

**FACTORS ASSOCIATED WITH OCCUPATIONAL STRESS AMONG NURSES  
WORKING IN CLINICS IN GABORONE, BOTSWANA**

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## **DECLARATION**

I declare that the mini –dissertation hereby submitted to the University of Limpopo, for the degree of Master of Public of Public Health has not previously been submitted by me for a degree at this or any other university: that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

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**Surname, initials (title)**

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**Date**

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## **DEDICATION**

For my husband Bernard and my two girls Peo and Neo in loving memory of my beloved departed parents Mr and Mrs. Bingana for their inspiration and encouragement. Mum and dad your spirit still lives on. Rest in peace

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## ABSTRACT

The purpose of the study was to find out factors associated with occupational stress among nurses working in clinics in Gaborone. The study was conducted in Gaborone district targeting all primary healthcare clinics. The specific focus was drawn to all registered nurses working in clinics in Gaborone. The objective of the study was to investigate factors associated with occupational stress among nurses working in clinics in Gaborone.

A quantitative study was carried out in this study. A sample of 106 respondents was used in the study. Purposive sampling was employed to select respondents that were included in the study. Data was collected through a self-administered questionnaire which comprised of close and open ended questions. Informed consent was obtained from the participants who participated in the study.

The study revealed that a higher percentage (74%) of nurses have ever experienced occupational stress. The results also revealed that females 80 percent respondents experienced stress compared to their male counterparts. The results also show that all of the respondents mentioned that they had experienced stress related to work. Respondents also mentioned that work relationship, shortage of staff, and workload contribute to stress among the nurses. On the other hand, the results of the study also found that staff welfare issues also contribute to stress among the nurses. These include lack of recognition, no personal growth, lack of support and unfriendly work environment. From the results most of the respondents indicated that there are no interventions dealing with stress in the workplace therefore the study recommends that interventions in the workplace needs to be introduced to address occupational stress among the nurse. Furthermore there is a need to create wellness programs, reduce work overload and motivate staff by promotions and other means in order to increase level of job satisfaction.

**Keywords: Occupational stress, nurses, stress, work-place, work-load**



## **DEFINITION OF KEY CONCEPTS**

**MINISTRY OF HEALTH:** refers to the place where the study subjects work.

**STRESS:** This explains a situation whereby an employee experiences emotional and physical strain and due to some external forces

**OCCUPATIONAL STRESS:** This refers to job strain experienced by employees due to different unfavorable factors in the workplace

**BURNOUT:** This explains a state of extreme physical exhaustion experienced by workers.

**STRAIN:** Strains are behavior, Physiological, and psychological processes that occur under the influence of stress and disrupt normal functioning.

**STRESSORS:** refers to anything external or internal that causes stress either psychologically or physiological.

**JOB SATISFACTION:** It is the extent to which people like their job.

**COPING:** Psychological and physical resources used to counter the effects of occupational stress.

**WORKLOAD:** Tends to be associated with decrements in performance or willingness to perform, or with the risk- of impairment of the well-being and health of the task

## **ABBREVIATIONS**

AIDS	Acquired Immune deficiency syndrome
ARV	Antiretroviral
BUTH	Butare university teaching hospital
CWC	Child welfare clinic
HIV	Human Immune Virus
PHC	Primary Health Care
WHO	World health Organisation
MCH	Maternal and Child health
OPD	Out Patient Department
SADC	Southern Africa Development Community
SMC	Safe Male Circumcision
SOC	Sense of coherence
SSTS	Symptoms of Secondary Traumatic Stress
CB	Cognitive Behavioural Perceived Stress
A-COPE	Adolescent coping orientation for problem experiences
ICU	Intensive Care Unit
HCW's	Health Care Workers
STSS	Secondary Traumatic Stress Scale
SPSS	Statistical Package for Social Scientists
NSS	Nursing Stress Indicator
NSI	Nursing Stress Indicator
HADS	Hospital Ancillary Scale
PSS	Perceived Stress Scale
PTS	Post Traumatic stress
PTSD	Post Traumatic Stress Symptom
JD-C	Job demand-Control
JDR	Job Demand Resources
COR	Conservation of resources
ED	Emergency Department
CB	Cognitive behavioural

EMR	Eastern Mediterranean Region
PTSD	Post traumatic stress disorder
VAS	Visual analogue scale
USA	United States of America



# CHAPTER 1

## Introduction and Background

### 1.1 Background of the study

Work plays an important role in individuals' social lives, providing the support of a regular income, opportunities and personal growth, social identity and self-esteem, but can have effects on the worker's health (Filha, Maria, Guilam, 2013). One of the effects that work can pose to human life is stress. The health impact of stress at work negatively affects workers and their communities, with a clear financial impact on business and beyond (Kortum, 2014). Given the value of work in this era, the amount of time spent at work and the current changes that are affecting the nature of work is not surprising that stress appears to be increasing (Kortum, 2014.) A healthy workplace is one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of all workers and the sustainability of the workplace (Kortum, 2014). Stress has been regarded as an occupational hazard long time ago, since the mid-1950s (Jones, 2012; Jennings, 2003). In fact, occupational stress has been mentioned as a major health problem (Jones, 2012). Work stress in nursing was first evaluated in 1960 where four sources of anxiety among nurses were identified to be, patient care, decision making, taking responsibility, and change (Jennings, 2008).

Stress is a term that is difficult to define and yet we can all identify with the physical, mental emotional and behavioural responses that signal to us that we are stressed (Murray, 2011). Radhakrishnan and Jins (2012), referred to stress as a sum of physical mental emotional strains or tensions on a person or feelings of stress which result from people interacting with the environment they live in that are alleged as hurting and/or beyond their adaptive aptitude and having threats to human wellbeing. However, stress is often termed as the twentieth century syndrome, born out of high competition and its subsequent complexities. It is a state of affair involving demand on physical or mental energy which can disturb the normal physiological and psychological functioning of an individual (Indoo and Ajeya, 2012). Stress can also be defined as

the reactions of individuals to new or threatening factors in their work environment (Hussein, Aniza, Ahmad , 2012). Work-related stress is the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge the ability to cope (WHO,2003). According to Moustaka and Constantinidis (2010), Occupational stress in nursing is to a great extent determined by how successfully each individual nurse cope with job related factors in her/his workplace. One of the greatest causes of nurse's stress is their lack of preparation in handling the emotional needs of patients which in turn causes anxiety within the nursing staff (Moustaka and Constantinidis, 2010).

Yeh and Huang (2007) stated that a lot of studies have examined occupational stress in nurses, especially in clinical settings. Results of those studies (Evans, 2002; Mc Vica, 2003; Parsh, Tanka and Bhattacharya, 2004) represent that stressors are many and varied. Frequently cited occupational stressors in nurses include workload, caring of dead and dying, role ambiguity, conflict with physicians or other nurses, insufficient staff, working overtime, career planning and achievement and non-organizational factors (Yeh and Huang, 2007).

Numerous specialists indicated that there is a natural chemical in the human body that responds to a threat or demand (Moustaka and Constantinidis, 2010). The response is universally known as the "flight or fight" reaction, which includes the releasing of adrenalin. After the threat or demand is finished, the body returns to its natural state. These demand or threat can be called a stressor which is defined as an event or set of state of affairs that causes stress response (Moustaka and Constantinidis, 2010). However stress is the physiological response of the body to the stressor (Moustaka and Constantinidis, 2010).

Stress can be viewed as a reaction to an external or internal demand while anything physically or mentally demanding or burdensome occurs for this to happen, the situation must have sufficient impact on the person to attract his or her attention, perhaps because it evokes feelings of disappointment annoyance, anger, or simply because the individual feels the situation should not exist (Chandraiah and Rao, 2011; Rollingson, 2005). Nurses often care for patients and families with trauma from encountered events. Stress up to a certain point, will improve people's performance and quality of life because it is healthy and essential to that they should experience challenges within their lives, but if pressure or other types of demands placed on them become

excessive, it loses its beneficial effect and become harmful. On the other hand (Jennings, 2008) has viewed stress as an event which puts demands upon the organism and sets in motion a nonspecific bodily response which leads to a variety of temporary or permanent physiological, psychological and structural changes.

Nursing is by its very nature, an occupation subject to a high degree of stress, confronting every day suffering, grief and death, and with many of its tasks being considered as routine, unrewarding and degrading (Jelastopulu et al., 2013). According to Shen et al., (2005), nurses are faced with professional work demands as well as the risk of violent assaults by patients.

However, Imtiaz and Ahmad (2009), noted that stress is a universal element and persons from nearly every walk of life have to face stress, adding that stress is often associated with psychological and social effects. The psychological effects of stress may be expressed in a variety of different ways and involve changes in cognitive-perceptual function, emotion and behaviour (European Agency for Safety and Health at Work, 2014). Meanwhile Imtiaz and Ahmad (2009), continued by indicating that stress is basically a mental strain from the internal or external stimulus that refrains a person to respond towards its environment in a normal way.

Researchers have categorized stress as an antecedent or stimulus, as a consequence or response, and as an interaction, this has been studied from many different frameworks (Jennings, 2008). Psychologists view stress as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. Personality traits also influence the stress equation because what may be overtaxing to one person may be exhilarating to another person (Jennings, 2008).

Jennings, (2008) further stated that women continue to juggle multiple roles, including those roles related to the home and family, for which women may have sole or major responsibility. Nonetheless, work stress and burnout remain major concerns in nursing, affecting both individuals and organizations. For the individual nurse, in spite of whether stress is perceived positively or negatively, the neuroendocrine response yields physiologic reactions that may eventually contribute to illness (Jennings, 2008). In health care organization, work stress may contribute to absenteeism and turnover, both of which impacts on the quality of care (Jennings, 2008). Hospitals in particular are facing a workforce crisis while the demand for acute care

services is growing concurrently with changing career expectations among potential health care workers and increasing dissatisfaction among existing hospital staff (Hakanen and Schaufeli, 2012).

By turning toxic work environments into healthy workplaces, researchers and nurse leaders suppose that improvements can be realized in recruitment and retention of nurses, job satisfaction for all health care staff, and patient outcomes particularly those related to patient safety (Jennings, 2008). Occupational stress does not only affect nurses. According to Hakanen and Schaufeli (2012), intensive care physicians find themselves particularly at risk because of their working environment which is closed, noisy, hyperactive and highly technical and because of the work itself which involves critically ill patients and death.

It is important to recognize that stress is a state, not an illness, which may be experienced as a result of an exposure to a wide range of work demands and in turn can contribute to an equally wide range of outcomes, which may concern the employee's health and be an illness or an injury, or changes in his/her behavior and lifestyle (Moustaka and Constantinidis, 2010). Work related stress has been described as a situation wherein job-related factors interact with the worker to change his or her psychological and/or physical condition such that a person is forced to deviate from normal functioning (Chandraiah and Rao, 2011). On the other hand (Malta, 2004), described occupational stress as any discomfort which is felt and perceived at a personal level and triggered by instances, events or situations that are too intense and frequent in nature so as to exceed a person's coping capabilities and resources to handle them adequately.

Work related stress was once thought of as occurring only in those who work in senior positions. It is now acknowledged that occupational stress can be experienced by employees at every level (Michie and Williams, 2003). It has been documented that the degree of control that employees have, determines whether they experience stress and how they cope with it (Gray, 2000). Occupational stress has been found to be one of the major work-related health problems (Gray, 2000). Therefore, it is important to know how work related stress affects health care workers and what factors in their work environment causes the greatest burden. This is so because at different workplaces health care workers are confronted with different tasks, working conditions and



stressful situations, for example, emotional suffering and death of a patient (Gray, 2000). Work related stress have also been described as a current and future issue for health and safety (Hosis,Mersal,Keshk, 2013).

Stress can impact on both employees and employers alike (Chandraiah and Rao, 2011). Job stress results from the interaction of the worker and the conditions of work. One can argue that interventions like identifying the possible causes for signs of stress, identifying or determining the signs of stress, identifying the possible causes for the signs and developing possible proposed solutions for each signs are required (Chandraiah and Rao, 2011). These measures allow individuals to build coping skills and develop strategies to develop individualized stress management plans that include eliminating the sources of stress (Chandraiah and Rao, 2011).

Stress results from a mismatch between the demands and pressures of the person, on one hand, and their knowledge and abilities, on the other. It challenges their ability to cope with work. This includes not only situations where the pressures of work exceed the worker's ability to cope but also where the worker's knowledge and abilities are not sufficiently utilized and that is a problem to them (WHO, 2003). According to WHO, (2003), pressure at the workplace is unavoidable due to the demands of the contemporary work environment however, work environment pressures may be positive or negative considering the degree of pressure. Pressure perceived as acceptable by an individual, may be positive as it may keep workers alert, motivated, able to work and learn, depending on the availability of resources and personal characteristics.

Nevertheless when that pressure becomes excessive or otherwise unmanageable it may be negative, thereby leading to stress (Makinen,Kivimaki,Elovaino,Virtanen,2003) stated that numerous factors are linked with occupational stress and studies showed that, in supplement to stressful factors intrinsic to nursing organizational management attributes influence work-related stress among nurses. Meanwhile, sources of stress vary in both nature and frequency across nursing specialties. Some of the factors that cause occupational stress are working environment, interpersonal relationships among workers, nature of the nursing profession, organizational factors, individual characteristics and role characteristics (Makinen et. al., 2003).

The working environmental conditions like the incorrect ventilation, lighting and the inadequate temperature levels are some of the potential work-related stressors (Moustaka and Constatinidis, 2010). Correct ventilation is vital in the working environment for the worker to inhale the fresh air. Adequate light is also instrumental in the work place so that the worker will see clearly and avoid some accidents. Right temperatures are important as well to avoid heat and cold stress on employees (Moustaka and Constatinidis, 2010).

Work relationships may be potential stressors. Sources of stress in the workplace are negative relationships amongst co-workers and the lack of staff support from the management. Lack of social support from colleagues and superiors and less satisfaction with the head nurses could add on much to the development of stress (Moustaka and Constatinidis, 2010). Moreover lack of understanding and support from managers also contributes significantly on the appearance of stress. A negative environment within the organization also impacts negatively on the wellbeing of workers. Occupational stress is a major health difficulty for both individual workers and organizations, and can produce burnout, illness, labour turnover, absenteeism, poor morale and reduced competence and performance (Hussein et al., 2012).

Occupational stress among nurses is associated with a variety of personal and institutional factors. Various studies (Moustaka and Constatinidis, 2010), showed that, organizational and management characteristics play a vital role in influencing the stress nurses experience at work. Globally, a considerable part of potential sources of stress for nurses appear to be organizational in nature as well as stress-generating nursing work situations, which can be of physical, psychological or social nature (Moustaka and Constatinidis, 2010). Some major determinants of emotional exhaustion include increased job demands, the use of sophisticated technologies, competition among hospitals, nursing shortage, work overload, and lack of task autonomy and feedback, as well as reduced advancement opportunities.

Ambiguity and role conflict are recognized as stressful characteristics of the working role. Ambiguity is generally defined as the lack of clarity regarding the employee's targets and duties, whereas role conflict as the conflict among professional roles (Moustaka and Constatinidis,

2010). In most cases stress in either individuals or groups occurs when their situation is more complicated. The lack of opportunities to practice the professional role of nursing drastically plays a part to the production of stress (Moustaka and Constatinidis, 2010).

According to Jennings (2008), the home and/or work interface and fulfilling other expectations for the role of the nurse are identified as elements of potential stress related to nursing. In addition to nursing itself, organizational and management characteristics influence the stress nurses experience at work (Moustaka and Constatinidis, 2010). However, occupational stress in nursing is to a great extent determined by how successfully each individual nurse copes with the job-related stress factors in his/her workplace. Meanwhile the biggest causes for nurses' stress is their lack of preparation in managing the emotional needs of patients which in most cases causes anxiety within the nursing staff (Moustaka and Constatinidis, 2010.)

