative activities, as their general aim is to ensure the health of the working population and to support the employees' participation in work life. Thus, the OHS, via the expertise of health professionals, help to promote the wellbeing and quality of life of the working aged population, as well as productivity and the quality of work. In this study, participants complained that they did not know about the OHS in the hospital and they were not

aware of such services. Schmidt, Sjöström and Antonsson (2012) mention in this regard that OHS can be used to contribute to health workers' knowledge and their practical attainment of connections between working conditions and health and that OHS can be used to avoid injuries and absenteeism. Nevertheless, the study found that health workers need to know that OHS are available because the majority of the participants indicated that they were not aware of them and some health workers had never heard the term "occupational health services".

Such awareness-raising is advocated by Worksafe Victoria (2001), which states that the employer has a duty to provide adequate information on hazards, as well as instruction, training and supervision to employees, to enable them to work safely and without risks to health. Such information should be disseminated to all employees and therefore policy content needs to be communicated to all employees.

In the current study, it was found that health workers are not oriented toward the policy content of occupational health services, no awareness-raising has been done by the employer and no information about OHS has been communicated to employees. This does not conform to the recommendations made by Work Cover (2002), which states that OHS should be part of all workplace training, and an integral part of day-to-day management. Health and safety should be included in induction training, supervisor and management training, on-the-job training, as well as specific hazard training, work procedures and skills training, emergency procedure training and first aid training. At Onandjokwe Hospital, as confirmed by the health workers, information and education on protection against infection and occupational health hazards is needed, but is currently not being provided the employer. This is a timely reminder of the need for comprehensive OHS in the hospital. Goetsch (2005) recommends that occupational health and safety services should provide induction training and lifelong education and training to minimise



and prevent risks to staff and patients. However, it was found in the present study that health workers are not oriented toward OHS; they consequently need training and awareness on OHS.

This was a major concern amongst participants who expressed themselves as follows:

*“I don’t know if an occupational health service is implemented in this hospital.”*

*“I am not aware if an occupational health service is available in Onandjokwe hospital.”*

*“As radiographer I use to undergone medical surveillance on annual basis but I do know the reason why it has been carried out.”*

*“I haven’t seen any occupational health services information provided to health workers in this setting of regarding their health benefit.”*

*“I heard occupational health services somewhere but not at this institution, not existing in the hospital.”*

*“I don’t have any information regarding occupational health services available in this organization. I never heard anything in my life.”*

### **3.4 Conclusion**

This chapter analysed the data with respect to a checklist of the wards and departments, on which the researcher ticked the stipulated items in accordance with whether they were available or not, to determine the existing situation of the OHS rendered at the institution. Random sampling was used to select ten departments and wards. Focus group discussions (FGDs) and interviews were held and field notes were written regarding the OHS experienced in terms of the provision of

health and welfare facilities to health workers. Accordingly, the perceptions of the health workers regarding OHS at Onandjokwe Hospital were described and explored. Purposive sampling was used to identify participants for 13 individual interviews and five focus group interviews.

As Matheson (2007) comments, all non-verbal signals which could not be captured by the voice recorder were recorded in the field notes, thus helping the researcher to remember all that had happened throughout the interview sessions, for instance if a participant started crying or showed pleasure during the interview sessions. The health workers' perceptions were used to identify three themes and the participants' negative and positive perceptions, as highlighted by the participants themselves, were presented and discussed.

## **CHAPTER 4**

### **CONCLUSION, RECOMMENDATIONS AND LIMITATIONS**

#### **4.1 Introduction**

In the previous chapter, data analysis was conducted, firstly, on the checklist survey conducted of the wards and departments in order to determine the existing situation relating to the occupational health services (OHS) rendered at the institution. Secondly, focus group discussions (FGDs) and interviews were conducted and field notes written in an attempt to explore the perceptions of the health workers regarding OHS at Onandjokwe Hospital and the provision of health and welfare facilities at the hospital. Three themes were identified from the perceptions of health workers and both their negative and positive perceptions were discussed.