Research on stress among health workers from across the globe indicates that the phenomenon of occupational stress in health work is alarmingly widespread. Occupational stress is becoming increasingly globalised and affects all countries, all professionals and all categories of workers, as well as families and society in general (Malik, 2011). There is growing evidence that health care workers and health professionals are largely affected by work-related stress or occupational stress (Sveinsdo'ttir, 2009). Health workers are exposed to greater job stress, great sense of high job responsibility and frequent overtime. The nature of work that health care workers do exposes them to occupational stress (Sveinsdo'ttir, 2009). Health work such as nursing profession is a challenging job because of its nature. Nurses are faced with professional work demands as well having to deal with difficult patients. Some of the reasons that can cause occupational stress among the healthcare workers could be due to increased workload, personal or family, meeting deadline, environmental pressure, long work hours, single job and high demands (Indoo and Ajeya, 2012). All these factors can actually leave an employee physically and emotionally drained. Job stress can interfere with physiological wellbeing.

According to Indoo and Ajeya ( 2012), nurses are one of the most susceptible professional groups to occupational stress, as they often run into stressful situations due to the special demands of their profession. During the last two decades, the interest in stress producing factors

that contribute to nurses' psychological state has risen (Indoo and Ajeya, 2012). The study of occupational stress is an essential need since it has been exposed that stress has negative impact both on nurses' health and on the health of organization (Indoo and Ajeya, 2012). Some of the chief stress producing factors in nurses are: frequently or rapidly alternating time shifts, bad occupational conditions ,role conflict, constant communication with a variety of people, work overload and severity of incidents, routine dealing and the lack of individual's role in the occupational environment (role ambiguity-lack of duties specification).

Work stress is thought to affect individual's psychological and physical health, as well as organizations' effectiveness, in an adverse manner (WHO, 2003). Stress affects people in different ways. Stress may contribute to various types of chronic health problems and also affect an individual's immune system negatively (WHO, 2003). Workplace stress of nurses can cause several symptoms, such as insomnia, which can result in a decline in nurses' performance. The experience of work stress can also cause unusual and dysfunctional behavior at work and contribute to poor physical and mental health. In extreme cases, long term stress or traumatic events may lead to physiological problems and be conducive to psychiatric disorders resulting in absence from work and preventing the worker from being able to work again (WHO, 2003). Occupational stress has been linked to a range of adverse physical and mental effects, including insomnia, depression, cardiovascular disease and anxiety, stressful working conditions have also been reported to impact negatively on employee wellbeing by directly contributing to negative health behaviours or by limiting an individual's ability to make positive changes to lifestyle behaviours (Chingarande and Bekezela, 2013). When demands are excessive and prolonged, the body's defenses are exhausted, and the person may develop physical health problems, emotional disorders or behaviors that are evidence of the strain.

Clinical nurses work under conditions of intense stress with limited autonomy in decision making, since they often work under policies defined by others (Meneze, 2005). However, in the end result, the important one who will be harmed due to nurses' stress is the patient. A nurse under stress will care for patients in a cold, indifferent and depersonalized way, with apathy and disappointment (Meneze, 2005). Moreover, it is possible that a nurse under stress withdraws, behaves negatively and has a short-temper, is often absent from work, and performs in a less

effective manner comparing to her best and she has often wishes to quit the profession (Meneze, 2005).

Meneze (2005), stated that job stress is considered rising and has become a challenge for the employer because high levels of stress result in low productivity, increased absenteeism. According to (Riaz and Ramzan, 2009), occupational stress is considered as a real cost of the organization, which has an effect on the routine manoeuvre of the organization.

People react to stress in different ways, some coping much better than others and suffering fewer of the harmful effects of stress (Meneze, 2005). Some people can find it not easy to keep a healthy balance among work and non-work life, meanwhile they may simultaneously get engaged in unhealthy activities such as alcohol and drugs abuse. Stress may differ from one person to the other as it may be seen as motivating force which alerts certain individuals and facilitates them to accomplish advanced levels of performance. However if such individuals are not exposed to the motivating force, they time and again lack loyalty where monotony, slowness and ultimately occurrence of laziness may result (Gibbens, 2007). There is evidence that the experience of stress at work is associated with changes in behavior and physiological function, both of which may be detrimental to employee's health.

It is not possible to eliminate stress, Organizations can always adopt strategies that a geared to minimize the stress levels within their employees (Jones and Bright, 2002), stated that stress cannot be eliminated as it serves as a driving force if kept at a certain level. Stress needs to be managed in the sense that the level of patient care, job satisfaction and other factor that affect it are minimized (Imtiaz and Ahmad, 2009).

Despite an impressive amount of empirical data showing the adverse effects of stress in the workplace on the health of individuals and on organizations, there is little scientific evidence on how to prevent it effectively. Given the scale of the problem and the costs associated with stress in the workplace, a lot of organisations would like to implement measures with a view to either training individuals to cope better with stress or reducing the sources of stress in the work environment. Despite a considerable increase in the number of scientific publications on stress in the workplace between 1991 and 2002, a number of authors necessitate to intensify research into

organizational-level work stress interventions (Brun et al., 2008). There is a rare scientific texts on organizational-level work stress interventions, and much scarcer than individual-level interventions. Consequently, it is difficult to ascertain which measures are likely to lead to an effective reduction in stress in the workplace and how these measures need to be implemented in order to achieve the anticipated results (Brun et al., 2008).

Moreover the demonstrated costs arising from occupational stress and the increased prevalence of stress in the workplace is becoming increasingly vital for managers to be aware of workplace stress and to have suitable strategies and skills to be able to manage employee distress effectively (Brun et al., 2008). Early intervention and appropriate strategies for prevention are an excellent position to not only reduce occupational stress in the employees but also reduce organizational costs associated with emotional distress (Brun et al., 2008). By taking the preventative step of reducing occupational stress in a work place will result in having a happier, healthier and more productive workforce, thereby increasing organizational performance.

Several studies (Dragano et al., 2005) have been conducted to evaluate ways to mitigate stress. Social support and empowerment studies conquered these researches (Jennings, 2008). Even though social support is a multifaceted construct, definitions and types of support were not typically found in these more recent researches. Nevertheless, the importance of co-worker support was verified in few studies undertaken. In some studies, a general construct labelled “organizational support” exhibited the expected negative relationship with work exhaustion. In the same way, social support from supervisors or colleagues demonstrated a negative association with work stress. Based on further studies, as nurses feel more stress, they rely more on social support (Jennings, 2008).

However (Brun et al., 2008) indicated that a cluster analysis demonstrated that high social support was found only in the cluster with low burnout and low stress. No buffering effects were discerned in the studies, but there was a direct and beneficial effect of social support on workers’ psychological well-being and organizational productivity. Even though these findings do not make clear the mechanism for social support, they do show that co-workers and supervisors at all

levels would be wise to consider the importance of reciprocal interpersonal exchanges that enhance security, mutual respect, and positive feelings.

According to (Jennings, 2008) studies of nurses and workplace empowerment were conducted by teams involving Laschinger. Empowerment showed a strong, negative association with job tension and a strong positive relationship with perceived work effectiveness. Similarly, in other reports, structural empowerment in the workplace such as opportunity, information, support, resources and power contributed to improved psychological empowerment like meaning, confidence, autonomy and impact. Psychological empowerment, in turn, had a strong positive effect on job satisfaction and a strong negative influence on job strain. Similarly, as perceptions of empowerment increased, staff nurses reported less emotional exhaustion and depersonalization together with a bigger sense of personal accomplishment the three components of burnout (Jennings, 2008).

Botswana, like all other developing countries, is experiencing a severe human crisis in health care sector. The health institutions are facing crippling manpower shortage. The shortage of nurses and doctors in Botswana's medical institutions is exacerbated by a number of factors, among them deplorable working conditions and uncompetitive salaries. Botswana health personnel have in the past revealed that the patient to nurse ratio is high as 30:2 instead of the internationally accepted standard of 10:1 (Tshweneyagae,2007).

Migration of the nurses has also immensely contributed to shortage of manpower (Tshweneyagae, 2007). Migration or resignation of nurses would be drastic and may result in deaths due to limited patient care. Bearing in mind the above conditions, there has been continuous public outcry about poor services in Botswana hospitals and clinics. Public complain about long waiting time and shortage of doctors in health facilities. In addition, nurses complain that they must work long hours in spite of high numbers of very seriously ill patients who require attention (Tshweneyagae, 2007).

Considering, the lack of research on nurses stressors, it is imperative to investigate occupational stressors in nursing as a profession and identify coping strategies that are available for nurses.

This study will be guided by Lazarus and Folkman's cognitive theory and coping (Jones and Bright, 2002) which identifies two processes, cognitive appraisal and coping, as critical mediators of stressful person-environment relations and their immediate and long-range outcomes. The variables in the theory that guided this research are personal and work characteristics. Work characteristics are environmental stressors whereas personal characteristics facilitate the individual nurse's ability to conduct the appraisal of the stressors (Jones and Bright, 2002). The nurse's perception of how much control an individual has is a factor which leads to feelings of stress when the situation is perceived during appraisal as uncontrollable. The experience of stress is defined by, first, the person's realisation that they are having difficulty coping with demand and threats to their wellbeing and second, that coping worries or depresses them (WHO, 2003).

Some of the few models of occupational stress are the job demands-resources model or (JDR) model which is an occupational stress model that suggests strain is a response to imbalance between demands on the individual and the resources he or she has to deal with those demands (Bakker, 2007).

It was established as an alternative to other models of employee well-being, such as the demand-control model and the effort-reward imbalance model. The authors of these model models "have been constrained to a given and limited set of predictor variables that may not be applicable for all job positions (Bakker, 2007). Consequently, the JD-R incorporates an extensive range of working conditions into the analyses of organizations and employees. Moreover, instead of focusing exclusively on negative outcome variables such as burnout, ill health, and repetitive strain, the JD-R model incorporate both negative and positive indicators and outcomes of employee well being. According to Bakker (2007), the JD-R model can be summarized with a short list of assumptions. While every occupation may have its own specific risk factors associated with job stress, these factors can be classified in two broad categories which are job demands and job resources.

Job demands include physical, psychological, social, or organizational aspects of the job that necessitate sustained physical and/or psychological effort or skills. As a result, they are linked with certain physiological and/or psychological costs. Few examples of job demands are work pressure and emotional demands



Job resources on the other hand include physical, psychological, social, or organizational aspects of the job that are either or: functional in achieving work goals; reduce job demands and the associated physiological and psychological cost; stimulate personal growth, learning, and development. Few examples of job resources are therefore, career opportunities, supervisor coaching, role-clarity, and autonomy (Karasek and Theorell, 1990).

According to the JDR model the interaction between job demands and job resources is important for the development of job strain and motivation (Karasek and Theorell, 1990). Job resources may shield the effects of job demands on job strain, including burnout. Specific job resources that can shield the impact of different job demands, depends on the specific work environment. Therefore, diverse types of job demands and job resources may interact in predicting job strain. However, perfect examples of job resources that have the potential of shielding job demands, are performance feedback and social support.

Job resources particularly influence motivation or work engagement when job demands are high. This assumption is based on the premises of the conservation of resources (COR) theory. According to this theory (Karasek and Theorell, 1990), people are motivated to obtain, retain and protect their resources, because they are valuable. Specialists argue that resource gain, acquires its saliency in the context of resource loss. This means that job resources gain their motivational potential particularly when employees are faced up with high job demands. However a relevant example is when employees are faced with high emotional demands, social support of colleagues might become more visible and more helpful.

The demand-control Model by Karasek, assumes that psychological strain results from joint effects of work demands and the decision-making freedom available for the employee facing the demands (Jones and Bright, 2002). The assumption in the model is that psychological strain results when work demands are high, and there is low or no decision-making freedom available for the employee facing the demands. Jobs with high demands but with low control increase the risk of stress (Jones and Bright, 2002).

In 1979, Karasek introduced the job demand-control (JD-C) model of job strain and it has been tested vigorously. This model assumes two main hypotheses namely the combination of high job

demands along with low job control precipitates psychological and physical strain and the jobs in which both demands and control are high produce well-being, learning and personal growth (Karasek and Theorell, 1990). Hence, according to the JD-C model, job demands and job control combine interactively rather than additively in predicting job-related outcomes.

Job demand control model also comprises 2 basic dimensions which are decision latitude and psychologic demands of which predict a wide range of health and behavioural outcomes (Karasek and Theorell, 1990). Decision latitude consists of two theoretically distinct concepts, skill discretion and decision authority, that are often joint for analysis. Skill discretion explains the degree to which the job involves the development of an individual's special abilities. Decision authority incorporates an individual's ability to make decisions about his or her job and to influence the work group or company policy or both (Karasek and Theorell, 1990). The psychologic demands dimension refers to whether there is enough time to get the job done, the amount of work, and the presence of conflicting demands. The variables in this model which guided the study are job demands and job strain or workload pressures. The study will also find the association between occupation stress and gender.

## **1.2 Significance of the study**

The findings of this research could help the employer to improve and develop programmes and strategies that will increase and enhance staff morale. The findings of this study could also improve the current programs that were tailored to reducing work-related stress. As a result, it is expected that service delivery will improve as well as health outcomes.

## **1.3 Research problem**

The Primary Health Care system in Botswana operates through a hierarchical referral system, starting at the bottom with a Mobile Health Stop, Health Post, Clinic without Maternity Ward, Clinic with Maternity Ward, and ending at the top with a referral hospital. (Fako and Ntonghawah, 2000). In all of these stages, the first contact person, and often the only one

responsible for preventive, promotive, curative and rehabilitative health-care services, is a nurse. In the majority of cases, even the decision to refer a patient to a higher health-care facility rests with a nurse (Fako and Ntonghawah, 2000).

The mandate of the Primary Health Care (PHC) strategy is to provide integrated, preventative and curative and rehabilitative services offered at clinics. The vision of the Ministry of Health in Botswana is to provide quality health services that inspired confidence in the clients and give job satisfaction to the health care workers (Fako and Ntonghawah, 2000). Improving job satisfaction can improve nurses' performance and the quality of care that patients receive (Fako and Ntonghawah, 2000). Over the years Ministry of Health has done more on improving the provision of services by building infrastructure developments (clinics, hospitals, transportation, and provision of electricity) and ensuring that clients' needs are met. In spite of all the improvements in health care provision, health care workers especially nurse still face constraints which hinder them to perform their duties accordingly. Nurses complain of staff shortage, poor work environment and long working hours due to high numbers of patients. These constraints affect nurses psychologically and their performance in work and lead to occupational stress. Nabirye et al., (2011), states that shortage of staff and heavy workloads lead to occupational stress. In spite of the three decades of complaints by and about nurses in Botswana, there has been very little systematic effort to study factors associated with stress among nurses. So information vacuum regarding stress among nurses in Botswana still needs to be filled. This study examined factors associated with occupational stress amongst nurses working in clinics in Gaborone.

#### **1.4 Aim of the study**

The aim of the study was to investigate factors associated with occupational stress among nurses working in clinics in Gaborone, Botswana.

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

To identify factors associated with occupational stress amongst nurses working clinics in Gaborone.

### **1.6 Research questions**

The following question was guided the researcher throughout the period of conducting the study;  
What are factors associated with occupational stress among nurses working in clinics in Gaborone Botswana?

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

Literature review is an evaluative report of studies found in the literature related to a particular selected area. The review aims at describing, summarizing, evaluating and clarifying the literature. It should give a theoretical basis for the research and help researcher to determine the nature of his/her own research. The literature review helps to lay the foundation and provide context for a new study. By doing a thorough review, researchers can determine how best to make a contribution to the existing base of evidence (Polit and Beck, 2008). Reviewing the literature can also help to identify relevant conceptual frameworks or appropriate research methods. A literature review also plays a role at the end of the study as researchers try to make sense of their findings (Polit and Beck, 2008). This section discusses factors contributing to occupational stress among nurses, the effects of stress, the interventions that are used to help nurses who experiences occupational stress and also provide a summary of the literature review.