This chapter focuses on the conclusion reached and the limitations of the study, and makes a number of recommendations that emanate from the findings. All the study findings and the subsequent recommendations will be communicated to the Lutheran Medical Services and other stakeholders in order to improve OHS and make them effective and efficient for all health workers. It should also assist in sustaining the health and work ability of all staff, and thereby also their employability throughout their working life. It will also help to reduce the health care costs of work-related injuries and diseases.

#### **4.2 Conclusion**

The aim of this study was to determine the challenges facing health workers regarding the OHS at Onandjokwe Hospital. Based on the research methodology, which included a situation analysis of selected departments using a checklist, interviews with key informants and FGDs with health

care providers in the hospital, the following conclusions can be drawn regarding the research objectives:

#### **4.2.1 Objective 1:**

##### **Objective 1: Determine the existing situation relating to the occupational health services rendered at Onandjokwe Hospital**

A checklist was used in order to determine the existing situation as it related to the OHS rendered at Onandjokwe Hospital.

- **Legal and regulatory framework**

With regard to the availability of policy and a legal and regulatory framework, the research has highlighted a serious shortage of the necessary documents across many departments. These are documents that managers, supervisors and staff need to rely on in planning, implementing and monitoring, as well evaluating, the effectiveness and efficiency of the OHS in the hospital. Key documents such as the Government Notice relating to health and safety and the National Occupational Health Policy were found in one department only, while copies of the Employees Compensation Act and the Presidential Proclamation Act of No 10 of the Labour Act 1992 were not found in any of the departments assessed.

- **Policy documents and processes**

Regarding a policy framework, the National Occupational Health Policy on OHS was not available in most of the departments and the majority of the health workers did not have access to it. However, training and education on risk mitigation in OHS, a safe working environment and equity in the workplace were provided in some of the departments.

- **Policy strategies and practices**

In terms of policy strategies and practices, it was discovered that documentation on types and causes of occupational diseases and injuries experienced at the hospital and lists and types of any compensation given for occupational disease and injury was not available in any of the departments. A policy on compensation for work-related injuries was also unavailable. However, documentation on needle prick injuries was available in all departments.

Documentation on occupational health strategies for human resources management and training was also virtually non-existent. Information on OHS was available in a few departments while the Occupational Health Information System was not available in any. No research had been done in relation to OHS in any department, nor had forms been completed on the notification of occupational diseases.

- **Occupational hygiene and medicine services**

Occupational hygiene and medicine risk assessment on person and policy was available in one department. Although personal protective equipment was available in all the departments, there was no training of personnel, and policy on the use of the equipment was not available. Only first

aid and emergency training were provided. Furthermore, medical surveillance in the workplace was provided for the X-ray department only.

- **Occupational health services**

The study revealed a glaring lack of OHS at Onandjokwe Hospital, with only two departments offering some semblance of OHS (kitchen and X-ray department). The OHS provided in the workplace covered only by ten percent. In addition, there was no health and safety officer available in any of the departments. Similarly, a health and safety representative was available in one department only.

- **Staff welfare and facilities**

Staff welfare was considered and facilities provided in many of the departments as many were found to have a well-ventilated working environment, and well-lit and clean working areas. All the departments had clean, sanitary toilets. Restrooms were provided in half of the departments assessed and most of the departments were found to have safe drinking water close to the workplace. Hand wash facilities were provided in many departments, and 50% of the departments had heating and cooling appliances.

#### **4.2.2 Objective 2**

**Objective 2: Describe and explore health workers' perceptions of occupational health services at Onandjokwe Hospital.**

In order to achieve this objective FGDs and in-depth interviews were conducted.

It was found that the majority of the participants were not knowledgeable about the availability of OHS at Onandjokwe Hospital. Some had never heard of such services, nor were they aware of the existing national policy on occupational health. Hence, participants emphasised the fact that they needed education and training on OHS. Although OHS have been partially implemented and standard operating procedure has been formulated, it was only known by the health workers at managerial level. Although medical surveillance had been provided for X-ray staff, health workers were not aware that it forms part of OHS.

The support available from OHS included medical surveillance of X-ray staff, personal protective equipment, post-exposure prophylaxis (PEP) for various infectious agents acquired in the workplace, hepatitis B vaccinations for all staff, and the provision of medical aid.