#### **2.1.1 Factors that contributing to occupational stress among nurses**

Occupational stress is recognized world-wide as a major challenge to worker's health and the healthiness of their organizations. The primary difference between occupational stress and many other forms of stress is the nature of the stressors and their interaction with the overall stress process (Chang et al., 2011). Several factors can be identified in the workplace as potential sources of stress for individual workers. Occupational stress is solitary a foremost grounds of work related health tribulations in approximately all occupations in all over the globe. At different workplaces nurses are confronted with different work tasks such as night shifts, poor working conditions and stressful situations which are more likely to lead to occupational stress (Tummers et al., 2002). A study by Moustaka and Constantinidis (2010) reported that a great deal is known about the sources of stress at work, about how to measure it and about the impact on range outcome indicators. The study further revealed that the interaction between

organizational factors and the characteristics of individual workers also play a significant role. Common organizational and individual stressors could be classified into five groups: Organizational practices (performance rewards systems, supervisory practices, promotion opportunities), job/task features (workload, workplace, autonomy), organizational culture/climate employee value, personal growth, integrity, interpersonal relationships (supervisors, co-workers, customer, personal characteristics (personality traits, family relationships; coping skills (WHO, 2003). It is estimated that about 100 million workdays are being lost due to stress and nearly 50% to 75% disease are related to stress (Imitiaz and Ahmad, 2003). A study by (Lee et al., 2003) was carried out to understand the phenomenon of burnout among Korean nurses. The results of the study reported higher levels of burnout among Korean nurses than nurses in Western countries such as Germany, Canada, the United Kingdom and the United States of America. Nurses who experienced higher job stress, showed lower cognitive empathy and empowerment, and worked in night shifts at tertiary hospitals and were more likely to experience burnout.

On the other ,nurses working in a critical care environment are frequently exposed to highly stressful and emotional situations, such as the relapse or death of a patient(Meyer et al., 2008) . In addition, nurses generally experiences more emotional exhaustion than physicians (Meyer et al., 2008). Nurses' stress on the job is very crucial as it can result in lowering quality patient care thus lowering patient satisfaction and also lower job satisfaction which is strongly associated with job burnout. Beginner nurses always experience stress related to their performance during the first few months of working since they will be trying to acclimatize to the work environment. However studies have been carried out to examine how stress influences negative outcomes, such as job satisfaction and burnout, in new graduate nurses(Meyer et al., 2008).

A study conducted by Moustaka and Constantinidis (2010), revealed that during last decade there has been increasing recognition of the stress experienced by hospital nursing staff. Even though some stressful situations are specialized to a particular type of hospital unit, nurses are however subjected to more general stress which arises from the physical, psychological, and social aspects of the work environment. Patient care is usually adversely affected to higher levels of stress in staff which may result in staff burnout and turnover.

In addition, a number of aspects of working life have been associated with stress (Moustaka and Constantinidis, 2010). The study noted that aspects of the work itself can be stressful, some few example maybe work overload and role-based factors such as lack of power, role ambiguity, and role conflict. On the other hand, threats to career development and achievement, including threat of redundancy, being undervalued and unclear promotion prospects are stressful.

Just as stress differs as a function of the individual, it also differs as a function of one's type of occupation. Some occupations are of course, inherently more stressful than others (Malik, 2011). A study conducted in China among physicians revealed that occupational stress has been identified as a predictor of depression and depressive symptoms (Liu et al., 2012). As health professionals, physicians are highly exposed to various occupational stressors such as work overload, time pressure, role conflict, effort-reward imbalance, and unsatisfactory doctor-patient relationship. The study also revealed that, occupational stress not only exerts a direct effect but also has an indirect effect on depression and depressive symptoms through (Moustaka and Constantinidis, 2010).

Heavy workload and the consequent occupational stress can have serious consequences for nurses and their patients. A study conducted among Icelandic nurses working within and outside the hospital revealed that Iceland strenuous working conditions are felt more severely among hospital nurses than nurses working outside the hospital settings (Sveinsdóttir, 2009). The results revealed that hospital nurses work more hours per week, provide more direct patient care, have less opportunity to take lunch breaks ,and there are greater staff shortages (Sveinsdóttir, 2009). A Study by (Chingarande and Bekezela, 2013) carried out to investigate the prevalence of occupational stress among radiographers working in public hospitals revealed that, the most common antecedent of occupational stress were, overwork/accelerated work pace, inadequate pay, inadequate holiday, too much pressure and lack of recognition.

According to the study conducted by Pratibha (2009), nurses' environment entails an enclosed atmosphere, time pressures, excessive noise or undue quiet, sudden swings of from intense to

mundane tasks, no second chance, unpleasant sights and sounds, and long standing hours. The study showed that in history nurses have always being inadequate in the nursing profession. The study by Pratibha (2009) also revealed that, by 2020 the nursing workforce will be 20% below requirements. In results also showed that, excessive workload was a main cause of stress and emotional exhaustion. The study also found out that standing for long hours, lack of exercise, and shifting patients can result in back pain which decrease efficiency and increase absenteeism among nurses. The other vital factor revealed by the study is stiffness in the neck and shoulders seen in the nurses is chiefly due to constant tensing of muscles due to stress. Being afraid of exposure to acquired immunodeficiency syndrome (AIDS) and Hepatitis while treating infected patients, is causing stress to nurses (Pratibha, 2009).

On one hand, home stress has been identified as a major contribution to the stress faced by nurses. Pratibha (2009), stated in his study that night shifts, overtime, transport delays and difficulty in getting leave disturbs the peace of nurse' home life. Nurse working on a night over shifts may consequently lead to such nurse worrying about his or her children back at home. The findings by Pratibha (2009), found that sixty percent of the nurses that participated in the study were not satisfied with their existing salaries and benefits. Unsatisfactory salaries may be the one other factor which contributes to increase of stress in nurses who participated in the study. However nurses look after their home, they cook, clean, and perform other households' chores as they cannot afford domestic help due to unsatisfactory salaries. Additionally, the respondents major sources of stress were related to nursing issues (nature of work) such too much work, interpersonal relationships, and dealing with hospital administration.

A study by (Mealer et al., 2012) found that Intensive care unit (ICU) nurses are in general constantly exposed to work related stresses resulting in the development of psychological disorders including posttraumatic stress disorder and burnout syndrome. Globally, there is shortage of nurses, mostly in specialty areas such as the intensive care unit (ICU). Dissatisfaction with the work environment is found to be the factor triggering this international crisis yet another vital component is the accelerated departure. In a study of nurses in the developed countries such as United States, Canada, England, Scotland, and Germany, almost half of hospital nurses were dissatisfied with their jobs where almost quarter intended on leaving the profession in less than a



year (Storesunda and McMurray, 2009). A study by Duffy et al., (2000), stated that on a day to day basis emergency department nurses are at the forefront of a demanding healthcare system and are required to deal with emotional trauma issues, which may result in them experiencing symptoms of secondary traumatic stress (SSTS). SSTS is generally described as a natural end result of stress experienced when assisting or wanting to assist a troubled or suffering person. Workplace stressors in the emergency department have been discovered broadly. Violence against staff, death or sexual abuse of a child, and interpersonal conflicts are some of the main reported stressors for emergency department nurses. However, secondary traumatic stress among emergency department nurses can result in physical symptoms of stress and feelings of depression, sadness, fear and shock (Duffy et al., 2000).

According to Park and Kim (2013), nurses also need to put in numerous hours to learn ever-changing medical techniques, these include dealing with nursing clients and hospital staff in other occupations, working as the guardians of patients for the most sum of time during treatment and such characteristics of duty can increase a nurse's can increase a nurse's job stress and cause them to have higher levels of stress than other occupations.

According to WHO, (2007 ), the median number of nurses working for mental health in India was only 0.05 per 100 000 population as compared to the global median of 2.0 per 100 000 population, this clearly shows the scarcity of nurses. Nurses in majority of Indian psychiatric hospitals have to work in an extremely stressful environment where they come across stressors which may range from shortage of nurses, unpredictable patient behaviour as well as aggression and violence on the unit. Nurses also develop depression, violent behaviour and other related diseases due to exposure to psychosocial risks (WHO, 2007). On the other hand, working in a psychiatric unit could be very stressful as the patient behaviour is highly unpredictable. Patients escaping from the unit, aggression towards other patients/staff, breaking hospital equipment in the unit are may lead to death and violent preventable incidents which may directly impact on nursing care. Even though physical work may be less when compared to working in a trauma care unit, the emotional burden may be tremendous and very stressful.

A study conducted Shen et al., (2005), to explore the work related stress and risk factors of nurses in psychiatric institutions in Taiwan, revealed that a high prevalence of workplace hazards by the nurses in the study. Assault was reported to be one of the most important job hazards for nurses in psychiatric institutions. Strong relationship has been found between nurses' occupational stress and job satisfaction and it has been reported that growing occupational stress is work related and result in an increasing turnover rate and causing nurses to leave the profession (Jaradat, 2012). The results of the study conducted by (Jaradat, 2012) to evaluate the factors contributing to work-related stress and job satisfaction, revealed that the majority of nurses experienced moderate to extreme stress related to general working conditions, the stressors were related to shortage of essential resources, staff shortage and unsocial hours. The results also revealed that nurses were generally dissatisfied with their job.

One descriptive, co relational study conducted by (Emery, 1993) examined the stressors most regularly experienced by paediatric oncology nurses among 155 members of the Association of Paediatric Oncology Nurses. The participants indicated that deterioration or sudden death of a beloved patient was their supreme source of stress followed by a workload seeming as too great to give quality patient care. The findings showed that paediatric oncology nursing is a stressful profession; moreover lot of research is needed to identify positive strategies for reducing this stress experienced by paediatric oncology nurses (Emery, 1993).

Various studies have discovered the relationship between some aspects of working conditions within hospitals and HCW health and/or patient safety (Jones et al., 2000). Increased fatigue and an increased risk of medical error or near error were linked to be caused by longer work hours, overtime, working night shifts, and rotating shift work. However poor social support has been associated with increased risk of injury and burnout, increased stress, fatigue and anxiety, and a greater probability of emotional exhaustion and poor health scores (Jones et al., 2000). The study by (Jones et al., 2000) also revealed that working long hours e.g. 8hrs, low trust among colleagues, unjust distribution of work and poor collaboration with supervisors were linked with a greater risk of patient infection (Jones et al., 2000). Another study by Udo et al., (2013), stated that hospital settings like medical-surgical units are related with a high risk of work-related stress among nurses, due to factors such as a heavy work-load and exposure to ethical dilemmas.

Generally surgical care unit is associated with the high work tempo, with many patients to attend to, each with their own, individual needs. A great degree of flexibility is required from nurses as they provide care for both dying patients and patients being cured.

Another stressor in surgical care there is a high number of patients with cancer, which is known to be particularly demanding and stressful, since it suggests feelings of powerlessness and helplessness in nurses when powerless to lessen patients' suffering. At times even, nurses' own fear of death is stimulated as death is so closely allied to thoughts of cancer. Alternatively, caring for patients with cancer is also alleged as very rewarding and meaningful; a typical example is when nurse receives a positive feedback for having been able to help (Udo et al., 2013). The study by Udo et al., (2013), also show that a high sense of control makes it easier to handle high demands and being able to support the patient and lessen suffering most likely boosts nurses' sense of being in control. Whilst, then again, nurses experience a low sense of control, this may multiply their work-related stress. As a result, it is important for nurses to have coping strategies, feel equipped to meet patients' needs and have a strong sense of coherence as this makes them better equipped to handle complicated demands on the ward (Udo et al., 2013).

Occupational stress is a global problem; it affects each and every worker regardless of their continent and/or race. In Africa the occupational stress is also a recognized problem in health care workers particularly, in intensive care unit (ICU) where the routine work demands a highly technical environment as well as well skilled and highly specialized doctors and nurses (Hussein et al., 2012). Quite a lot of studies had pointed out that different factors and stressors in some ICU hospitals may not be present in other ICU hospitals. This shows the significance of exploring the work settings in order to understand what kind of stressors health workers experience. Hussein et al., (2012), carried out cross-sectional study in two hospitals in Hargeisa city at Somalia to determine the job and organizational stress among nurses and doctors in ICU and its influencing factors.

There is scarce literature on occupational stress among nurses in the Southern African Development Committee (SADC) countries. However one cross sectional study was carried out by (Rothmann et al., 2006), examining the construct validity and reliability of the Nursing Stress

Indicator (NSI) and identifying differences between occupational stressors of professional and enrolled nurses in South Africa among 980 professional nurses and 800 enrolled and auxiliary nurses (Rothmann et al., 2006). It was found that five reliable stress factors, which were patient care, job demands, and lack of support, staff issues, and overtime were extracted. Health risks posed by contact with patients, lack of recognition and insufficient staff were noted as the most severe stressors for the nurses. The other harsh stressors for professional nurses according to Rothmann et al., (2006), were watching patients suffer, demands of patients and staff issues. Professional nurses' severity of stressors was higher than of enrolled and auxiliary nurses. Rothmann et al., (2006), concluded that the organizations that employ nurses should implement programs to monitor and manage stress, specifically regarding staff issues and job demands.

There is scarcity of literature on job stress in African countries. However there is one job stress related study of Chirwa et al., (2009), exploring the demographic and social factors, including perceived HIV stigma, that affect job satisfaction in nurses from 5 African countries. Chirwa et al., (2009), used a cross-sectional survey among 1,384 nurses caring for patients living with HIV infection in Lesotho, Malawi, South Africa, Swaziland, and Tanzania. It was found that the personal satisfaction subscale was the higher in this sample study. However the findings showed the significant difference in the job satisfaction among nurses of 5 different countries and the differences were consistent across all subscales. Chirwa et al., (2009), stated that mental and physical health, marital status, education level, urban/rural setting, and perceived HIV stigma had significant were found to be influencing job satisfaction, perceived HIV stigma being the strongest predictor of job dissatisfaction. The study results therefore provide new areas for intervention strategies that might improve the work environment for nurses in these countries.

SADC nations are encountering migration of nurses at a crucial time when these nations are also fighting a serious HIV (Chirwa et al., 2009). Few nurses who are not migrating from these already disadvantaged systems encounter worsening working conditions and heavier workloads, which always results in lower job satisfaction and ultimately stress. Meanwhile the most vital time to understand the job satisfaction of the nurses who are still providing services in these countries is at a height of epidemic like the HIV-epidemic yet there has never been time for that. Khosa et al., (2014), conducted a study to assess the impact of stress and burnout on performance

of registered nurses in the primary healthcare facilities of Bushbuckridge sub-district, in Mpumalanga, where random sample technique was used to select 50 registered nurses from 38 primary healthcare facilities. Information on the impact of occupational stress and burnout on performance of registered nurses was gathered by using a quantitative explorative design. The results of the study showed that there is a negative relationship between job stress and burnout on the performance of nurses in rural clinics of BBR Sub district and that nurses are highly stressed, the main causes being, work overload, time pressure, and lack of social support, understaffing, role ambiguity as well as dealing with severely ill or dying patients (Khosa et al., 2014). This is supported by (Jennings, 2011), who stated that , stress has been regarded as an occupational hazard since the mid 1950's and also cited as a significant health problem.

Fako and Ntoghwana (2000), conducted a study to explore job satisfaction, and examine the extent of job dissatisfaction among nurses in Botswana, the aim of the study was to explore factors that may help explain satisfaction or dissatisfaction among the nurses. The study found that nurses who were most likely to be satisfied with their jobs included those with the most academic education, a high level of professional training, and a high income. These nurses received recognition and support from their supervisors and peers and were satisfied with their salaries.

A negative work environments impacts on the workers wellbeing and job performance (Agolla, 2009) conducted a study on the occupational stress among police officers in Botswana. The purpose of the study was to find out the general level of stress symptoms among police officers, reaction to stressors and sources of police stress in the workplace. Convenient random sampling technique was used to sample the participants. The findings from the study reveal that the police work stressors are; getting injured while on duty and the use of force when the job demand to do so. The results also revealed that the job of policing is highly stressful. Employers should understand that adverse work conditions result in psychosocial risks and unhealthy life styles.