Participants listed the managerial challenges that influence OHS negatively as the fact that there is no guidance from the MOHSS and that when they have questions about occupational health problems there is no focal person to answer them. Additionally, owing to a lack of financial and human resources, compensation and medical surveillance are not available in the workplace. There is also a problem relating to proper infrastructure, as some structures are beyond repair and pose an occupational hazard in the workplace. A further big concern that was voiced was the lack of a staff clinic.

Another pertinent issue raised was the lack of infection control measures coupled with the absence of an occupational health committee and OHS representatives in all departments. There were also no comprehensive OHS including no staff welfare services.

### **4.3 Recommendations arising from the research**

The following recommendations have been made based on the conclusions drawn from objectives 1 and 2:

#### **4.3.1 Management**

- **Policy and regulatory framework**

Copies of the Employees Compensation Act and the National Occupational Health Policy, the forms for the Notification of Occupational Disease, as well as claim forms should be made available to all departments by the human resources officer within a period of one month.

Effective implementation of occupational health policy: The policy should be implemented practically and health workers should be oriented to the policy content. Clear procedures for reporting occupational injuries should be spelt out by the hospital management. It is expected that this could be accomplished within three months.

The nurse manager and the hospital administrator should ensure that all the forms and registers necessary for documenting and reporting on OHS should be made available in all departments within one month. Orientation through in-service training on the use of the forms should be



conducted within three months and supervision and monitoring of the use of the forms should be conducted regularly by the nurse manager and the principal medical officer. In addition, the nurse manager, the principal medical officer and the hospital administrator, as well as departmental heads, should keep records of all types of compensation provided for occupational injuries and diseases.

- **Availability of occupational health services**

Medical surveillance for all health workers with full support afterwards should be provided by hospital management and this should be addressed as a matter of urgency by the hospital management. Annual medical examinations for all health workers should be budgeted for; all new employees should be made to undergo comprehensive pre-employment screening; and all workers who resign should undergo an end-of-employment medical exam. Hospital management should provide hepatitis B vaccinations and PPE for all staff in need on a continuous basis.

- **Health and welfare facilities**

Comprehensive OHS need to be provided by the hospital management team as soon as possible and this should comprise recreation activities, a staff clinic, restrooms in all departments, and baby and mother friendly services to attain the ten steps of breastfeeding. A health and safety officer and a health and safety representative should be appointed or designated in every department by hospital management within three months, after due consultation with the department heads.

- **Focal person for occupational health services**

There is a need to appoint a focal person as regards OHS to work in the staff clinic, as well as an occupational health and safety representative in each department to facilitate OHS activities and provide answers on occupational health problems and to spearhead occupational health information. All these should be budgeted for and implemented by the human resources officer with the support of hospital management, well as government, before the end of the next financial year.

- **Hospital occupational health and safety website and newsletter**

A website is needed to enable the health workers to communicate with other occupational health and safety professionals in the health sector, to submit their question, make recommendations and obtain answers from other health workers globally. Furthermore, a secure bulletin board should be created. An in-house newsletter could also be circulated to enable health workers within the hospital to share views and ideas on matters pertaining to health and safety in the workplace. Furthermore, management should consider creating an annual award to incentivise employees and departments and to stimulate performance and staff welfare.

#### **4.3.2 Education and training**

An awareness campaign should be targeted at all health workers about the availability of OHS in the hospital, and training should be provided on how they should protect themselves against

occupational hazards in order to promote workplace health. It is management's responsibility to ensure that training needs are identified; appropriate training is provided to all employees and that records of all training are kept after the effective implementation of OHS. The X-ray department and dental clinic should be provided with emergency training and first aid kits as a matter of urgency.

### **4.3.3 Research**

The following areas for further research arising from the current study are recommended for the future:

- A survey on staff satisfaction with the work environment
- The impact of stress on staff performance and the prevalence of work-related health disorders among employees at Onandjokwe Hospital
- Motivation and incentives that improve performance at Onandjokwe Hospital
- An evaluation of the effectiveness of OHS
- An assessment of the awareness of occupational hazards and the implementation of safety measures
- An assessment of the use of safety equipment.

### **4.4 Limitations**

The study was limited by the following factors:

- Some of the health workers were unwilling to participate in the study with some of the respondents opting not to answer questions.
- Some respondents were too busy to attend the focus group discussions especially those who were working in the emergency departments such as theatre, the casualty and maternity wards and intensive care unit.
- Some doctors and nurses in various departments withdrew during the session because they were called out to attend to an emergency.
- Some of the health workers were on leave at the time of data collection.
- Time to finalise the study was also a limiting factor as the researcher is simultaneously an employee, a student, a mother and a wife. Consequently, the study results were limited by the number of participants who could give full attention to participate in the study.

#### **4.5 Summary**

This chapter has shown that the purpose and objectives of the study were met. In this chapter of the report, the context of the study and the perceptions of health workers regarding OHS were explained. The researcher illustrated her obligations and interest in undertaking this study, since the study was completed according to the preliminary objectives in chapter 1. The study ended by making a number of recommendations as well as suggestions for possible further research areas. The limitations on the study scope were also discussed. A combined qualitative and quantitative study design was followed which proved to be a relevant approach for this study. The impact and significance of the study was again mentioned as it was outlined in chapter 1. The study has significantly pointed out areas that need to be addressed in order to strengthen the

implementation of OHS in Onandjokwe Hospital. Attention to such areas and the successful implementation of these services would serve as a model for other similar hospitals in Namibia.

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## ANNEXURE A: LETTER OF PERMISSION FROM THE POSTGRADUATE STUDY

Phone: 061-205 6111  
Website: www.unam.na



141 Namibia Hill, Windhoek  
Private Bag 13301  
Windhoek  
NAMIBIA

Inspiring minds & shaping the future

Enquiries: Dr. H. J. Amukugo  
Private Bag 13301  
Mandume Ndemufayo  
Windhoek

Tel. No: 061-205 6117  
Fax No: 061-  
e-mail: hamukugo@unam.na

*All correspondence must be addressed to the Office of the Associate Dean*

**LETTER OF PERMISSION:  
POST GRADUATE STUDENTS**

Date: 08 January 2013

Dear Student: Ms Kristofina Sipa  
Student number 9833535

The post graduate studies committee has approved your research proposal.

**PERCEPTION OF HEALTH WORKERS REGARDING THE OCCUPATIONAL HEALTH SERVICES AT ONANDJOKWE HOSPITAL, NAMIBIA**

It may be required that you need to apply for additional permission to utilize your target population. If so, please submit this letter to the relevant organizations involved. It is stressed that you should not proceed with data collection and fieldwork before you have received this letter and got permission from the other institutions to conduct the study. It may also be expected that these organizations may require additional information from you.

Please contact your supervisors on a regular basis

  
Ms. L. van der Westhuizen  
Deputy Associate Dean (SoNPH)

**ANNEXURE B: LETTER TO REQUEST PERMISSION TO COLLECT DATA**

Kristofina Tsenaye Sipa

PO Box 1828

Ondangwa

Cell: 0812504014

20 February 2013

Lutheran Medical Services

Onandjokwe Hospital Research Committee

Private Bag 2016

Ondangwa

Dear Sir/Madam

**Re: Permission to conduct a study at the institution**

I Kristofina Tsenaye Sipa, a UNAM student in the School of Nursing and Public Health, student number 9833536, would like to request a permission to carry out a study at Onandjokwe

Hospital. The research topic is “Perceptions of health workers regarding the occupational health services at Onandjokwe Hospital, Namibia”.

The purpose of the study is to determine the challenges facing health workers regarding the OHS at Onandjokwe Hospital. The objectives of the study are to determine the existing situation of OHS rendered at Onandjokwe Hospital, as well as to describe and explore the perceptions of the health workers regarding OHS at Onandjokwe Hospital and make recommendations based on the findings for improvement of OHS at Onandjokwe Hospital.