### **2.1.2 Effects of stress on health of nurses**

Occupational stress also has some effects on the well-being of nurses. Occupational stress is wide spread, rampant and complex and has assumed great importance in work places (Akinoboye et al., 2002). In a study conducted in Europe and USA on stress, burnout and job dissatisfaction in mental health workers revealed high levels of stress and burnout. Stress and burnout among mental health professionals have an impact on the quality and effectiveness of their work (Rossler, 2012). In turn, a healthy workplace is a key factor for job satisfaction and a good quality of mental health. Occupational stress has been reported to affect job satisfaction and job performance among nurses, thus compromising nursing care and placing patients' lives at risk (Sveinsdo'ttir, 2009). Nursing is considered a particularly stressful and emotionally demanding job. According to (Chiang and Chang, 2012) the nurses' stressful work circumstances may cause extreme psycho physiological responses, mental distress, mood disturbances and burnout; it may also badly affect the nurses' job performance as well as productivity.

Previous studies (Chiang and Chang, 2012), indicated that a number of personality resources alleviated the impact of occupational stress on nurses' mental health. Among these resources are personality natures like hardiness and coping approaches. Coping approaches that have been established to better nurses' mental health incorporated practice of self-control, positive reappraisal, and escape avoidance coping, and distancing (Chiang and Chang, 2012). However nurses who are using these coping approaches felt less nervous and miserable, they also reported coping enhanced with job-related stressors and improved levels of well-being compared with their counterparts. However, results from other studies were vague and demonstrated that avoidance and distraction coping strategies could dull emotional responses and cause burnout in the long run (Chiang and Chang, 2012).

The study carried out by Pratibha, (2009), in Indian nurses also indicated that nurses are faced with being affected by psychosomatic illness. Psychosomatic illness is a disorder that affects the body and the mind. These illnesses have emotional origins causing physical symptoms. About 90% of these illnesses are due to the chronic stress. However, study findings showed that working overtime has a severe impact on nurses. Stress can affect individuals' minds where such individual may end up having erratic meal times, missing meals because of overwork, and faulty eating and excessive consumption of tea and coffee during the night shift. Pratibha (2009) indicated that anaemia was seen in 32% of the nurses in the study. Findings of Kane's study indicate that anaemia, backache, and stiffness in the neck and shoulders are linked to stress at home and workplace. A study conducted by (Konstantinos and Ozouni, 2008) reported that nurses' job satisfaction was found to be influenced primarily by psychological stress and the quality leadership. The results of the study also revealed that a variety of factors influence stress and job satisfaction of mental health nurses. Among these, clinical leadership and quality inter professional collaboration between nurses and doctors and amongst nurses are particularly important. According to (Weinberg and Creed, 2000) nursing is highly a stressful occupation, and high levels of occupational stress are understood to affect the physical and mental health of nurses. Numerous studies carried out on occupational stress among hospital nurses showed that occupational roles were found to be the major work related stressor.

A study by De Boer et al., (2011), on a meta-analysis reviewing existing data on the effects of work-related serious incidents in hospital-based health care professionals. Post-traumatic stress symptoms or even post-traumatic stress disorder (PTSD), anxiety, and depression and may negatively affect health care practitioners' behaviours toward patients are some of impacts that may be induced by work related critical incidents (De Boer et al., 2011). The stress of overwork has been associated with psychological problems such as depression, anxiety and burnout, physiological health problems such as hypertension and heart attacks and organizational problems including workplace violence and accidents (Muchinsky, 2000). Work place stress result in behavioural problems, such as increased alcohol consumption and smoking. Common finding is that work stress has negative effects on families and home life (Muchinsky, 2000). The results of the study conducted in Uganda to assess levels of occupational stress, job satisfaction and job performance among hospital nurses revealed that, Ugandan hospitals experience

moderate levels of occupational stress (Nabirye et al., 2011). The results of the study also revealed that nurses with higher education and more experience perceived more stress.

A study conducted by (Weinberg and Creed, 2000), on doctors, nurses, and administrative and ancillary indicated that both stress at work and outside of work contribute to the anxiety and depressive disorders experienced by healthcare staff. Various researches showed that job stress has an effect on a person's well-being, ranging from cognitive, psychological, physiological as well as behavioural aspects. Stress resides in the brain's memory of a task during a major stressful conditions leading to a reduced mental concentration. Moreover, chronic stress trigger damage to the cerebral structures like hippocampus which can be accompanied by difficulties in cognitive functions (Park and Kim, 2013) which can increase error rates in duties and results in accident occurrence.

When nurses are incapable to cope with the stress, there are possibilities that somatic symptoms such as palpitations, feeling of fullness; gas in the stomach, giddiness, lethargy, fatigue, reduced sleep and appetite plus pain anywhere in the body may present in them which in turn can become another stressor. High stress perception by nurses caring for psychiatric patients can result in somatic symptoms which has effects on their job satisfaction. The impact of stress in the workplace is well recognized, with both human and financial costs investigated in the literature. A study by Caulfield et al., (2004) conducted in Australia on imperial research into occupational stress interventions within the past 10 years. Another study on effects of nurses' stress on patient healthcare was conducted by (Jones et al., 2000). According to Jones et al., (2000) healthcare workers who work in a hospital settings are exposed to high physical and mental demands which may increase their fatigue and stress levels, with potential consequences on patient. For hospitals to promote worker health and ensure patient safety they need to reduce stress and fatigue through organizational structures that minimize negative effects on Health Care Workers (HCW).

Meanwhile the determinants and effects of stress and fatigue produced in hospital environments are multi-factorial. Studies on a comprehensive evaluation of the impact of a broad range of



organizational factors on both physical and mental HCW health are required to enhance understanding the multiple dynamics present in hospital settings.

Healthcare workers who work in intensive-care units (ICUs) are highly exposed to high physical and mental demands potentially affecting their health or having repercussions on patient care. Even though numerous studies have explored the association between some aspects of working conditions, (Jones et al., 2000) conducted a cross-sectional study among 682 ICUs (medical, surgical and polyvalent) workers of Paris-area hospitals. The study was aiming to explore the impact of a wide range of demographic, employment and organizational factors correlated to fatigue and stress of French ICU HCWs. The study found that doctors reported fewer sleep difficulties but were more likely to report a tired present state. However findings indicated that female gender was correlated to higher stress levels and greater fatigue for all outcomes, whereas greater social support of supervisor or colleagues decreased stress and fatigue. Furthermore, longer shifts (12 hours vs. 8 hours) were linked with tired current state and greater sleep difficulties at the organizational level (Jones et al., 2000). When comparing shifts, personnel on rotating shifts had inferior stress and a better current state. On the other hand HCWs working on night shifts had greater sleep and energy level difficulties. Still when controlling for demographic factors, employment and organizational elements stayed significantly related with stress and fatigue outcomes. However to improve HCW health it is vital to consider at the same time factors at the individual and organizational level.

Stress has various health problems and stressed workers are more likely to be unhealthy. A study by (Nakhli et al., 2013) carried out a research among 70 nurses working in six medical departments and three surgery departments. The research was aimed to assess the degree of professional stress among nurses working in the general hospital and determining correlation between stress and anxiety symptoms. The results that were collected by questionnaires (the Perceived Stress Scale (PSS) and the Hospital Anxiety and Depression Scale (HADS) showed that 33% of nurses had anxiety symptoms and 44% had depressive symptoms(Nakhli et al., 2013).

However there was no correlation was found between PSS score and HADS score furthermore there was no correlation found between PSS score and the two sub-scales of HADS. Female gender and conflicts with colleagues are variables which were drastically interrelated with high anxiety symptoms. On the other hand it was found that nurses working in surgery department were more depressed than those in medicine department. Meanwhile, 37% of nurses had criteria of higher depressive disorder and in conclusion 13% of nurses had pathological stress level where only third of them had anxiety symptoms and fewer of them not exceeding half had depressive symptoms (Nakhli et al., 2013).

Moral distress results from the failure to provide the desired care to patients (Harrowing and Mill, 2010). In Sub-Saharan Africa there is scarce literature on moral distress as no research has been reported that addresses moral distress. A study by (Harrowing and Mill, 2010) carried a critical ethnography research among 24 acute care and public health nurses at a large referral centre in Uganda. The study aimed to describe the manifestation and impact of moral distress since it was experienced by Ugandan nurses who are providers of care to HIV infected and/or affected people. The study found that participants explained their passion for nursing and commitment to patients (Harrowing and Mill, 2010).

However when nurses are experiencing moral distress when there is lack of resources, patients' wellbeing is put at a very high risk. The results indicated that strain imposed by systemic challenges on the nursing profession was recognized, as the perception that the public blamed nurses for poor patient outcomes which results in nurses being stressed. The study by (Harrowing and Mill, 2010), concluded that the experience of moral distress among nurses in Uganda differed somewhat from the experience of nurses in developed countries. Constraints imposed by the failure to implement skills and knowledge to their fullest extent, together with lack of resources and infrastructure may consequence in the omission of care for patients. Furthermore moral distress appears to manifest within a relational and contextual environment and participants paying attention to the impact for patients, communities, and the nursing profession, rather than on their own individual suffering.

### **2.1.3 Interventions to deal with occupational stress among nurses**

Occupational stress within the nursing profession is a noteworthy global problem. Researchers have focused upon how nurses cope with the stress that is intrinsic within their roles (Happell et al., 2013). Several positive conclusions were made which are; social support, the main popular way for nurses to cope with stress, nurses have a preference to use adaptive coping strategies, and nurses use problem-focused strategies more than emotion-focused strategies (Happell et al., 2013). According to Happell et al., (2013) nursing is acknowledged as a stressful occupation, and the negative effects of high stress levels have been broadly researched. Meanwhile less attention has been paid to methods for coping with stress. Happell et al., (2013), conducted a study to discover and recognize how nurses cope with work-related stress away from their work environments.

About 38 nurses, including nursing directors, nurse unit managers, and ward nurses from a broad array of clinical areas participated in the study and 11 coping strategies were found. The study findings also showed that respondents coped with their stresses by seeking support from friends and colleagues, using different cognitive strategies and through leisure activities (Callaghan et al., 2000). There was a statistically significant link between the respondents' stress and sickness levels. The results therefore raise issues about the nature of nurses' working experiences. Some of the problems are potentially solvable and can be remedied by modifications to the workplace (Gardiner and Harrington, 2007; Callaghan et al., 2000) carried out a study cross-sectional survey in Hong Kong nurses, investigating an issue associated with a work-related health. The study investigated factors associated to stress and coping among Chinese nurses in Hong Kong (Callaghan et al., 2000).

Drinking alcohol, smoking, using the staff social club, using social networking websites, exercising, family activities, home-based activities, outdoor activities, avoiding people, displacement, and sleep were the found factors. Though more than few adaptive strategies appear in this list such as exercising and home-based activities, some nurses were using harmful behaviours to cope with work-related stress such as drinking alcohol, smoking and displacement (Happell et al., 2013). Knowledge produced locally, like that generated for the hospital in this

study, should work as the foundation for organizational strategies to improve the health of nurses. A study by (Laal, 2013) conducted an observational study among 103 nurses of 2 hospitals in Sanandaj-Iran determining how much nurses coped with their stress and defining the factors affecting stress management.

Participants responded to questionnaires based on Adolescent Coping Orientation for Problem Experiences (A-COPE) with 3-Likert-scale responses. It was found that stress management was positive in 67.9% and negative in 38.8% of nurses (Laal, 2013). The study illustrated that managing stress depends on both one's personality and the work environment. Apart from teaching nurses proper methods of stress management to support their coping resources, efforts should be done to arrange work environments how to reduce sources of stress.

Notwithstanding the rising evidence regarding the effectiveness of cognitive-behavioural interventions in reducing occupational stress, only some studies have examined its effectiveness among nurses. Orly et al., (2012), carried a study investigating the effect of a cognitive-behavioural (CB) course on the nurses' well-being where it compared the sense of coherence (SOC), perceived stress (PSS), and mood states among 20 nurses having participated in the CB course. It was found that no noteworthy differences were found between the two groups in SOC, PSS, and mood states at the baseline (t1) (Orly et al., 2012). On the other, a significant increase in SOC and the mood state of vigor and a significant reduce in PSS and fatigues were found only among participants in the CB course. Results indicated that health care professionals are prone to nonstop stress as part of their occupational load.

There are personalities dispositions associated with reduction of stress and one of them is sense of coherence (SOC). SOC represents the extent to which a person perceives the world and the predictable stressful events he or she come across as comprehensible, manageable, and important challenges worth overcoming. Orientation like this enables competent recruitment of available resources to cope with an array of demanding situations. Meanwhile high SOC make possible flexibility and an increased capability to successfully select the adequate resources for coping with a precise situation. Undeniably, negative association between SOC and levels of anxiety in stressful situations were in the past acknowledged, furthermore a negative association between

SOC and burnout was documented too. Indeed, the emotionally draining experiences can cause a psycho physiological burden on an individual according to facts above.

A study by Jelastopulu et al., (2013), highlights the need of creating a supportive and positive working environment for the nursing staff, by reducing sources of stress and setting up intervention programs. According to Jelastopulu et al., (2013), the supreme work-related pressure was experienced by nurses with expertise and in high positions; these include head nurses or supervisors and/or nurses with higher education. These nurse have more responsibilities which usually expand over a range of fields like the training and the supervision the nurses who are undergoing practice, the caring for the recovery or even the lives of their patients and the management of economical matters, vital for the procurement of drugs and other medical supplies and for the smooth operation of their ward in general, increasing thus the levels of stress and anxiety. Moreover the study also discovered that both the level of nursing care the nurses offer and the level of stress they encounter are related to their private lives. Meanwhile it was found that nurses without children are more likely to enjoy their work, providing higher support and more time to their patients, raising thus the level of quality of hospital care, while nurses with three and more children may find their job demands coming in dispute with their family responsibilities (Jelastopulu et al., 2013).

Different ways of moderating stress were noted including talking to trusted friends, engaging in sports or simply being quiet. A mechanism, programs, policies, initiatives, actions and practices that provide health workers with the physical, mental, psychological and organizational conditions that can improve their health and well-being is healthy work (El-Jardali et al., 2011). This is associated with improving quality of care, better patient safety and societal results in addition to improve organizational performance. From several researches that have examined nurses' work environment in an effort to spot enhancement opportunities and design retention strategies for qualified nursing staff, it is found that work environment matters can work as push or pull factors, hence influence nurses' decision to stay working. Some reasons that can hinder the ability of a healthcare organization to keep its nurses maybe heavy workloads, inflexible scheduling, excessive overtime, poor management, weak leadership and narrow opportunities for

professional development. The double load of nursing scarcities and poor work environments make threats to the quality of patient care.

Results suggested overall, individually focused interventions do not seem to perform particularly well at lowering work stress. The results also show that voluntary health programs aimed at teaching skills in stress Occupational stress within the nursing profession is a noteworthy global problem. Researchers have focused upon how nurses cope with the stress that is intrinsic within their roles. According to the Australian research several positive conclusions were made which are; social support is the mainly popular way for nurses to cope with stress, nurses have a preference to use adaptive coping strategies, and nurses use problem-focused strategies more than emotion-focused strategies (Happell et al., 2013). According to Happell et al., (2013), nursing is acknowledged as a stressful occupation, and the negative effects of high stress levels have been broadly researched. Meanwhile less attention has been paid to methods for coping with stress. Happell et al., (2013), conducted a study to discover and recognize how nurses cope with work-related stress away from their work environments. management are not particularly successful, seminar based programs appear to procure better outcomes (Caulfield et al., 2004).