The researcher will invite participants to participate voluntarily in this study. There should no risk or discomfort in participating in the sharing of their experiences during individual interviews. The researcher will visit the participants for in-depth unstructured interviews that will not last more than 20 minutes and focus group discussions that will not last for more than an hour in a private room without disturbances. Departments will also be assessed by the researcher together with the unit supervisor after the in-depth interviews. Consequently, during the discussion, the researcher will be taking notes to keep track of what has been covered and will also voice record the participants. The recording will be used by the researcher to remember what has been said. As soon as the recording has been transcribed, it will be destroyed once the promoter and co-promoter have given their permission to do so. Participants’ names or any information that identifies them will not appear on the recordings or on the transcripts to ensure confidentiality. Furthermore, the identity of the participants will not be revealed when the study is reported or published. Participants have the right to autonomy and can withdraw from the research process at any stage.

The findings of this study will benefit the institution and the results will be made available on request.

The proposal was approved by the Post Graduate Studies Committee.

I trust that my application will receive your favourable consideration.

Yours sincerely

Kristofina Tsenaye Sipa

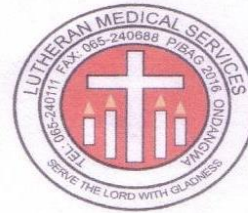
**ANNEXURE C: LETTER OF PERMISSION FROM ONANDJOKWE RESEARCH  
COMMITTEE**

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**LUTHERAN MEDICAL SERVICE**

ONANDJOKWE HOSPITAL  
PRIVATE BAG 2016  
ONDANGWA  
NAMIBIA



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PRACTICE NO: 057 000 0012572  
Enquiries: Dr. G. Marufu

TELEPHONE 065-240111/248111/2/3/4/5/6/7  
FAX 065 - 240688

14/03/2013

To: Mrs.T.Sipa  
PRN- Ward 2

**RE: Research on Occupational Health Services at Onandjokwe**

1. The management of Onandjokwe supports staff members who continuously strive to improve their knowledge;
2. The research you are planning to undertake addresses pertinent employee safety and satisfaction issues relevant to our Human Resources and safe workplace policy;
3. The findings can potentially lead to the improvement of the above;
4. You are therefore authorised to conduct the study as in accordance with the protocol you submitted, without any unapproved variations to the document;
5. You are required to report back your findings in writing to the management committee, and present any relevant recommendations

Thank you

Dr. G. Marufu  
Principal Medical Officer

for Onandjokwe Hospital Management Committee

**LUTHERAN MEDICAL SERVICE**  
PMO OFFICE

11-03-2013

Tel: 065-240111 • Fax. 065-240688  
Private Bag 2016 Ondangwa

## **ANNEXURE D: INFORMED CONSENT FORM**

### **ANNEXURE D1: INFORMED CONSENT FORM FOR KEY INFORMANT INTERVIEWER**

#### **Invitation to participate in a research study**

I, Kristofina Tsenaye Sipa, a student at the University of Namibia in the Department of Public Health, invite you to be part of a research project that I am going to conduct in order to complete the requirements for an advanced degree. I am supervised by Dr Hans Amukugo and Ms Hanna Neshuku. The study is focusing on the **perceptions of the health worker regarding the occupational health services at Onandjokwe hospital, Namibia**. The purpose of the study is to determine the situation as regards the occupational health services provided at Onandjokwe Hospital.

#### **Description of your involvement**

If you agree to be part of the research study, you will be asked to participate as a key informant interviewee to assess your department using a checklist if you are working in specific unit. The key informant interview will last about 20 minutes and the checklist will take about an hour. All the information provided will be handled confidentially and no names will be used in the report.

#### **Benefits**

The results of this study will contribute towards an understanding of the challenges concerning occupational health services in Onandjokwe Hospital and this study will be useful in improving planning and implementation with regard efficient and effective occupational health services in Onandjokwe district and similar hospitals in Namibia.



**Compensation**

There is no compensation for participation since the study is self-financed. Participating in this study is completely voluntary and you may withdraw at any time.

**Consent**

By signing this document, you are agreeing to be in the study. You may contact the researcher on telephone number 0812504014 if you think of a question later.