Generally, work related stress affect employees negatively in their accomplishment and performance at work, which could usually end up in often result in disappointments and being not satisfied with their successes. Kamanzi and Nkosi (2011), stated that it is important to motivate nurses in order for them to achieve their every day jobs, supply worth care and contribute to the growth of nursing profession. In a study that Kamanzi and Nkosi, (2011) conducted, to explore the factors influencing the motivation levels of nurses working at Butare University Teaching Hospital (BUTH) in Rwanda. The results revealed that nurses at this hospital had a moderate level of motivation. They were unenthusiastic because of displeasure with payments, chances for growth and promotion; work place conditions; acknowledgment, rewards and gratitude together with benefits and allowances. This then confirms the notion that stress is indeed a universal problem.

A study by Effionm et al., (2007), to investigate the difference between the level of alleged stress among nurses and non-nurses in the University teaching Hospital Calabar in Nigeria. The results

revealed that nurses of University teaching hospital alleged heavy workload and sustaining values and standards as major stress factors fundamentally more associated with their work than their non-nurses colleagues who alleged too much supervision as a major stress factor more than non-nurses (Effionm et al., 2007).

In a retrospective study by Meyer et al., (2008), a positive work environment such as adequate staffing and support of nurses has been associated with lower nurse job burnout, intention to leave, and job dissatisfaction. Moreover job satisfaction has been correlated positively with having a day shift, less routine and more promotional opportunities and on the other hand higher turnover rates among nursing staff has been shown to negatively correlate with job satisfaction (Meyer et al., 2008). It was shown that in general, hospitals that invest in positive work environments for nurses can increase job retention (Meyer et al., 2008). Notwithstanding the fact that these relationships are famous, the specific mechanisms through which stress predicts burnout and job satisfaction have yet to be determined.

#### **2.1.4 Conclusion**

In conclusion the literature reviewed showed that indeed occupational stress is a global phenomenon and it has shown to be affecting nurses in all the countries in which research has been conducted on occupational stress. Several factors can be identified in the workplace as potential sources of stress for individual workers. Factors that were identified at the workplace include; work-overload, lack of support from management and co-workers, role ambiguity and caring for dying patients. On the other hand, family factors which include; sole major responsibility, gender roles, caring for the family also contribute to stress. The literature review also show that occupational stress has some effects on the health of the nurses and ultimately affect their work performance. Nurses are affected by occupational stress, the effects include; burnout, irritability, illness, absenteeism, poor morale and reduce competency and performance. In addition, coping strategies that are used to help nurses experiencing occupational stress were also revealed by the literature. Some of the coping strategies include; early interventions, salary increment, conducive environment, improved work relationships and support from management. Occupational stress seems to be a major factor in the delivery of health services and hence result

in declining productivity. Therefore it is apparent that strategies have to be put in place to address the negative impact of occupational stress.

## **CHAPTER 3:**

### **RESEARCH METHODOLOGY**

#### **3.1 Study site**

The study was conducted in Gaborone which is the capital city of Botswana. Gaborone is situated in Southern part of Botswana, has an area of 169 square kilometres and a population of 227 333 (Census Report, 2011). Gaborone has a total of 15 health clinics offering primary health care services. The study was conducted in all the clinics in Gaborone.

#### **3.2 Study population**

The target population in this study consisted of all the primary health care clinics in the country. However, due to resource constraints, it will not be possible to carry-out the research in the whole country. The study area has been limited to Gaborone because of the presence of a cluster of primary health care clinics in the same area but in different locations. The clinics within Gaborone and out of Gaborone operate with the same policy and regulatory framework.

As a result, the population is characteristically homogeneous and it will be possible to use the results obtained from the Gaborone study area to test the generality of the results and their usefulness in other locations where primary health clinics are run.

The study therefore, targeted all qualified registered nurses with a diploma in general nursing and registered nurses with midwifery. All the nurses considered were registered with the



Nursing and Midwifery Council of Botswana, working fulltime, in a clinic for a period of more than two years. In Gaborone District, there are 15 primary health care clinics with a total labor force of 212 nurses. The subjects within this total population are distributed evenly across the clinics depending on the size of the clinic. This study reached the following categories of primary health care nurse respondents; registered nurse with midwifery and registered nurses.

### **3.3 Research design**

Having identified key parameters of the study which forms the scope of this research work quantitative technique of data gathering and analysis will be used in this study to identify factors associated with occupational stress among nurses working in clinics in Gaborone.

Quantitative research is defined as a formal, objective, systematic process in which numerical data are used to obtain information about the world (Burns and Grove, 2009).

In the study the researcher was interested in factors associated with stress among nurses working in clinics in Gaborone. Relatively little is known about stress causing factors that constrain service delivery in primary health care clinics in Botswana and what becomes of employees in the various occupational units of their health clinics. To meet the objectives of the research work, the present study will use questionnaire as an instrument of quantitative and descriptive analysis.

The aim is to carefully separate and quantify experiences of primary health employees in their work environment and seek their assistance in interpreting their experiences so that lessons can be learnt and policy interventions made to make the work place stress free. It is for this reason that quantitative method will be used to achieve the goals of the research work. The specific strategy adopted is to generate data from employee perspectives concerning sources of stress and its effects in their specific work environments as they interact with other employees to fulfill the mandates of their work.

The rationale for using quantitative design is that the data gathered will be specifically used for developing policies and strategies therefore providing greater depth and insights in interpretation. The quantitative data in this research will enable me to cross reference on a fuller understanding of stress issues at stake. It will also help in making more meaningful interpretations of issues and processes and to get better assessment of stress factors impacting primary health employees in their work environments.

Overall, method used to collect data from the various sources in this study was a questionnaire. The responses to the questionnaire were generated from 212 nurses that are employed in the 15 primary health care clinics in Gaborone.

### **3.4 Sampling**

Sampling is referred to as the researcher's process of selecting the sample from a population in order to obtain information regarding a phenomenon in a way that represents the population interest (Brink, 2009). The sample has been rationalized through consultations with the Ministry of Health personnel. Based on the information collected on primary health care clinics in general, the sample is constituted of all nurses in the study area of Gaborone.

There 15 primary health care clinics considered which include :Extension 2 , Block 8, Sebele, Broadhurst -1, Broadhurst -2, Broadhurst – 3, Extension -14, Extension 15, Bontleng, Old Naledi, Gaborone West, Phase 2, Block 6, Block 9, Broadhurst Traditional. The clinics under study have a total of 212 nurses employed. A list of nurses enrollment per clinic was developed. . The list assisted in determining the size of the sample as stated as demonstrated in Table 1.0 below:

### 3.2.4.1 Sample Size Selection

**Table 1.0:**

#	Name Of Clinic	Registered Nurse With Midwifery	Registered Nurses
1.0	Extension 2	5	23
2.0	Sebele	5	1
3.0	Broadhurst -1	3	3
4.0	Broadhurst -2	4	4
5.0	Broadhurst -3	5	6
6.0	Extension 14	3	3
7.0	Bontleng	5	11
8.0	Old Naledi	12	5
9.0	Gaborone West	5	5
10.0	Phase- 2	9	7
11.0	Block -6	23	3
12.0	Block - 8	4	8
13.0	Block -9	14	12
14.0	Broadhurst Traditional	14	4
15.0	Extension 15	3	3
16.0	Total # of nurses	114	98
17.0	Sample size (50%)	57	49

There are 114 registered nurses with midwifery and 98 registered nurses forming the total sample population (Table 1.0)

The intention is to stratify the sample according to the nursing cadre per clinic to select the number of respondents from the population. In sampling, each nursing cadre was considered a stratum from which a sample proportion was selected. Given the size of the samples from the different nursing cadres, 50% of the nurses were subjected to the questionnaire. It was then possible to compare the results across the stratum because of the similarity of the sample population.

The research instrument is a questionnaire that was applied to all sampled cadres of nurses in the clinics. The questionnaire dealt with major variables of the study to address both the scope and objectives of each study dimension. The variables covered in the study included the following: demographics, knowledge of stress, experience on stress and intervention available at the work place.

### **Inclusion criteria**

All local registered nurses working in the clinics at Gaborone District in Botswana

### **Exclusion criteria**

All foreign nurses working in clinics in Gaborone and all non-nursing professionals

### **3.2.4 Bias**

Data collector bias was minimized by the researcher being the only one to administer the questionnaire and standardizing conditions such as exhibiting similar personal attributes to all participants, for example, friendliness and support. In purposive sampling, the sample may be quite biased. For, example, some people may be over selected, other under-selected or missed all together. In this example, the interactions observed may be biased. In purposive sampling where participants are selected because are likely to generate useful data for the project, the researcher used a maximum variation strategy to ensure that the sample was credible and covers the main groups of interest. This involved selecting demographic variables that are likely to have impacts on participant's view of the topic

### **3.3 Data collection**

A self-administered questionnaire was used to collect data from the nurses. The questionnaire comprised of close and open ended questions which focused on demographic data information, understanding of stress, their experience on stress and interventions available at the workplace.

#### **3.3.1 Pre test**

The researcher carried out a pilot study involving only a few samples that served to help test the questionnaire. The objective of the pilot study is to check appropriateness accuracy, and quality of the instruments. The pilot study helped to establish effectiveness and appropriateness of the language used. The questionnaire was pre tested on nurses at Nkoyaphiri clinic in Mogoditshane. The pre-test helped to evaluate if the questions answer the research questions. The results from the pre-test assisted in restructuring and validating the questionnaire.

### **3.4 Data analysis**

Quantitative data were coded and entered into SPSS software version 21. Descriptive statistics (mean, Standard deviation and median) were used to explore the data. Analysis of quantitative data included frequencies to describe the sample characteristics. Bivariate analysis was performed using the Pearson Chi- square. The chi- square was used to establish statistical association between the independent and the dependent variables. Binary logistic regression was conducted to depict the main predictors of stress.

Logistic regression was applied because it provides an interpretable linear model for a binary dependent variable and also allows the testing of the significance of a given predictor, while controlling for all other predictors in the model. It also involves assessing the statistical significance of the estimated relationships that is the degree of confidence that the true relationship is close to the estimated relationship. It further involves hypotheses about the relationship of the variables of interest (Agresti, 1990). Logistic Regression Analysis model was chosen because the outcome measure is binary where you have ever experienced stress related to work was coded '1', while those have not experienced stress related to work was coded '0' and the independent variables were categorical. The level of significant (p) was fixed at 0.05.

### **3.5 Study validity**

Study validity is a measure of the truth or accuracy of the claim (Burn and Groove, 2009). An instrument cannot validly measure an attribute if it is inconsistent and inaccurate (Polit and Beck, 2008) Validation efforts should be viewed as evidence –gathering enterprises, in which the goal is to assemble sufficient evidence from which validity can be inferred (Polit and Beck, 2008). There is no point using an instrument that is not valid, however reliable it may be. By the same token, if an instrument measures a phenomenon of importance but the measurements are not consistent, it is of no use (Brink, 2006).

## **3.6 MEASURES OF RELIABILITY, VALIDITY AND OBJECTIVITY**

### **3.6.1 Credibility**

Credibility as an alternative to internal validity in which the goal is to demonstrate that the inquiry will be conducted in such a manner to ensure that the participants were accurately, identified and described (De Voss et al, 2004).

Appointments dates were set so that the researcher had several close contacts to interact with nurses professionals to make sure that there is prolonged engagement with them when conducting the study and develop more trusting relations. The researcher explained all the objectives and purpose of the study to the respondents.

### **3.6.2 Conformability**

Conformability guarantees the findings, conclusions and recommendations are supported by the data and that there is internal agreement between the investigators' interpretation and the actual evidence (Brink, 2006).

Conformability of the research findings was ensured by leaving an audit trail (Brink, 2006). This is a record of activities that can be followed by another researcher. This works like an audit and is done in health services to identify a clear picture of what has been done in the past, and the reason why it was done.

### **3.6.3 Dependability**

Dependability is concerned with the stability of the data over a specified time and over conditions. Any researcher can depend on the research findings once there is truth value in the results. Dependability audit was ensured through involvement of the experts Ethics and Research Committee within the ministry of Health in Botswana.

### **3.6.4 Transferability**

Transferability means the extent to which quantitative and qualitative findings can be transferred to other settings, as another aspect of a study's trustworthiness (Polit and Beck, 2008). An important mechanism for promoting transferability is the amount of information provided about the contexts of the studies. Research findings were applied in other settings and yielded the same

results. In this research, the results from the data can be transferred to the nurses executing services in other health facilities.

### **3.7 ETHICAL CONSIDERATIONS**

An ethical clearance was obtained from University of Limpopo (Medunsa Campus) Research and Ethics Committee and permission were sought from the Botswana Ministry of Health and from the respondents who took part in the study. Principles that guide the ethics of research were be up held at all times.

### **3.8 PROTECTING THE RIGHTS OF RESPONDENTS**

Before every respondent could participate in the study, an explanation regarding the purpose of the study was explained. The respondents were told that participating in the study is voluntary and that they can withdraw anytime they want to. The duration of was explained and clarification concerning the study was given to the participants. Each participant signed consent prior to completing a questionnaire. The signed consent forms were collected separately from every respondent and were kept in a different bag from anonymously completed questionnaires.

No signed consent was linked to any of the questionnaires. The respondents were asked not to write names or initials including mobile cell phone numbers on the questionnaires for the sake of anonymity. The respondents were assured that no name would be published in the report and that their information would be treated confidentially. Contact information for the researcher was given to those who wanted to obtain a copy of the research report.



## **CHAPTER 4**

### **DISCUSSION /PRESENTATION/ INTERPRETATION OF FINDINGS**

#### **4.1 Introduction**

This study targeted 106 participants, 49 registered nurses without midwifery and 57 registered nurses with midwifery. A total of 74 respondents answered the questionnaire, generating a response rate of 70 percent. Other studies on the same topic have generated similar response rates and the results were found to be acceptable. The results in this study therefore sought to investigate factors associated with occupational stress among nurses working in government clinics in Gaborone.

#### **4.2 Background Characteristics**

The results in this section present the background characteristics of respondents. The study shows that females make 80 percent of the 74 respondents surveyed. It has also been established by the study that 84 percent of those surveyed held a diploma in nursing. The distribution of the population interviewed by age shows that 41.7 percent of respondents were aged over 40 years, 23.6 percent were aged between 35-40 years and another 19.4 percent were aged 20-29 years (see figure 4.1). Table 4.1 shows a percentage distribution of respondents by place of work, where, 10.8 percent were obtained from Block 9 clinics, 6.8 percent from Block 6 clinic and 5.4 percent from Extension 2 clinic. These clinics produced the lowest number of responses despite having a considerably large staff compliment.

**Figure 4. 1: Percentage distribution of respondents by age**

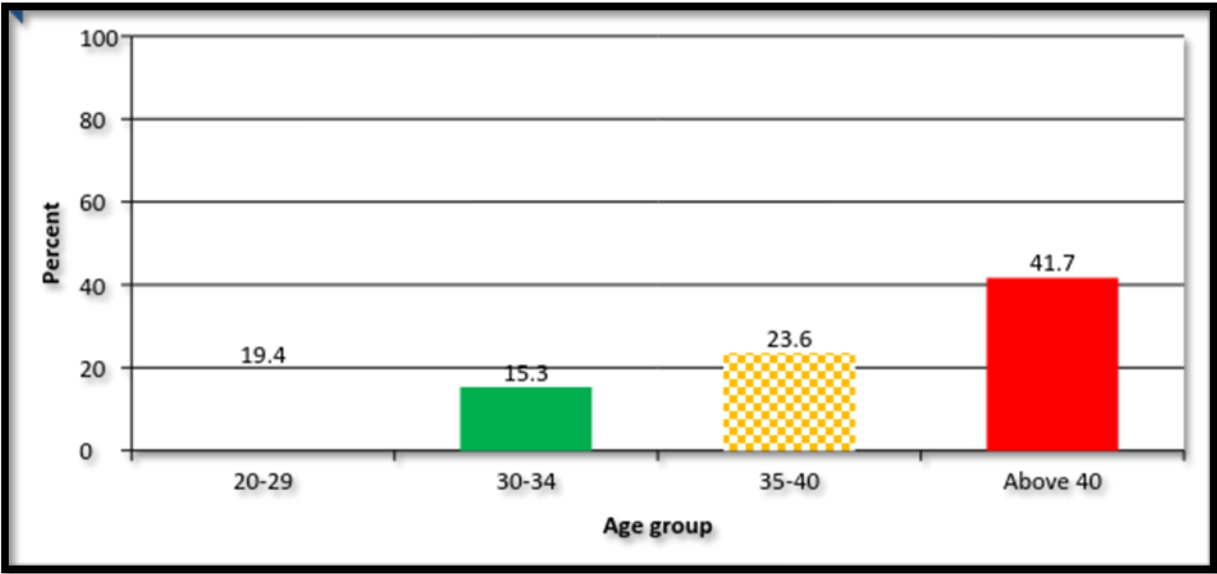


Table 4.1 shows a percentage distribution of respondents by place of work, where, 10.8 percent were obtained from Block 9 clinics, 6.8 percent from Block 6 clinic and 5.4 percent from Extension 2 clinic. These clinics produced the lowest number of responses despite having a considerably large staff compliment.