*I agree to participate in the study. As part of my consent, I agree to be voice recorded.*

\_\_\_\_\_

\_\_\_\_\_

Signature

Date

**ANNEXURE D2: INFORMED CONSENT FORM FOR FOCUS GROUP DISCUSSION**

I, Kristofina Tsenaye Sipa, a student at the University of Namibia in the Department of Public Health, invite you to be part of a research project that I am going to conduct in order to complete the requirements for an advanced degree. I am supervised by Dr Hans Justus Amukugo and Ms Hanna Neshuku. The study is focusing on the **Perceptions of the health worker regarding the occupational health services at Onandjokwe Hospital, Namibia**. The purpose of the study is to determine the situation as regards the occupational health services provided at Onandjokwe Hospital.

**Description of your involvement****Benefits**

The results of this study will contribute towards an understanding of the challenges concerning occupational health services at Onandjokwe Hospital and this study will be useful in improving the planning and implementation of efficient and effective occupational health services in Onandjokwe district and similar hospitals in Namibia.

**Compensation**

There is no compensation for participation since the study is self-financed. Participating in this study is completely voluntary and you may withdraw at any time.

**Consent**

By signing this document, you are agreeing to be in the study. You may contact the researcher on telephone number 0812504014 if you think of a question later.

*I agree to participate in the study. As part of my consent, I agree to be voice recorded.*

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Signature

Date

**ANNEXURE E: GUIDELINE FOR KEY INFORMANT INTERVIEW**

**Designation of respondent** -----

1. What in your opinion of the main achievements of occupational health services (if any) at Onandjokwe Hospital?

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2. What do you think are the barriers to effective occupational health services at Onandjokwe Hospital?

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3. What suggestions do you have to improve occupational health services at Onandjokwe Hospital? (Please be specific in your suggestions and say who should be responsible.)

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**Thank you for your time**

**ANNEXURE F: GUIDELINE FOR CONDUCTING FOCUS GROUP DISCUSSION**

**Research Topic:** Perceptions of health workers regarding the occupational health services at Onandjokwe Hospital, Namibia

**Venue:** Onandjokwe Hospital

**Researcher:** Kristofina Tsenaye Sipa

**Researcher assistant:** Helena Uushona

**There are three parts to a focus group script:**

**1. The opening**

The facilitator welcomes the group; introduce the researchers and the research assistant; let group members introduce themselves; state the purpose and context of the focus group; explain what a focus group is and how it will flow.

A focus group is a small-group discussion guided by a trained leader. It is used to learn more about opinions on a designated topic, and then to guide future action. The group's composition and the group discussion should be carefully planned to create a nonthreatening environment, so that participants feel free to talk openly and give honest opinions. Participants are actively encouraged to not only express their own opinions, but also respond to other members and questions posed by the leader.

## **2. The question section**

### **The main question**

How do you perceive the occupational health services offered to you in this hospital?

### **Follow up question**

- 1 If you are not satisfied as workers, what strategies do you use to express your dissatisfaction with occupational health services providers?
- 2 Our organisation has a documented client charter/bill of rights, what about a health workers' bill of rights?
- 3 What control measures have you been provided with by the organisation to guarantee your safety at work?
- 4 What are the occupational challenges that health worker are facing in their dairy work?
- 5 How do you describe the role of occupational health services to staff?
- 6 What are the current health and wellbeing activities offered by this institution as part of occupational health services?
- 7 What are the occupational health services you expect to be offered to you by this institution?
- 8 How do you perceive the occupational health services offered to you in this hospital?

## **2 The closing section**

The closing section wraps up the focus group. Before the group ends, ask if anyone has any other comments to make. The researcher then thanks the participants, giving them an opportunity and avenue for further input, telling them how the data will be used, and explaining when the larger process will be completed.