**Table 4. 1: Percentage distribution of respondents by place of work (n=74)**

<b>Name of clinic</b>	<b>Number of respondent's</b>	<b>Percent</b>
Extension 2	4	5,4
Block 8	7	9,5
Old Naledi	3	4,1
Village	4	5,4
Phase 2	6	8,1
Gaborone West	4	5,4
Block 9	8	10,8
Broadhurst	6	8,1
Bontleng	6	8,1
Block 6	5	6,8
Sebele	5	6,8
Broadhurst Traditional	4	5,4
Broadhurst 3	7	9,5
Extension 14	5	6,8
<b>TOTAL</b>	<b>74</b>	<b>100,0</b>

Figure 4.2 shows percentage distribution respondents by number of years of work experience. The results show that, almost 4 in ten (39 and 37 percent) of respondents had work experience of 5-10 years and 11-14 years respectively. Only one fifth had work experience of between 1-4 years.

**Figure 4. 2: Percentage distribution of respondents by number of years of work experience (n=74)**

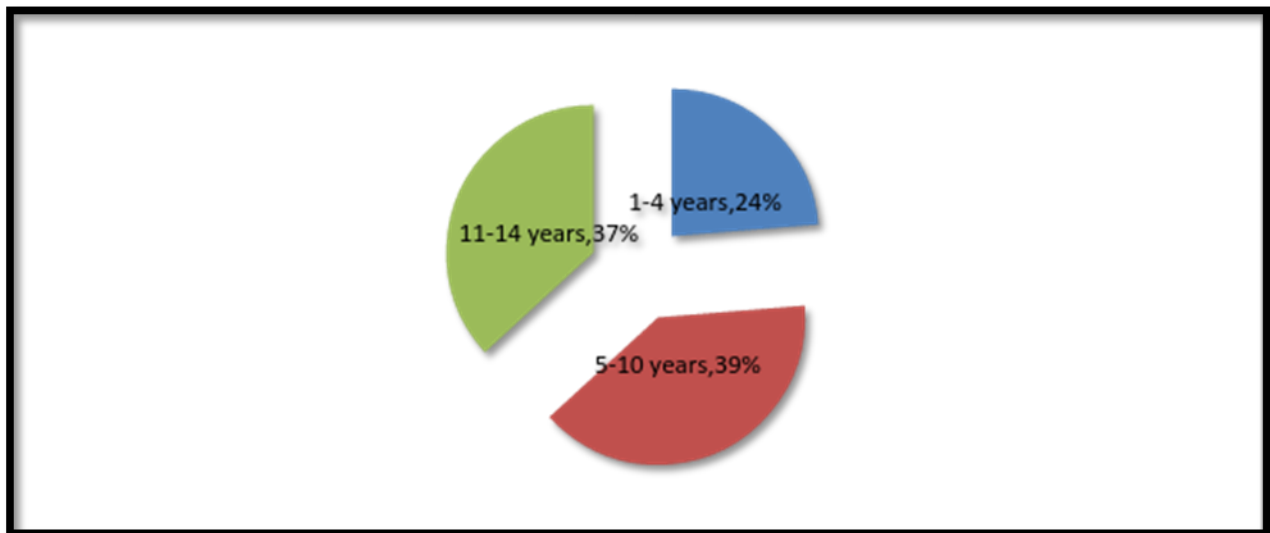
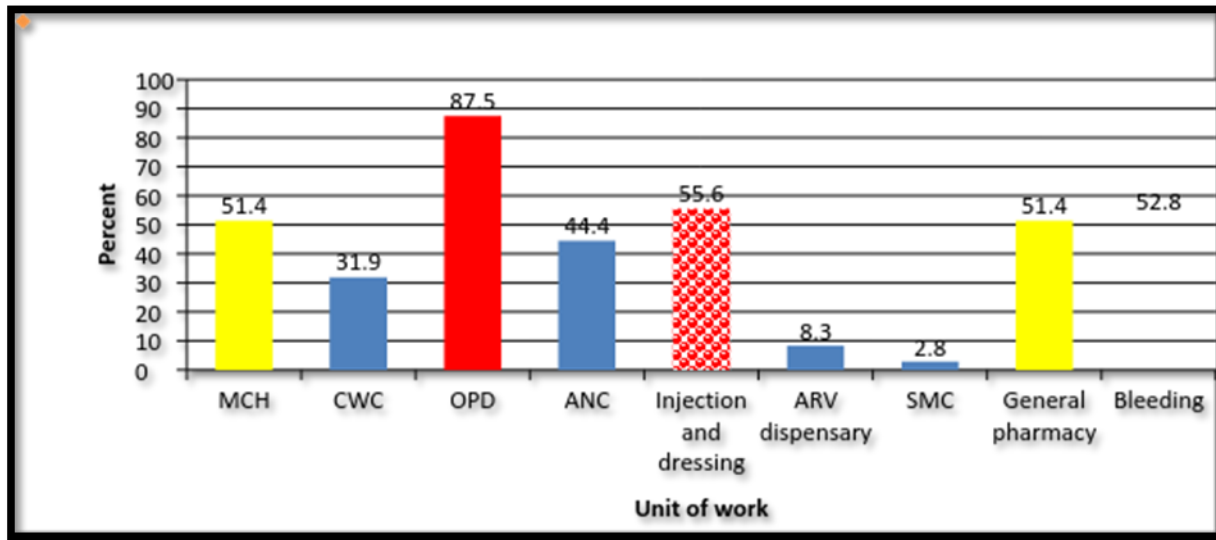


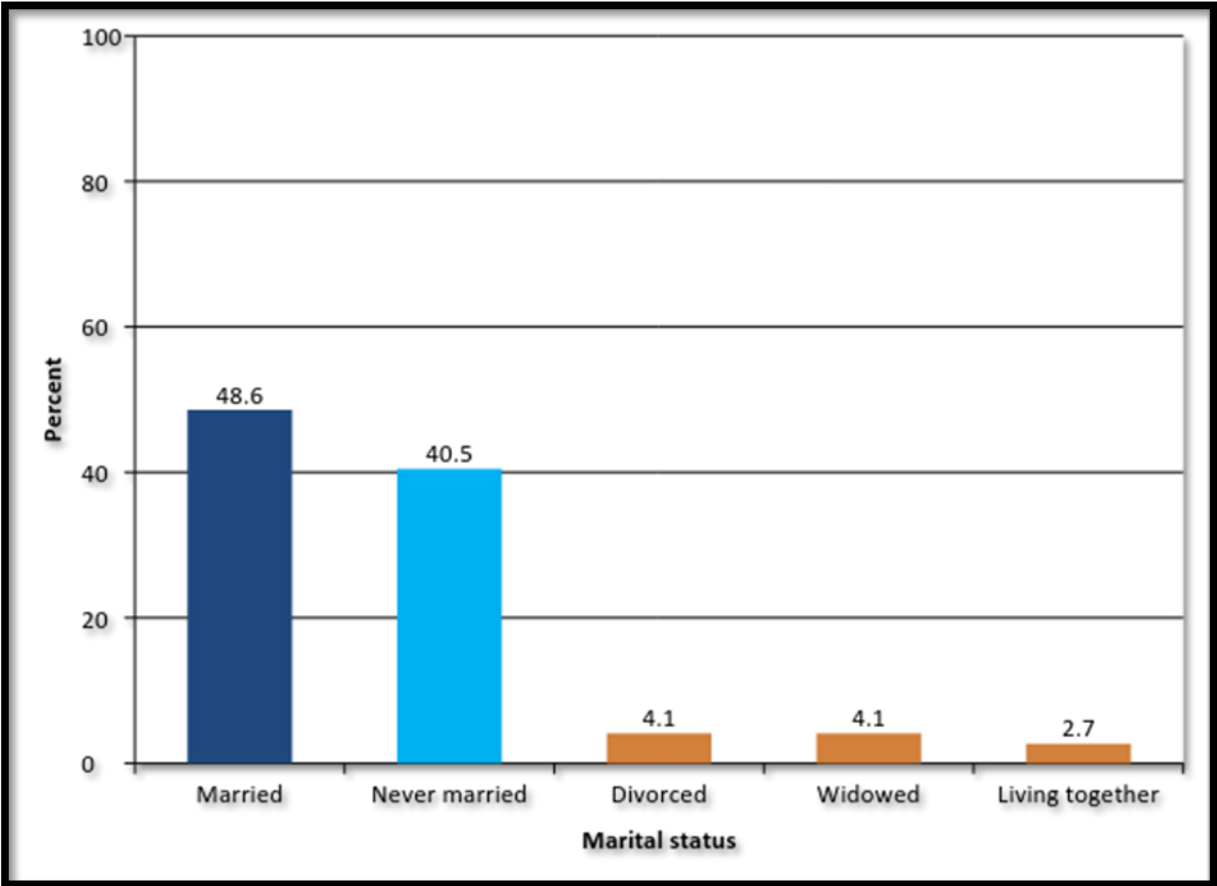
Figure 4.3 shows a percentage distribution of respondents by unit of work. The result represent units in which respondents worked at, it however should be noted that in some instances respondents worked in more than one unit, hence the percentages do not add to a 100. In this instance the results shows that the most common units in which the respondents worked in were OPD (87.5 percent), followed by Injection and dressing (55.6 percent), Bleeding (52.8 percent), MCH and General pharmacy at 51.4 percent each. The least common unit of work was SMC (2.8 percent)

**Figure 4. 3: Percentage distribution of respondents by unit of work (n=74)**



The data in figure 4.4 shows that almost half of the respondents (48.6%) were married; about two fifth were never married (40.5 percent) while 4.1% were divorced and 2.7% living together.

**Figure 4. 4: Percentage distribution of respondents by marital status (n=74)**



### 4.3 Knowledge, Experience and Perceptions about factors that cause stress

**Table 4. 2: Percentage distribution of respondents by knowledge, experience and perceived causes of stress**

<b>Do you know what stress is?</b>	<b>Number</b>	<b>Percent</b>
Yes	74	100,0
No	0	0,0
<b>Total</b>	<b>74</b>	<b>100,0</b>
<b>Have you ever experienced stress related to work?</b>		
Yes	74	100,0
No	0	0,0
<b>Total</b>	<b>74</b>	<b>100,0</b>
<b>What was the cause of the stress?</b>		
Too much work	65	89,0
Lack of Promotion	48	65,8
Poor work environment	60	82,2
<b>Total</b>	<b>73</b>	<b>100,0</b>
<b>Were they any other factors apart from the ones mentioned above</b>		
Yes	49	73,1
No	18	26,9
<b>Total</b>	<b>67</b>	<b>100,0</b>
<b>How long did the stress last</b>		
One week	10	14,1
Two weeks	5	7,0
Three weeks	3	4,2
One month	5	7,0
More than a month	48	67,6
<b>Total</b>	<b>71</b>	<b>100,0</b>
<b>Are there any programmes in your workplace that are designed to deal with occupational stress</b>		
Yes	4	5,6
No	68	94,4
<b>Total</b>	<b>72</b>	<b>100,0</b>

Results on table 4.2 indicate the percentage distribution of respondents on knowledge, experiences and perceptions about stress. The results show that, all respondents know what stress is and had experienced work related stress. On what causes stress, nine in ten of respondents(89 percent) pointed to too much work, with 82.2 percent indicating poor working environment and just over three fifth of respondents(65 percent) indicate lack of promotion as a cause of stress. Also, seven in ten (73.1percent) respondents mentioned that there are other factors apart from ones mentioned that causes stress.

Furthermore, over three fifth (67.6 percent) respondents showed that stresses lasted for more than a month, with 14.1percent indicating it lasted for a week compared to 4.2 percent which lasted for three weeks and under one in ten (7 percent) who said it lasted for two weeks and a month. Just over nine in ten (94.4 percent) indicated that there are no programmes in work place that deal with occupational stress.

**Table 4. 3: Percentage distribution of respondents by factors that lead to stress (n=74).**

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
<b>Poor working conditions</b>						
Shortage of essential resources	39,1	56,3	4,7	0,0	0,0	64
Shortage of staff	32,9	65,7	1,4	0,0	0,0	70
Work overload	34,3	64,3	1,4	0,0	0,0	70
Long working hours	41,9	40,3	9,7	8,1	0,0	62
Time pressure	40,3	37,1	19,4	3,2	0,0	62
<b>Staff welfare</b>						
Lack of recognition	48,4	45,3	6,3	0,0	0,0	64
No personal growth	41,0	45,9	6,6	3,3	3,3	61
Unfriendly work environment	33,3	60,3	4,8	,0	1,6	63
Lack of support	34,9	52,4	6,3	4,8	1,6	63
Financial problems	31,7	48,3	6,7	8,3	5,0	60
<b>Work relationship</b>						
Unfriendly supervisor	23,6	40,0	9,1	12,7	14,5	55
Lack of motivation	43,3	47,8	9,0	0,0	0,0	67
Lack of appreciation	38,5	50,8	10,8	0,0	0,0	65
Poor work ethic	34,4	34,4	18,0	11,5	1,6	61
Lack of reward	32,8	57,8	6,3	1,6	1,6	64



<b>Summary Index</b>						
<b>Staff welfare</b>	75,4	72,5	17,4	11,6	10,1	69
<b>Poor working conditions</b>	72,6	76,7	24,7	6,8	0,0	73
<b>Work relationship</b>	67,6	64,8	26,8	19,7	14,1	71

Table 4.3 shows a percentage distribution of respondent's perceptions about factors that cause stress. Respondents were asked to gauge on a scale of 1 to 5 if they agree or disagree with the statements on the factors that cause stress. The results show that about seven in ten strongly agreed that poor working conditions lead to stress, among those, four in ten indicated long working hours (41.9 percent), time pressure (40.3 percent), with 39.1 percent indicating shortage of essential resources while more than thirty percent (32.9 and 34.3 percent) indicated shortage of staff and work overload respectively.

Data from table 4.3 also shows that 75.4 percent strongly agreed that factors relating to staff welfare lead to stress, almost half of respondents indicated strongly that lack of recognition lead to stress, with four in ten indicating no personal growth compared to over three in ten (33.3, 34.9 and 31.7 percent) who revealed unfriendly environment, lack of support and financial problems.

Furthermore, over three fifth strongly agreed it's due to work relationship, 43.3 percent of respondents strongly agreed that stress is caused by lack of motivation, almost two fifth of respondents (38.5 percent) indicating lack of appreciation whereas over one fifth indicate unfriendly supervisor, with 34.4 percent and 32.8 percent showing poor work ethic and lack of reward respectively.

**Table 4. 4: Percentage distribution of respondents by perceived levels of stress (n=74)**

	Stress Level		Total
	Somewhat stressed to virtually stress free	Stressed	
<b>Gender</b>			
Male	40,0	60,0	15
Female	12,1	87,9	58
<b>Total</b>	<b>17,8</b>	<b>82,2</b>	<b>73</b>
	$\chi^2 = 6.352$	Df =1	P-value = 0.012*
<b>Age group</b>			
Less than 35 years	12,0	88,0	25
35 years and over	19,1	80,9	47
<b>Total</b>	<b>16,7</b>	<b>83,3</b>	<b>72</b>
	$\chi^2 = 0.601$	Df =1	P-value = 0.438
<b>Marital status</b>			
Never in union	16,7	83,3	30
Ever in union	18,2	81,8	44
<b>Total</b>	<b>17,6</b>	<b>82,4</b>	<b>74</b>
	$\chi^2 = 0.028$	Df =1	P-value = 0.866
<b>Number of years worked</b>			
10 years or less	12,5	87,5	24
11-14 years	14,3	85,7	14
15 years and over	23,5	76,5	34
<b>Total</b>	<b>18,1</b>	<b>81,9</b>	<b>72</b>
	$\chi^2 = 1.324$	Df =2	P-value = 0.516
<b>Number of unit(s) working in</b>			
One unit	30,0	70,0	20
2-4 units	4,8	95,2	21
5 units or more	16,1	83,9	31
<b>Total</b>	<b>16,7</b>	<b>83,3</b>	<b>72</b>
	$\chi^2 = 4.709$	Df =2	P-value = 0.095*

\*\*Chi square is significant at 0.05, \*Chi-square is significant at 0.10.

Table 4.4 shows that, majority of respondents (83.3 percent) were stressed. The percentages of those who were stressed vary by age, sex, marital status, number of years worked and number of units a respondent works in.

A higher percentage (87.8 percent) of respondents stressed were females, also, over four fifth (83.3 and 81.8 percent) of respondents stressed are never in union and ever in union respectively, (ever in union include those married, living together, widowed, separated and divorced). Also, the percentage of respondents who were stressed decrease as the number of years worked increases. A higher percentage (87.5 percent) of respondents who worked for 10 years or less were stressed compared to over four fifth (85.7 percent) respondents worked between 11- 14 years whereas just over seven in ten (76.5 percent) respondents worked a number of 15 years and over. Finally, majority (95.2 percent) of respondents working in 2-4 units were stressed compared to over four fifth (83.9 percent) working in 5 units and seven in ten (70 percent) who works in one unit.

The table 4.4 also shows the chi square results. The chi-square result shows that gender and respondents perceived level of stress has a statistically significant association ( $\chi^2= 6.352$ , Df = 1, P-value = 0.012). While there is no statistically significant association between stress levels and variables: age, marital status, number of years worked and number of units working. However, the relationship between the stress level and number of units of work is statistically significant at 10 percent ( $\chi^2= 4.709$ , Df = 2, P-value = 0.095).

#### **4.4 Data Management and Analysis**

The data was collected using a questionnaire. Each question was assigned a data code. Out of a total of 74 questionnaires distributed, were returned by the participants, leading to a response rate of 87. The questionnaires were numbered for easy identification when doing data entry. Data was entered into statistical package for social scientists (SPSS version 21). Data cleaning was done to check for inconsistencies and to ensure the data quality. Missing data were assigned codes for easy analysis. Data analysis was done using, frequencies, cross-tabulations, tables and graphs. Chi-square was also used to examine the level of significant among the variables compared.

#### **4.5 Discussion of Results**

The study revealed that a higher percentage (74%) of nurses have ever experienced occupational stress. This finding is in line with other studies (Chirwa, 2009; Tummers, 2002, Makinen et.al, 2003) who found that occupational stress was prevalent among nurses. The result also supports that every 4<sup>th</sup> person professional have shown increased level of anxiety related to the workplace. Health care professionals are extremely prominent to this condition. The reason behind this prevalence of anxiety among nurses is that health professional work for the safety of the patients. Thus any life threatening or emergent condition will increase the level of stress within health care professional (WHO, 2014).

On the other hand the results of this study show that majority of respondents know what stress is and were able to define it. This could be due to the fact that stress seems to be something that is embedded in their work and they experience it more often.

Respondents also mentioned that work relationship, shortage of staff, and workload contribute to stress among the nurses. The results are consistent with Yen and Huang (2007) and Chirwa, (2009) who stated that frequent stressors in nurses include workload, caring of patients, role ambiguity, conflict with physicians and organisational factors. This result supports Makinen

et.al, (2003) and Tummers (2002) who argues that some factors that cause occupational stress are working environment, interpersonal relationships among workers and nature of the nursing profession. This result provides an important finding that the working conditions within which the nurses work contribute immensely to occupational stress among the nurses. The results are also in line with Moustaka and Constatinidis (2010) who found that working environmental conditions are potential work-related stressors and also that work relationships may be potential stressors. The findings are also consistent with (Roland, 2014) who found that physical work environment is the leading cause for the development of occupational stress. Some of the factors associated with the environment include; poor ventilation, high temperatures, noise, shortage of essential services, and long working hours. All these factors were directly associated with the development of stress.

On the other hand, the results of the study also found that staff welfare issues also contribute to stress among the nurses. These include lack of recognition, no personal growth, lack of support and unfriendly work environment. This result is consistent with Rothmann (2006) who found health risks posed by contact with patients, lack of recognition and insufficient staffs were noted as the most severe stressors for nurses. Issues such as watching patients suffer demands of patients and staff issues have also been highlighted as some stressors among nurses.

In addition, the results also found that most of respondents, knew what stress is and have ever experienced stress related to work. Majority of the respondent mentioned that too much work was the main cause of stress. This is because the nature of the work entails multiple tasks which are performed by those that are on duty. Nursing are tasked with taking care of the sick patients, feeding them, bathing them, provide medication and attending to any other call from the patients.

Respondents also mentioned poor work environment and lack of promotion as other cause of work related stress among the nurses. The social context in which nurses work in contribute greatly to occupational stress. The environment is not conducive and contributes to occupational stress among the nurses. With regard to gender of respondent, female were mostly stressed compared to their male counterparts. The relationships between gender and those stressed was statistically significant p-value (0.012). This finding is consistent with Jones et.al, (2000) who found that female was correlated to higher stress levels and greater fatigue for all outcomes. The

reason female nurses are more likely to be stressed could be to the multiple tasks that perform for example work related and family tasks.

This could put more pressure on female nurses, having to deal with work pressures and also attend to family issues. The results also show that respondents who have worked for 10 years or less were stressed compared to those who worked between 11-14 years. The reason could be due to the fact that those who have many years have gained a lot in terms of dealing pressures from work.

Furthermore the results show that those working in 2-4 units were stressed compared to those who were working in 5 units or more and those who working in one unit. The number of hours worked may contribute to occupation stress among the nurses. For those who work long shifts are more likely to be exhausted and this could lead to fatigue. The results also revealed that most of respondents highlighted that stress lasted for more than one more, followed by those who said lasted for week and those who said stress lasted for three weeks.

Moreover, the results also show that majority of respondent indicated that there are no programmes in work place that deal with occupational stress. This finding supports, Lajini (2014), who argues that the understanding and management of workplace stress is still a challenge in Botswana. This finding is also consistent with Happell et.al, (2013) which indicated that negative effects of high stress levels have been researched, less attention have been paid to methods for coping with stress. Lack of interventions is lead to nurses experiencing stress for a long time and this could ultimately have long term effects on the health of the nurses and also affect their work performance.

## **CHAPTER 5**

### **SUMMARY, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS**

#### **5.1 Summary**

The study of factors associated with occupational stress is a noteworthy topic in the nursing field. The study was conducted in Gaborone district targeting all primary healthcare clinics. Occupational stress is recognised worldwide as a major challenge to workers health and the healthiness of their organisations (Chiang et al., 2011). This calls for management to implore proper strategies to improve the lives of nurses and their working conditions. The health impact of stress at work negatively affects the workers performance. Studies have shown that organizational and management roles play a vital part in influencing the stress experienced by nurses at work. It is therefore important for organizations to adopt strategies that are geared towards minimizing the stress levels of their employees.

The research study is quantitative in nature. The study area has been adequately covered. Findings of the study can be used to improve and develop programmes and strategies that will increase and enhance staff morale. The question of ethical consideration was clearly outlined and considered. Data was collected through a self-administered questionnaire comprised of close and open ended questions.

Literature indicated that occupational stress is a global problem which affects both the employer, the employee and also impacts negatively on overall performance (Agolla, 2009). Unless proper strategies are implored the situation will worsen and this will lead to migration of nurses to other areas to seek for better working conditions

## 5.2 Conclusions

The results of this study show that indeed nurses are suffering from occupational stress. The results of the study are consistent with most of the findings from other studies done on occupational stress among nurses. The study revealed that the main causes of occupational stress among nurses are; poor working conditions, lack of interest on staff welfare and poor relationship with co-workers. The causes of occupational stress among nurses call for urgent need to design interventions which can easier make the work environment conducive for nurses. The environment which individuals work determine the level of satisfaction with work performed and can also contribute to a sense of unhappier among the individuals. The results show that the number of year worked also contributes to occupational stress among the nurses. On the one hand, the understanding of the relationship between stress and the workplace is still a challenge, and thus it is important to acknowledge that work can cause stress and therefore stress should be prevented (Lajini, 2014).

While respondents with many years working did experienced less stress compared to those who have less years working. On the other hand female respondents had experienced occupational stress compared to their male counterparts. There results of the study show that there were no interventions to deal with stress related issues. The study also show that almost all the respondents reported that there were no interventions in the workplace to deal with issues of occupational stress. Most respondents mentioned that stress lasted for more than a month. There is a need to come up interventions to deal with occupational stress among the nurses. In order to make individuals perform to their capacity, efforts should be done to ensure that the employer cater for welfare of its employees by providing all necessary the need to perform the duties. There need also to identify the problems employees encountered in the day-to-day work and work as a team to come up with interventions to reduce the problems. It is important to have a healthy mind and body in the workplace. Stress affects the employer and employees in many ways and must not be underestimated. There a need to prevent stress in the workplace to improve the quality of lives and contribute positively towards improved productivity of the organisations.



### 5.3 Recommendations

The following recommendations are recommended for reducing stress in the work-place:

- **Introduction of interventions in the workplace to address occupational stress among the nurses:** Most of the respondents mentioned that there are no interventions dealing with stress in the workplace. An urgent need to come up with interventions that are specifically designed to address stress issues that are experienced by nurses. The interventions should be monitored and evaluated to ensure that they address the needs of nurses.
- **To create a conducive environment that will reduce occupational stress:** Creation of active wellness programs to address occupational stress. To improve work environment by also addressing work conditions such as improved working relationship, addressing staff welfare, increase essential services, reduce long working hours, and improved ventilation. There is a need to address work environment issues and also to address welfare issues of employees.
- **Reducing the extent of overload:** There is a need to reduce work-overload by ensuring that there is adequate manpower and also by ensuring nurses ratio vs. patients is adequately addressed.
- **Staff motivation.** There is need to motivate staff in order to increase level of job satisfaction. Staff welfare such as recognition, promotion, and personal growth needs to be taken as a priority by the employer. This calls for managers to take interest in staff welfare to be able to address staff issues accordingly

## 5.4 Limitations

Below are the noted limitations which have been encountered on this project:

- The study showed an imbalance on sex ratio because the predominant gender in the study was females
- Recall bias
- Unlimited resources i.e. Time

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## ANNEXES

**TABLE 1: FINANCIAL BUDGET FOR THE RESEARCH PROJECT**

<b>TASK</b>	Unit cost and Multiplying factor	<b>AMOUNT IN BW PULA</b> (1pula=ZA Rand1.04)
Stationery (plain papers, envelopes, pens, stapler staples)	2 reams plain paper @P38 each, 5 large envelopes @ P5 each 5 pens @P3.50 each Stapler @P65, 1 box staples @P35	P219
Internet services	P399 subscription per month for 15 months	P5985
Printing, photocopying and binding		P650
Transport to and from University of Botswana library literature search	From July 2012 – September 2013, 2 visits/month (30 visits) at P20 (approx. 2ltr) fuel each	P600
Travel & subsistence	Travelling to Polokwane for Proposal Presentation Local travel around Gaborone for data collection.	P800  P400
Telecommunications (phone calls, faxing)		P200

Courier costs to CUT, SA		P400
<b>Subtotal:</b>		P9524.54
<b>Add 10% unforeseen expenses</b>		P925.40
<b>TOTAL:</b>		P10179.40

**TABLE 2: TIME FRAME**

TASK	2013-2014																	
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August
Topic identification																		
Survey literature																		
Write proposal		S/ L																
Revised proposal,							S/ L	S/ L										
Submit plan and data collection.																		
Data analysis, write introduction, methods																		



Results, discussion																			
Conclusion, recommendatio n																			
Revise																			
Contents, acknowlegemet s, appendices																			
Revise first draft																			
Proof Reading Printing, binding ,																			
Final Submission and Presentation																			

**KEY: S/L MEANS TIME FOR FEEDBACK FROM STUDY LEADER**

- Literature review will take 14 months because the researcher will need to review literature at every stage.
- Revising first draft proposal will take 4 months because second draft needs to be near perfection.
- Data analysis will take 3 months because it requires more time.
- The researcher will meet the study leader at every new stage of the study for guidance.
- Revising first draft and printing and binding will be done in the same month because printing and binding does not take much time.
- Submission and presentation will take 2 months because the study report will need to be posted to CUT hence provision for any delays by courier

## QUESTIONNAIRE

PLEASE ANSWER THE FOLLOWING QUESTIONS BY PUTTING A TICK(X) SIGN ON THE APPROPRIATE BLOCK

Questionnaire No	Response
1. Which clinic do you work at(please tick)	Extension 2 <input type="checkbox"/>
	Block 8 <input type="checkbox"/>
	Old Naledi <input type="checkbox"/>
	Village <input type="checkbox"/>
	Phase 2 <input type="checkbox"/>
	Gaborone west <input type="checkbox"/>
	Block 9 <input type="checkbox"/>
	Broadhurst <input type="checkbox"/>
	Bontleng <input type="checkbox"/>
	Block 6 <input type="checkbox"/>
	Sebele <input type="checkbox"/>
	Broadhurst traditional <input type="checkbox"/>
	Broadhurst 3 <input type="checkbox"/>
	Extension 14 <input type="checkbox"/>
2. Which unit do you work in (please tick)	MCH <input type="checkbox"/>
	CWC <input type="checkbox"/>
	OPD <input type="checkbox"/>
	ANC <input type="checkbox"/>
	Infection and Dressing <input type="checkbox"/>
	ARV dispensary <input type="checkbox"/>
	SMC <input type="checkbox"/>
	General pharmacy <input type="checkbox"/>
	Bleeding <input type="checkbox"/>
3. Gender (please tick)	Male <input type="checkbox"/>
	Female <input type="checkbox"/>
4. Age (please tick)	20-30 <input type="checkbox"/>
	30-35 <input type="checkbox"/>

	35-40	<input type="checkbox"/>
	Above 40	<input type="checkbox"/>
5. Educational qualification (please tick)	Diploma	<input type="checkbox"/>
	Degree	<input type="checkbox"/>
6. Marital Status(please tick)	Married	<input type="checkbox"/>
	Single	<input type="checkbox"/>
	Divorced	<input type="checkbox"/>
	Widowed	<input type="checkbox"/>
	Single but living with a partner	<input type="checkbox"/>
7. Number of years worked(please tick)	1-4 years	<input type="checkbox"/>
	5-10years	<input type="checkbox"/>
	11-14 years	<input type="checkbox"/>
	More than 15 years	<input type="checkbox"/>
8. Do you know what stress is? (please tick)	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
9. Have you ever experienced stress related to work (please tick)	Yes	
	No	
10. If Yes what was the cause of the stress?(please tick)	1.Too much work	<input type="checkbox"/>
	2.Lack of promotion	<input type="checkbox"/>
	3.Poor work environment	<input type="checkbox"/>
11. Were they any other factors apart from the ones mentioned above? (please tick)	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/>
12. If yes please specify the factors		
13. How long did the stress last (tick)	1.One week	<input type="checkbox"/>
	2.Two week	<input type="checkbox"/>
	3.Three weeks	<input type="checkbox"/>
	4.1 month	<input type="checkbox"/>
	5.More than 1 month	<input type="checkbox"/>

14. List the way stress was treated	1. 2. 3.
15. How do you relief stress?	
16. Are there any programmes in your workplace that are designed to deal with occupational stress(please tick)	1.Yes <input type="checkbox"/> 2.No <input type="checkbox"/>
17. If yes list the programmes	1. 2. 3. 4.
18. Which of the following do you agree is more likely to lead to stress? (1 =agree, 2=Strongly agree, 3=neutral, 4 =disagree, 5 =strongly disagree).	<b>Poor work condition:</b> 1. Shortage of essential resources <input type="checkbox"/> 2. Shortage of staff <input type="checkbox"/> 3. Work overload <input type="checkbox"/> 4. Long working hours <input type="checkbox"/> 5. Time pressure <input type="checkbox"/>
	<b>Staff Welfare</b> 1.Lack of recognition <input type="checkbox"/> 2.No personal growth <input type="checkbox"/> 3.Unfriendly work environment <input type="checkbox"/> 4.Lack of support <input type="checkbox"/> 5.Financial problems <input type="checkbox"/>
	<b>Work Relationship</b> 1.Unfriendly supervisor <input type="checkbox"/> 2.Lack of motivation <input type="checkbox"/> 3.Lack of appreciation <input type="checkbox"/> 4.Poor work ethic <input type="checkbox"/> 5.Lack of reward <input type="checkbox"/>

Thank you for time...