**ANNEXURE G: FREQUENCY TABLE AND CONFIDENCE INTERVAL FOR SITUATIONAL ANALYSIS (n = 10)**

<b>Variables</b>	<b>Responses</b>  <b>Yes = Available</b>  <b>No = Not available</b>	<b>Frequencies</b>	<b>Percentages</b>	<b>Confidence intervals</b>  (95% confidence limit)
<b>1. Availability of a legal and regulatory framework</b>				
The constitution of the Republic of Namibia	Yes = 6 No = 4	6 4	60% 40%	26.2–87.8% 12.2–73.8%
Labour Act, 2004	Yes = 10 No = 0	10	100%	-
Government Notice No. 156 “Regulations Relating to Health and Safety at Work”	Yes = 1 No = 9	1 9	10% 90%	0.3–44.5% 55.5–99.7%
Employees Compensation Act, 1941	Yes = 0 No = 10	10	100%	- -
HIV Code on Employment	Yes = 1 No = 9	1 9	10% 90%	0.3–44.5% 55.5–99.7%
Affirmative Action (Employment) Act, 1998	Yes = 8 No = 2	8 2	80% 20%	44.4–97.5% 2.5–55.6%

Presidential Proclamation No. 10, Labour Act, 1992	Yes = 0 No = 10	10	100%	- -
<b>2. Availability of policy documents and processes</b>				
National Occupational Health policy on occupational health services	Yes = 1 No = 9	1 9	10% 90%	0.3–44.5% 55.5–99.7%
Training and education on risk mitigation	Yes = 9 No = 1	9 1	90% 10%	55.5–99.7% 0.3–44.5%
Safe working environment	Yes = 8 No = 2	8 2	80% 20%	44.4–97.5% 2.5–55.6%
Equity	Yes = 9 No = 1	9 1	90% 10%	55.5–99.7% 0.3–44.5%
<b>3. Policy strategies and practices</b>				
<b>3.1 Practice indicators</b>				
Documentation on types and causes of occupational diseases and injuries	Yes = 0 No = 10	10	100%	
Needle prick injuries	Yes = 9 No = 1	9 1	90% 10%	55.5–99.7% 0.3–44.5%
List and types of any compensations made for occupational disease and injuries	Yes = 0 No = 10	10	100%	



<b>3.2 Documentation of OHS strategies</b>				
Human resources management and training	Yes = 7 No = 3	7 3	70% 30%	34.8–93.3% 6.7–65.2%
Dissemination of OHS information	Yes = 2 No = 8	2 8	20% 80%	2.5–55.6% 44.4–97.5%
Occupational health information system	Yes = 0 No = 10	 10	 100%	
Research done	Yes = 0 No = 10	 10	 100%	
Notification of occupational disease form	Yes = 0 No = 10	 10	 100%	
<b>3.3 Availability of occupational hygiene and medicine services</b>				
Risk assessment	Yes = 5 No = 5	5 5	50% 50%	18.7–81.3% 18.7–81.3%
PPE availability	Yes = 9 No = 1	9 1	90% 10%	55.5–99.7% 0.3–44.5%
Emergency training and first aid	Yes = 8 No = 2	8 2	80% 20%	44.4–97.5% 2.5–55.6%
<b>3.4 Availability of occupational health services</b>				
Occupational health services in the	Yes = 1	1	10%	0.3–44.5%

workplace	No = 9	9	90%	55.5–99.7%
Health and safety officer	Yes = 0			
	No = 10	10	100%	
Health and safety representative	Yes = 1	1	10%	0.3–44.5%
	No = 9	9	90%	55.5–99.7%
<b>3.5. Staff welfare and facilities at workplace</b>				
Working environmental well ventilated, well lit and clean	Yes = 8	8	80%	44.4–97.5%
	No = 2	2	20%	2.5–55.6%
Clean and sanitary toilets	Yes = 10	10	100%	
	No = 0			
Restroom	Yes = 5	5	50%	18.7–81.3%
	No = 5	5	50%	18.7–81.3%
Safe drinking water close to workplace	Yes = 9	9	90%	55.5–99.7%
	No = 1	1	10%	0.3–44.5%
Hand washing facilities	Yes = 6	6	60%	26.2–87.8%
	No = 4	4	40%	12–73.8%
Heating and cooling appliances	Yes = 6	6	60%	26.2–87.8%
	No = 4		40%	12–73.8%

Source: Adapted from MOHSS (2006). *National Occupational Health Policy*. Windhoek: Namibia.