**POTSOLOTSO**

**TSWEETSWEWE ARABA DIPOTSO TSE DI LATELANG KA GO TSENYA LETSHWAO**

**(X) MO LEBOKOSONG LE LE LEBANYENG.**

<b>POTSOLOTSO</b>	<b>KARABO</b>
1. O direla kwa kokelong efe (tshwaa)	Extension 2 <input type="checkbox"/> Block 8 <input type="checkbox"/> Old Naledi <input type="checkbox"/> Village <input type="checkbox"/> Phase 2 <input type="checkbox"/> Gaborone west <input type="checkbox"/> Block 9 <input type="checkbox"/> Broadhurst <input type="checkbox"/> Bontleng <input type="checkbox"/> Block 6 <input type="checkbox"/> Sebele <input type="checkbox"/> Broadhurst traditional <input type="checkbox"/> Broadhurst 3 <input type="checkbox"/> Extension 14 <input type="checkbox"/>
2. O direla mo lekalaneng lefe (tshwaa)	MCH <input type="checkbox"/> CWC <input type="checkbox"/> OPD <input type="checkbox"/> ANC <input type="checkbox"/> Infection and Dressing <input type="checkbox"/> ARV dispensary <input type="checkbox"/> SMC <input type="checkbox"/> General pharmacy <input type="checkbox"/> Bleeding <input type="checkbox"/>
3. O mong?) (tshwaa)	Rre <input type="checkbox"/> Mme <input type="checkbox"/>

4. O ngwaga tse kae (please tick)	20-30	<input type="checkbox"/>
	30-35	<input type="checkbox"/>
	35-40	<input type="checkbox"/>
	Go feta dingwaga tse 40	<input type="checkbox"/>
5 O feletse ka dithuto dife (tshwaa)	Diploma	<input type="checkbox"/>
	Degree	<input type="checkbox"/>
6. Seemo sa sago sa nyalo) (tshwaa)	Ao nyetswe	<input type="checkbox"/>
	Ga oa nyalwa	<input type="checkbox"/>
	O tladile/tladilwe	<input type="checkbox"/>
	O motholagadi/moswagadi	<input type="checkbox"/>
	Ga oa nyalwa mme o nna le mongwe	<input type="checkbox"/>
7 Dingwaga tse o di berekileng (tshwaa)	Dingwaga 1-4	<input type="checkbox"/>
	Dingwaga 5-10	<input type="checkbox"/>
	Dingwaga 11-14	<input type="checkbox"/>
	Go feta dingwaga tse 15	<input type="checkbox"/>
8 A o itse gore kgatelelo ya maikutlo ke eng (tshwaa)	Ee	<input type="checkbox"/>
	Nyaa	<input type="checkbox"/>
9 A o kile wa nna le kgatelelo ya maikutlo ee amanang le tiro (tshwaa)	Ee	
	Nyaa	
10. Ha karabo e le ee, mabaka a ne a tsisitswe ke eng (tshwaa)	1Tiro e ntsi.	<input type="checkbox"/>
	2 Go tlhoka go tsholediswa maemo	<input type="checkbox"/>
	3.Seemo se se sa nametseng sa tiro	<input type="checkbox"/>
11. A go ne go na le mabaka mangwe kwantle ga aa bolestweng (tshwaa)	Ee	<input type="checkbox"/>
	Nyaa	<input type="checkbox"/>
12. Ha karabo e le e. a bolele		
13. Kgatelelo ya maikutlo e go tsere lobaka lo lo kae (tshwaa)	1.Beke	<input type="checkbox"/>
	2 Beke tse pedi	<input type="checkbox"/>
	3.Beke tse tharo	<input type="checkbox"/>
	4.Kgwedi	<input type="checkbox"/>

	5.Go feta kgwedi <input type="checkbox"/>
14. Bolela gore o ne wa alafiwa kgatelelo ya maikutlo jang	1. 2. 3.
15 O intsha kgotsa o fokotsa kgatelelo ya maikutlo jang	
16 A go na le mananeo mangwe kwa tirong ya gago aa diretsweng go thusa mo kgatelelong ya maikutlo (tshwaa)	1.Ee <input type="checkbox"/> 2.Nyaa <input type="checkbox"/>
17 fa a le teng a kwale	1. 2 3. 4.
18 Supa ka tse di latelang gore ke efe ee ka bakang kgatelelo ya maikutlo. <i>(1=ke a dumela agree, 2=Strongly agree Ke dumela thata, 3= Ke fa gare neutral, 4 =Ga ke dumalane disagree, 5 =Ga ke dumalane thata strongly disagree).</i>	<b>Tsamaiso ya tiro ee siameng:</b> 1. .Letlhoko la ditsompelo tsa botlhokwa <input type="checkbox"/> 2 Tlhaelo ya badiri. <input type="checkbox"/> 3.Tiro e ntsi thata <input type="checkbox"/> 4.Nako tse di telele tsa tiro <input type="checkbox"/> 5 Letlhoko la tiro. <input type="checkbox"/>
	<b>Seemo sa badiri mo tirong</b> 1.Go sa tlhokomelwa mo tirong <input type="checkbox"/> 2.Go sa godisiwa maemo mo tirong <input type="checkbox"/> 3.Seemo se se sa siamang mo tirong <input type="checkbox"/> 4 Go sa rotloediwa. <input type="checkbox"/> 5. Mathata a madi. <input type="checkbox"/>
	<b>Tirisanyo mmogo mo tirong</b> 1.Moeteledi pele yo o senang botsala <input type="checkbox"/> 2 Go tlhoka thotloetso. <input type="checkbox"/> 3 Go sa lemogwa <input type="checkbox"/> 4.Maemo a tiro aa sa siamang <input type="checkbox"/> 5 Go sa lebogwa. <input type="checkbox"/>

## **INFORMED CONSENT DOCUMENT**

### **Title: FACTORS ASSOCIATED WITH OCCUPATIONAL STRESS AMONG NURSES WORKING IN CLINICS IN GABORONE, BOTSWANA**

#### **Introduction:**

Stress is often termed as the twentieth century syndrome, born out of high competition and its subsequent complexities. It is a state of affair involving demand on physical or mental energy which can disturb the normal physiological and psychological functioning of an individual. (Ajeya and Naidoo, 2012). Stress up to a certain point, will improve people's performance and quality of life because it is healthy and essential to that they should experience challenges within their lives but if pressure or other types of demands placed on them and arises when they worry that they cannot cope (Constantindis and Moustaka, 2010).

There is growing evidence that nurses are largely affected by work-related stress or occupational stress. The nature of work that health care workers do exposure them to occupational stress. Nursing profession is a challenging job because of its nature. Nurses are faced with professional work demands as well having to deal with difficult patients. Some of the reasons that can cause occupational stress among the health-care workers could be due to increased workload, personal or family, meeting deadline, environmental pressure, long work hours, single job and high demands.

#### **Purpose of the story:**

The aim of the study is to investigate factors associated with occupational stress among nurses working in clinics in Gaborone district in, Botswana

#### **Eligibility criteria:**

The study will only include nurses working at the identified health facilities. Allied workers working in the same health facilities will be excluded.



### **Study procedure:**

- 15clinics are selected by the researcher in Gaborone Botswana
- A brief (20 to25 minutes) meeting is organized individually with each of the interviewee at the health facility;
- Interviewees are identified with the help of the Nurse in Charge;
- The meeting consists of an introduction of the participants. their role, then the interviewee is being explained the consent document until the moment of accepting or refusing each of the consent statements;
- Once identified nurse has accepted at least the first consent statement (participation), the discussion can start in English.
- If an identified nurse declines the first consent statement, then the team need to keep identifying other nurses until it finds a nurse who is willing to consent to –at least- the first consent statements

### **Risks and/or discomfort:**

No perceived risks.

### **Benefits:**

The benefit to the interviewees are that their valuable inputs will be part an effort to identify strategies that could be used to address issues of occupational stress among nurses in Botswana By using exploratory and descriptive designs the researcher will also be able to identify and describe and document the various factors that influence occupational stress among the nurses working in health facilities in Gaborone Botswana.

### **Costs to subjects and compensation:**

This process will not generate cost to the subjects.

### **Voluntary participation:**

Participation is voluntary and refusal to participate will involve no penalty or loss of benefits to which the subjects are otherwise entitled to

**Right to withdraw**

Subjects have the right to withdraw at any point in time in the interview process. Withdrawal will involve no penalty or loss of benefits to which the subjects are otherwise entitled to.

**Privacy, anonymity and confidentiality**

The reporting of nurses can be done in an anonymous manner if interviewees preferred it that way.

**Future use of information**

Collected information, notes from interviews will be utilized to write the report. The information Collected will also be stored in a sealed envelope.

**Who to contact:**

Tabby Maphangela (3632262)

**Statements of consent:**

(1) Consent to participate in the interview

*I have read or I have the above statements read to me in relation to participating in this interview. I was given a chance to ask questions and questions were answered to my satisfaction. I understand that I can stop taking part in this interview anytime. To exit or to refuse to join the interview will not affect me in any way. I agree to take part in this interview as a volunteer.*

\_\_\_\_\_  
Volunteer signature

\_\_\_\_\_  
Date

## **MOKWALO WA TUMALANO YA GO TSAA YA KAROLO**

**Setlho: Mabaka aa amangwang le kgatelelo ya maikutlo mo tirong mo baoking ba dikokelwana tsa Gaborone Botswana**

### **Matseno/Ketapele:**

Kgatelelo ya maikutlo fa gongwe e bidiwa jaaka bolwetse jwa malatsi a sesha, bo bakwa ke kgaisano ee tseneletseng le ditlamorago tsa yone. Ke seemo se se tsayang maikutlo kgotsa mmele wa motho mo go ka faposang go bereka ga mmele le tshaloganyo ya motho. Seemo se se rileng sa kgatelelo ya maikutlo se kgona go oketsa boleng jwa go bereka le go tokafatsa botshelo, jaaka mongwe le mongwe a tshwanelwa ke go nna le dikgwetlho mo botshelong.

Go na le tshupapagalo ya gore baaki ba na le go nna le kgatelelo ya maikutlo ee amang le tiro ya bone. Tiro ya booki e na le dikgwetlho tse di farologanyeng jaaka go dira le balwetsi ba ba dingalo. Mangwe a mabaka aa tlišang kgatelelo ya maikutlo a badiri ba botsogo ba kopanang le one ke go fiwa tiro e ntsi, mathata a selegae, go tshwara nako ya tiro, go bereka nako e telele, tiro e e tshwanang e boelela.

### **Maikaelelo a Patlisiso:**

Maikaelelo a patlisiso e, ke go sekaseka mabaka aa tlišang kgatelelo ya maikutlo mo baoking ba dikokelwana tsa Gaborone, Botswana

### **Go diriswa bo mang:**

Tshekatsheko e tsenya fela baaki botlhe ba ba tlaa tlhophiwang mo dikokelwaneng tse di tlhophilweng. Badiri ba bangwe ba e seng baaki ba dira mo dikokelwaneng tseo, ga ba na go dirisiwa.

Tsamaiso ya baba tlhophiwang::

- Dikokelwana tse lesome le botlhano di tla tlhophiwa mo Gaborone, Botswana ke Mmatlisisi
- Puisano tse di ka tsayang metsotso e masome mabedi go ya ko go masome mabedi le botlhano e tla bidiwa gareng ga batsaa karolo le mmatlisisi
- Baokamedi ba dikokelwana ba tla kopiwa go thusa go tlhopa ba tsaa karolo

- Dipuisanyo di tla tlhalosa tiro ya batsaakarolo le tlhaloso ya tumalano ya go tsa karolo go fithelela ba tlhaloganya go tsaya tshwetso ya go tsaya karolo kana go gana.
- Ba ba dumetseng go dirisiwa ba tla baya monwana tumalano ee kwadilweng, puisano e tla simolola ka puo ya sekgoa
- Ha mooki yo o tlhophilweng a boela morago go baya monwana wa tumelano, go tla tlhokega gore go batliwe mooki mongwe yo o nang le kgatlhego ya go tsa karolo

### **Bodiphatsa**

Ga gona bodiphatsa bope mabapi le tshekatsheko

### **Dipoelo tse di amogelesegang:**

Maduo a a tswang mo patlisisong , a tla diriswa go tla ka maano aa ka thusang go rarabolola tsotlhe tse di tsisang kgatelelo ya maikutlo mo baoking, mo Botswana. Tsamaiso ya tshekatsheko e tla dira gore mokwadi a bone tsotlhe tse di tsisang kgatelelo ya maikutlo mo baoking ba ba dirang mo dikokelwaneng mo Gaborone, Botswana

### **Dituelo mo go ba ba tsayang karolo:**

Ba ba tsayang karolo ga ba na go duela kgotsa go duelwa.

### **Go ithaopa:**

Botlhe ba ba tsayang karolo ba tlaa bo ba ithaopile e bile ba ba sa batleng go tsaya karolo ga ba na go otlhaiwa kgotsa go tseelwa sepe.

### **Teta ya go tswa mo patlisisong**

Ba ba tsayang karolo ba kgona go ikogogela morago nako ngwe le ngwe mo potsolotsong. Go ikogogela morago ga gago, ga gona go otlhaiwa ka gope ka go latlhegelwa ke dithuso tse o neng o tla di bona.

## **Tshireletso ya baithaopi**

Go bega ga baoki go ka dirwa mo sephiring fa ba ba botsolotswang ba batla jalo

## **Tiriso ya maduo a patlisiso**

Kitso yotlhe ee phuthilweng e tla dirisiwa mo go kwaleng pegu, mme e tla bewa mo go tlhokometsweng. Dikitso tse di tserweng mo ba tseeng karolo di tla dirisiwa go kwala pegu. Dikisto tse di tserweng di tla bewa mo enfelopong ee tswetseng

## **O ka itshwaraganya le:**

Tabby Maphangela (3632262)

## **Puo ya tumalano:**

### **(2) Tumalano ya go tsenelela potsolotso**

*Ke badile, kana ke baletswe mafoko aa fa godimo mabapi le go tsenelela potsolotso e. Ke ne ka fiwa sebaka sa go botsa dipotso mme ebile dipotso di ne tsa arabiwa mo go nkgotsofaditseng. Ke tlhaloganya gore ke ka emisa go botsolotswa nako ngwe le ngwe. Go tswa mo potsolotsong kana go gana gana go tsema mo potsolotsong ga go na go nkama ka gope fela. Ke dumalana go tsenelela potsolotso e ke le moithaopi*

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Sekano sa moithaopi

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Letsatsi